CHAPTER 1

BACKGROUND TO THE STUDY

1.1 Introduction

Since the new government in South Africa came to power in 1994, the country has experienced intensive national transformation programmes aimed at the government, civil society and the economy. The education system has also undergone a dramatic change regarding a single unified system built on the principles of redress and equity in a bid to rectify a previously fragmented and divided education system. In support of educational equity, White Paper 6 (Department of Education, 2001), states that every learner in South Africa has the right to pursue their learning potential to the best of their ability. The South African Schools Act of 1996 regulates that the governing body of a school determines the language of instruction for the school and that the language policy may not exclude learners from different backgrounds. Learners may thus enrol in any school of their choice regardless of the fact that there is no correlation between the learner's home language and the school's language of instruction. As a result, many English second language learners struggle to understand the learning material and thus perform poorly academically (Myburgh, Poggenpoel & Van Rensburg, 2004).

A survey conducted by Kellas (1994), revealed that a strong support for English as the official language exists amongst the Black population in South Africa. It is also widely recognised that English is the international language for science, technology, business and commerce and that since the 1994 South African elections, the 'industry' advertising English, namely its publishing houses, printers, schools and universities ensure the longevity and spread of the language (Balfour, 1999). It is thus not surprising that English is the predominant language of instruction at many South African schools. One of the arguments strongly in favour for retaining English as a medium of instruction is that many indigenous languages cannot be used in technical and scientific contexts due to their lack of linguistic complexity (Balfour, 1999). It is interesting to speculate that this very lack of linguistic complexity in the indigenous languages may add to the difficulties experienced by the second language learner (L2) when confronted by scholastic texts that discuss concepts which may be foreign to his mother tongue.

Teachers are concerned about the ineffective support that they are giving to L2 learners in an endeavour to help them cope with learning in a second language. This, the teachers argue, frequently leads to apathetic attitudes towards schoolwork and lack of commitment in the second language learner (Myburgh et al., 2004). According to De Wet (2002), educators attribute lack of English proficiency in second language learners as the foremost reason for the grade 12 failure rates. Second language learners are also 1.5 times more likely to drop out of school than first language learners (Cardenas, Robledo & Waggoner, 1988). The L2 learners also receive lower grades, are judged by their teachers to have poor academic abilities and score below their peers on standardised tests of reading and mathematics (Moss & Puma, 1995).

A method to improve the English Second Language (L2) understanding of English and particularly the prescribed reading material, would be to introduce an intervention that could improve the learner's reading, vocabulary and comprehension abilities.

1.2 Literature Review

The following literature review includes the relevant theoretical concepts and research findings regarding the causes of the L2 learners' poor literacy skills and how this is related to poor academic achievement. Since the main focus of the present study is to evaluate the efficacy of an intervention aimed at improving the reading abilities of L2 learners, the Literature Review has been structured around the core issues in the study namely, the factors that impact on the L2 learner's literacy skills and academic performance, the essential characteristics of successful reading and comprehension skills and a motivation as to why the peer reading intervention would be beneficial to improve the reading skills of the L2 learner. The rationale and aims of the study are presented at the end of the chapter.

1.2.1 Factors Impacting on English Second Language Learner Literacy and Academic Performance

Before being able to devise and implement a reading intervention, it is pertinent to examine the factors that affect these learners' reading skills and ultimately their academic performance.

Language and Cognitive Factors

One of the main reasons why English Second Language learners have difficulty with their reading skills and ultimately their ability to comprehend texts in their second language is because they are learning in their second language whilst learning the second language at the same time (King & Jordaan, 2005). This would indicate that although many South African L2 learners may be able to communicate adequately in English in an every day context, they have insufficient knowledge of English to perform well academically. A theoretical approach by Jim Cummins supports this argument.

In one of his earlier works, Cummins (1984) stated that effective communication is dependent on what he referred to as Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP). BICS provides learners with the ability to speak and cope with vocabulary and pronunciation necessary to use English in an every day context. CALP enables learners to become effective academic communicators. It also enables learners to engage in problem solving and cognitively challenging tasks. For academic success, the CALP level of English proficiency is necessary. According to Cummins (1984) language competence at the BICS level does not enable a learner to perform cognitive operations with the necessary proficiency. The question arises as to what extent the learner's non-verbal intelligence plays a role in his learning process regardless of his proficiency in the language of instruction.

Classic theorists, for example Chomsky (1957) and Vygotsky (1962) support that language and thought are closely connected. According to Piaget (1926), language can not be separated from general cognitive development. He argued that language acquisition is the result of the completion of the cognitive process during the first 18 months of life, involved in sensori-motor development, namely the capacity for symbolic representation and object permanence (Hook, Watts & Cockcroft, 2002) If the child has not successfully achieved this developmental stage, he may struggle with language as he gets older. Lev Vygotsky, a social interactionist theorist, stressed the importance of the interpersonal context in which language develops. According to this approach, the infant learns about language through the exchanges with the caregiver with whom he has a close relationship (Hook, et al., 2002).

From the literature, it is thus evident that language is considered to be a vital link in thinking and learning. There is evidence that if the learner does not have the basic structures of a first language acquired in the early developmental stages of life, he is bound to struggle with the learning of a second language, let alone acquiring Cognitive Academic Language Proficiency (CALP) during his school career.

Apart from the lack of adequate English language skills, the L2 learners may face many other difficulties. Problems encountered by L2 learners include the challenge of sorting out new meanings from the old, trying to distinguish concepts in one language that are similar but not exactly the same to the second language and acquiring new systems of conceptualisation (Malefo, 1991). This highlights how cultural perceptions and differences, often reflected in the language used, may impact on the L2 learners' understanding and learning of a second language.

Cultural and Economic Factors

The advantage of having experienced cognitive and academic development in the first language that has been obtained in a supportive home and school environment transfers to the second language (Foertsch, 1998). The question arises, how many South African L2 learners have experienced enough cognitive and academic development in their first language to perform well academically?

Foertsch (1998) and Snow (1992) indicate that the ways in which children communicate in their home cultures provide the foundation for reading and writing behaviours. It is further stated that if there is a discrepancy between values and expectations of the home language and the school language of instruction, learners may be at a disadvantage for success in early reading tasks and possibly in their entire school careers. In his earlier work, McLaughlin (1982) indicates that the linguistic environment to which the child is exposed, affects the child's approach to language. Webb (1992) states that language attitudes of the community can affect the economic, educational and social aspects of a particular language group including the success of learning.

Home language and cultural values can impact on language development especially in early childhood. Naude (1999) investigated the language development and language enrichment of senior toddlers in an environmentally deprived Griqua community in South

Africa. It was concluded that the poor linguistic examples set by the family and the community members resulted in inadequate language development in the toddlers. The senior toddlers in the study presented deficiencies pertaining to mastery of language, style of language and language usage. The study conducted by Naude (1999) may provide a greater understanding as to why certain L2 learners who have not had the opportunity to fully master their home language at an early age, may struggle to acquire a second language in a school context.

Apart from the impact of the community and the family, it is necessary to consider factors that impact on the L2 learner's cognitive, linguistic and academic development. Pretorius (2002) posits that the learning environment within the African context is affected by poverty, disadvantage, inadequate physical resources, inadequate supplies of learning materials and poorly qualified teachers. Furthermore, the multilingual nature of African culture impacts on the learning environment and the majority of learners do not do their schooling in their mother tongue. This finding brings to mind the ideas of the aforementioned theorists, for example, Piaget and Luria who declared that the development of early language skills affects the way the child learns and thinks.

Pretorius (2002) cited statistics provided by the Minister of Education regarding the physical resources of learners. It was stated that out of 27 148 schools in South Africa, 45% of the schools have no electricity, 34% of the schools have no telephones and 66% of the schools are without adequate sanitation. There are 67 000 teachers who are either unqualified or under-qualified. The possibility that a vast number of L2 learners may not have had the advantage of optimal cognitive and academic development in their mother tongue places an immense burden on the educators, many of whom may not be highly proficient in the English language or as revealed in the aforementioned statistics, have not had sufficient training to overcome these difficulties.

From the literature, it is evident that the earlier the child develops language skills in his mother tongue, the greater are his chances for success at school and at learning a second language. Can the older child, who does not have the early language skills still benefit from special language interventions?

The Age of the Child and the Learning of Language Skills

McLaughlin (1982) refers to the critical period for language learning, namely from age two to puberty. Cummins (1999) states that the phonological skills in the individual's native language and basic fluency reach a plateau in the first six years of life, meaning that the rate of subsequent development is very much reduced when compared to previous development. However, this does not apply to literacy and vocabulary knowledge (CALP) which continues to develop throughout the school years and throughout the individual's lifetime.

Cummins and Swain (1987) posit that based on the interdependence principle, older learners who are cognitively mature and who have a sound L1 proficiency, would cope better with the demanding aspects of L2 proficiency than younger learners. In studies discussed in Cummins and Swain (1987), it was found that older learners make more rapid progress pertaining to L2 acquisition, contrary to the view that to be successful for L2 acquisition, learners must be pre-pubertal. The advantage of the older learner (about 14 years of age) thus lies in the interdependence of conceptual knowledge across languages.

Patrowski (1980) mentioned in McLaughlin (1982), argued that the optimal age for second language learning was from 12 to 15 years, suggesting that there is no evidence that children younger than 12 outperform older children regarding second language acquisition. It thus appears that opinions are somewhat divided regarding the most optimal age for children to learn a second language, with the greater evidence that the older learner is better equipped cognitively to acquire new literacy skills.

In sum, there is evidence in the literature that many factors can impact the South African L2 learner's ability to be proficient in English. There is also evidence that L2 learners often do not succeed academically. Several authors identified in the literature, (for example, Hugo, Le Roux, Muller and Nel, 2005) posit that one of the main reasons learners fail to succeed at school and at tertiary level is that they have poor reading abilities. The following section discusses the characteristics of reading and comprehension skills regarding the L2 learner's academic achievement and how these factors have influenced the choice of reading interventions found in the literature.

1.2.2 Characteristics of Reading and Comprehension Skills

In the previous section, mention was made of CALP, or cognitive academic language proficiency which allows the L2 learner to comprehend English texts at school and at tertiary level. Although many L2 learners have been taught in English, they might not have developed the cognitive academic language proficiency to fully understand their prescribed English text books. It was also mentioned that one of the reasons why L2 learners struggle with their reading and ability to comprehend texts in their second language is because they are learning in the second language whilst trying to learn the second language at the same time.

Given these difficulties, what can be done to improve the L2's reading and comprehension abilities? Differences in skill and reading styles exist amongst all readers. Pretorius (2005) posits that there are certain cognitive-linguistic skills that are central to reading well, with the most important characteristic of skilled reading being the ability to construct meaning. Meaning can be constructed by being able to identify important ideas in the text and being able to formulate a coherent understanding of what the author is trying to convey. To do this successfully, the reader needs to engage with the text, lack of engagement reduces the chances of meaning construction.

Pretorius (2005) examined the way tertiary students undertook reading exercises to ascertain why they were weak readers. Five case studies of first year Psychology students were undertaken. Observing the readers over a 3 month period, Pretorius (2005) found that the subjects did not engage with the reading material, had poor meaning construction and they did not backtrack in the text during reading in order to link new information. The subjects were also slow, non-strategic and struggled to make sense of their prescribed textbook. Pretorius (2005) states that a possible lack of attention to text details may cause lack of proficiency in the L2 learner. There may also be a lack of awareness regarding the need for precision in reading. The subjects in the Pretorius (2005) study admitted to doing none or very little reading outside of what was required regarding their studies.

Relevant to this discussion, is the relationship between comprehension and vocabulary. Cambourne and Turbill (1999) define reading as "composing meaning from the written

text" (p. 91). Composing meaning from the text would be the ability of the reader to retell it in his own words and that the text makes sense to him or her, thus indicating that the reader has comprehended the text. Vocabulary knowledge is essential in reading comprehension. Cooper (1997) found that learners who showed a paucity in vocabulary, especially academic words, performed more poorly than those learners with greater vocabularies.

Bohlmann and Pretorius (2002) argue that skilled readers tend to have a larger vocabulary than weaker readers, as a result of a more consistent exposure to the printed word. Skilled readers also seem to have a better ability to infer new meanings from the written context and their lexical access is quicker if words are recognised on the printed page. Furthermore, reading requires the understanding of the context of what is being read and the language of the text, namely the words. Phonetic decoding skills and sight word recognition are also essential to the reading process.

Pretorius (1996) has supported the view that academic success is linked to reading skills, namely that poor scholastic performers are also poor readers. Strong readers continually add new knowledge to their schemata and frequently adapt their reading strategies. The weak reader however, is 'stuck' or inert and cannot shift beyond his comprehending and decoding skills. Weak readers also become weaker at other levels, for example, cognitive, language and academic skills (Pretorius, 1996). Stronger readers on the other hand, tend to become more academically successful.

A small vocabulary is a symptom of unskilled reading and a lack of exposure to written texts (Daneman, 1991). Further support for this argument is provided in Cummins and Swain (1987) and Ruddell (1994), that for L2 learners to succeed academically, they require maximum exposure to English reading. There is thus sufficient evidence in the literature indicating that repeated exposure to reading material and the building of a wider vocabulary which includes words used in academic discourse, may help to improve the learner's academic performance. One of the methods used to maximise exposure to English reading, is the peer reading intervention programme.

1.2.3 The Paired Reading Intervention

The literature provides extensive support regarding the benefits of guided peer reading programmes or interventions. Hall (2006) defines peer mediated instruction and intervention as an alternative classroom arrangement in which learners take an instructional role with classmates or other learners. Meeks and Austin (2003) describe how guided reading interventions using a mentor-apprentice relationship can greatly enhance the reading skills in a literacy learning context and emphasise that these interventions are an essential pedagogical tool to teaching reading at a secondary school level. A study conducted by Malada (2003) indicates that shared reading can create more trust and cooperation including more openness and unselfishness in learners.

Myburgh et al. (2004) emphasise that many teachers feel they are not adequately equipped to assist L2 learners in coping with the academic demands in a second or third language and would welcome assistance in this regard. According to Nel, Dreyer and Klopper (2004) South African research indicates a bleak picture with respect to the reading comprehension levels of students and learners. Other South African studies with regard to the importance of reading skills for academic success (for example, Pretorius, 2005, Pretorius and Naude, 2002) provide a strong message, namely that extra reading and related intervention programmes could assist in improving the L2's literacy skills and general academic performance. A paired reading intervention has been identified as one method to improve the L2's reading skills.

In a typical guided reading intervention, the mentor or 'expert reader' whether student, parent or teacher models strategies and skills to create meaning from the text. The apprentice is given several opportunities to practice the reading skills and strategies the he or she needs before being expected to read independently. Important in the guided reading programme is the risk-free atmosphere in which learners can feel comfortable making mistakes without fear of ridicule or retribution. Small-group guided readings in which learners practice the reading strategies and skills demonstrated by the teacher or instructor are particularly effective (Meeks & Austin, 2003). With the reading coach or teacher providing positive affirmations, guidance and support, the learners feel comfortable asking questions and making mistakes. The learners also practice how to gain meaning from the text and through repeated guided reading lessons can apply the skills and strategies in other learning contexts.

Visser (2005) states that supportive peer relationships can promote the sharing of knowledge and experience, provide valuable role models and improve coping skills. Small-group guided readings in which learners practice the reading strategies and skills demonstrated by the teacher or instructor are particularly effective not only for academic gains, but for the sharing of knowledge and the psychological support it provides (Meeks & Austin, 2003). In a meta-analysis of peer reading interventions, Cohen, Kulik and Kulik, (1982) found that it was not only the tutee that gained from the intervention but that the tutor also gained increased confidence and greater learning from the intervention material.

The Outcomes-Based Education (OBE) approach was introduced in 1998 to advance teaching and learning of various Learning Areas in South African schools. In contrast to the older or more traditional method of 'talk and chalk' teaching, the OBE approach aims to promote the efficient assimilation and use of several teaching and learning strategies by educators and learners alike. This enables educators and learners to use teaching strategies such as group work, discussion and co-operative learning in day- to- day teaching. With the OBE approach and the needs of the educators in mind, the literature was examined for suitable reading interventions that could not only improve the reading skills of the learner, but also help to improve his academic performance.

Hall (2006) conducted a meta-analysis of peer mediated interventions in educational settings and found that overall the outcomes of these interventions were positive. Kulik and Kulik (1992) identified the following characteristics as central for the successful implementation of peer mediated interventions:

- Teachers should ensure that learners do not fall below the level of learning required to be successful at the next level of education
- Teachers should remain clear and focused with respect to instructions to learners
- Teachers should ensure that learners are accountable for their own development and learning
- Class-time should be used for learning. Learners should be monitored consistently for task completion.
- There should be positive and personal teacher and learner interaction.

From these characteristics, it is evident that the teachers play a significant role in ensuring that the interventions are successful.

The intervention devised by Bloom (1987) consists of a mentor (strong reader) and a mentee (weak reader). Originally devised for a parent or adult to read with a child, the intervention was found to be suitable for strong and weak readers within a classroom context. The theory underpinning the paired reading intervention, include the principles of behavioural psychology. This behavioural aspect was based on the concept of participant modelling with reinforcement. The benefits from this method appear to be psycholinguistic because the model of reading is more holistic than skills based (Bloom, 1987).

There are four steps to be followed by the strong and weak reader. The four steps are presented in section 2.2.2 of Chapter 2. The aim of these four steps is to encourage the weak reader into longer periods of independent reading. Adverse comments are excluded and frequent praise is provided for independent reading. Bloom (1987) advocates that this results in an enhancement of the weak reader's self-esteem. It is also recommended that the weak reader selects the reading material. The focus in the procedure is on meaning and understanding rather than on isolated sub-skills. The idea of failure which has been in the weak reader's mind up to now, is eliminated in this practice. Both mentor and mentee have an equal part to play and both receive instruction together. The flow of meaning from the text is maintained as the weak reader does not have to stop and grapple to find new words. Apart from only using graphic-phonic cues, the readers also make use of contextual cues.

The researchers, Derbyshire and Dobson mentioned in Bloom (1987) carried out one of the earliest paired reading experiments. The researchers concluded that there were three important elements required for the paired reading to be successful:

- Simultaneous reading where both mentor and mentee feel comfortable
- Increasingly long periods of independent reading have to be aimed for
- The transition from the mentee reading independently back to simultaneous reading should be smooth.

From the research, it was found that when the mentees could select their own reading material, they very soon selected books at their instructional level. The role of the teacher was considered essential in that a warm and supportive context facilitated the intervention process.

In sum, the literature reveals that many successful paired reading interventions have been initiated by individuals outside the school contexts. Mention is also frequently made regarding the long-term benefits of reading intervention programmes. This leads the discussion to the rationale, aims and hypothesis of the present study.

1.3 Rationale

Peer mentoring and group work is the cornerstone of the present Outcomes Based Education (OBE) system adopted in South Africa since 1998 and provides a strong motivation for interventions that reflect the intention of the OBE system. Research conducted by the International Institute for Educational Planning (HEP/UNESCO, 2005) has emphasised two significant learning barriers for L2 learners, namely the lack of understanding of school text books and their teacher's instructions. Several authors identified in the literature, (for example, Hugo, Le Roux, Muller and Nel, 2005) state that one of the main reasons learners fail to succeed at school and at tertiary level is that they have poor reading abilities. Reading is considered an essential skill for the pursuit of academic achievement. The statistics and research findings mentioned at the beginning of the chapter highlight the urgency for educators to remedy the lack of English proficiency in second language learners. An alarming number of second language learners move on to tertiary study where they fail to complete their training or struggle with the academic demands of their chosen fields of study.

Reading ability is an intrinsic part of language proficiency and it seems reasonable to focus on improving this skill in learners who struggle to understand the language that they are taught in. Bloom (1987) and Pretorius, (1996) including several other authors found in the literature, argue that one of the ways to improve the L2 learner's understanding of English and particularly the prescribed reading material, is to introduce effective reading interventions that could improve reading and comprehension abilities.

1.4 Aims

The aim of this study was to select and implement a peer reading intervention for Second Language Grade 9 learners to:

- Evaluate the efficacy of the paired reading intervention by comparing the SDRT subtests Vocabulary and Comprehension scores of the weak readers in the Experimental group, with the SDRT subtest Vocabulary and Comprehension scores of the weak readers in the Comparison Group who did not participate in the intervention.
- Determine whether the stronger readers within the Experimental Group, and the Comparison Group showed any improvement regarding their SDRT scores in the subtests Vocabulary and Comprehension.
- Record the Academic Performance of both the strong and weak readers at the pretest phase, namely before the intervention takes place and at the post-test phase, when the intervention has been completed. This will be done for both the Experimental and the Comparison Groups. The pre-test and post-test academic averages from both groups will then be compared to ascertain whether there was a improvement in Academic Performance, specifically regarding the participants of the Experimental Group.
- To evaluate the intervention regarding its strengths and limitations using questionnaires and to then conduct a qualitative analysis from the responses obtained.

1.5 Research Questions

- To what extent will there be an improvement in the post-test scores of the SDRT (Brown Level) subtests, Vocabulary and Comprehension regarding all the subjects (namely, the strong and weak readers) that participate in the reading intervention?
- To what extent will there be an improvement in the overall academic performance of the group of learners, that participate in the intervention programme?

• What factors will make the intervention successful or unsuccessful?

1.6 Research Hypothesis

After an eleven week peer reading intervention programme administered to the Experimental Group, there will be a significant difference in the reading abilities and overall academic performance between the Experimental Group and the Comparison Group, as reflected in the pre- and post-test scores of the SDRT (Brown Level) subtests Vocabulary and Comprehension, including the post-test academic results.

CHAPTER 2 METHODOLOGY

2.1 The Research Design

Although mainly quantitative in nature, the study also includes a qualitative section. The research design used in the quantitative section of the study, is a Comparison Group Pretest-Post-test Design. According to De Vos, Strydom, Fouche and Delport (2002), this design has an Experimental Group and a Comparison Group. Both groups receive the pre-test and the post-test at the same time, but the Comparison Group does not receive the treatment or intervention. De Vos et al. (2002) further posit that this design is the equivalent of the classical experiment, but without the random assignment of subjects to the groups. The random selection of subjects was not possible for this study, as the subjects had to be attending the same class to receive the intervention. This design was also selected because it best assists in assessing whether the intervention was effective or not. The three variables examined at the pre-test and post-test stages, were the SDRT (Brown Level) scores of the subtests Vocabulary and Comprehension and the Academic Performance/results of the Experimental and Comparison Groups.

The qualitative research design derived from Rosnow and Roshenthal (1996) is called the 'critical incident technique'. Any number of open-ended questions are asked to allow subjects to provide a detailed description of an observable or experienced action. In the present study, the subjects namely, both strong and weak readers (mentors and mentees) of the Experimental Group were given two questions to answer regarding their experience of the reading intervention (See Appendix D). The responses were then analysed according to themes and trends.

2.1.1 The Sample

The study was conducted at a co-educational High School, in the province of Gauteng, South Africa. Volunteer participants were obtained from the 216 Grade 9 learners at the school. After obtaining consent from the learners' parents and the learners themselves,

the total sample of 106 subjects was divided into two groups, namely the Experimental Group and the Comparison Group. Their biographical information was used to facilitate the qualitative analysis (Refer to Table 2.1).

Table 2.1: Biographical Data of the Experimental and Comparison Group.

DESCRIPTION	FREQUENCY				
Of SUBJECTS					
Total Experimental Group	53				
Total Comparison Group	53				
Total (n)	106				
Experimental and Comparison					
Groups:					
Total number of strong readers	52				
Total number of weak readers	54				
Age of Subjects					
13	32				
14	66				
15	5				
16	1				
Gender					
Female	59				
Male	47				

The Experimental Group

To form reading pairs for the intervention or experimental group, 60 volunteers of the 106 Grade 9 learners were chosen as a 'pool of learners' from which the most suitable strong and weak readers could be selected. A considerable difference in reading strength and academic performance at the pre-test phase was important to facilitate the division of the Experimental Group into strong and weak groups. The results of the pre-test SDRT scores and the academic averages at the end of the Grade 8 year were analysed and selection for the paired groups was based on the following results:

• The participants for the weak reading group were identified from the biographical information (see Appendix C) as English second language learners (L2) during

the pre-test phase, when The Stanford Diagnostic Reading Test (SDRT) (Brown Level) was administered at the end of the participants' Grade 8 year. Further criteria for selecting the weak reading group was that the subjects: a) obtain significantly lower academic averages than the strong reading group; b) obtain significantly lower scores than the strong reading group pertaining to the pre-test subtests Vocabulary and Comprehension. The overall means of the weak reading group were converted into percentages for greater clarity. The weak reading group obtained an overall average of 57% for the SDRT subtest Vocabulary and an overall average of 50% for the subtest Comprehension. The academic average of this group at the end of their Grade 8 year was 56.17% (See Table 2.2).

- The SDRT (Brown Level) had also been administered to the strong readers as part of the pre-test procedure at the end of their Grade 8 year. The strong reading group obtained an average score of 90% for the subtest Vocabulary and an average of 90% for the Comprehension subtest. The academic average of this group at the end of their Grade 8 year was 69.26% (See Table 2.2).
- From the initial 28 pair groups chosen for the Experimental Group, 2 participants from the strong reading group and one participant from the weak reading group could not be included in the final analysis due their absence at the post-test phase. Therefore, the data is based on responses from: The Experimental Group 26 strong readers and 27 weak readers. The Comparison Group 26 strong readers and 27 weak readers.

The Comparison Group

Out of the remainder of the Grade 9 learners who volunteered to participate, a Comparison Group of 53 subjects were identified according to the same criteria provided for the selection of the Experimental Group. The SDRT (Brown Level) was also administered to the strong and weak readers as part of the pre-test procedure at the end of their Grade 8 year. Their results had to be as similar as possible to the Experimental Group. The strong reading group obtained an average score of 87 % for the subtest Vocabulary and an average of 86 % for the Comprehension subtest. The academic average of this group at the end of their Grade 8 year was 69.52% (See Table 2.2). The weak reading group obtained an average score of 60 % for the subtest Vocabulary and an average of 56 % for the Comprehension subtest. The academic average of this group

at the end of their Grade 8 year, was 57.71% (See Table 2.2). The Comparison Group was not arranged into mentor/mentee pairs groups, as these subjects did not participate in the intervention.

Table 2.2: Descriptive Statistics for the Pre-test means of the Experimental and Comparison Group

	Experimental Group					Comparison Group						
Variable	Strong Readers Pre-test Means			Weak Readers Pre-test Means		Strong Readers Pre-test Means		Weak Readers Pre-test Means				
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Vocabulary	26	36. 19	2.9	27	23. 96	2.5	26	34. 96	3.0	27	24. 65	3.1
Comprehension	26	54. 00	3.2	27	30. 92	7.4	26	51. 96	3.8	27	34. 52	6.4
Academic Performance	26	69. 26	9.4	27	56. 17	7.9	26	69. 52	9.1	27	57. 71	8.0

2.1.2 Materials

The Stanford Diagnostic Reading Test (SDRT): Brown Level

As a measure of reading achievement, the Stanford Diagnostic Reading Test (SDRT): Brown Level was chosen as a suitable measure for the pre-testing and post-testing of both the Experimental Group as well as the Comparison Group. The SDRT (Brown Level) was designed for Grade 6-8.

The Stanford Diagnostic Reading Test (SDRT) is aimed at obtaining scores for inferential and literal comprehension, phonics, vocabulary, word building skills, including skim reading and scanning. Bjorn (1986) indicates that the SDRT is different to other reading surveys in that the emphasis in the test is focused on low achievers, with easier questions than found in other reading tests. Another advantage is that the SDRT has been normed on Grade 8 to Community College levels and this makes the test favourable for the sample groups in the present study. However, the SDRT has been normed on American learners and this should be taken into consideration when testing South African learners from different multicultural backgrounds. For the purpose of the present study, the two

subtests Comprehension and Vocabulary were selected and will now be discussed in more detail.

The SDRT is based on the premise that reading comprehension is the most important aspect of reading and that other skills for example, word recognition and phonics are necessary skills for comprehension to occur. Inferential Comprehension pertains to the ability to predict outcomes, to see cause and effect in relationships and an understanding of tone and mood. Literal Comprehension is the ability to understand what has been stated in the text. The Vocabulary subtest consists of words from common high school subjects in the fields of reading and literature, social science, art, mathematics and science.

The Questionnaire

To assist in obtaining feedback from the Experimental Group, the researcher devised a brief questionnaire based on the critical incident approach. The two questions were openended so that the subjects could express their perceptions and experiences of the intervention programme within the context of their own freedom (See Appendix D). The idea for the design of the questionnaires was derived from Rosnow and Rosenthal (1996) where questionnaires referred to as the *critical incident technique* allow for subjects to provide an open-ended description of an observable or experienced action.

2.1.3 Procedure

- After full consent for the research had been granted by the Principal of the High School, the researcher provided consent/assent forms to the Guidance Teacher of the school to convey to the parents of the Grade 9 learners and to the Grade 9 learners themselves. Attached to each consent/assent form was a letter of introduction from the researcher informing the participants of the purpose of the study. (Appendix A and B). Permission was also obtained from the University Ethics Committee and the Gauteng Department of Education (GDE) to conduct the study.
- The researcher arranged a meeting with the Guidance Teacher to discuss the administration requirements regarding the study and where her help would be

required pertaining to the communication with teachers and learners. The agreement of the Guidance Teacher to assist with the study, was considered essential as she would be ensuring that the intervention was correctly being administered in the classrooms in the absence of the researcher.

- Once the signed consent forms had been returned by the parents and the learners, the researcher and the Guidance Teacher selected the Experimental and Comparison Groups from the list of SDRT scores, the biographical data and academic averages that were obtained in the pre-test phase when the learners were in their Grade 8 year. This procedure was described in Section 2.2.1. The data from the pre-test phase had been obtained from the psychology supervisor at the university who had monitored the pre-testing of the Grade 8 learners at that time. To ensure compatibility of the paired groups, the Guidance Teacher who was familiar with the personalities of the subjects, assisted the researcher in selecting pair groups that were most likely to work well together for the duration of the intervention period. The biographical data obtained at the pre-test phase facilitated this procedure (See Table 2.1).
- At the convenience of the Guidance Teacher, the teachers and the learners, a workshop to be facilitated by the researcher was arranged. The aim of the workshop was to instruct the Guidance Teacher and the participants of the Experimental Group as to what steps they would need to follow whilst doing the paired reading intervention. The Guidance Teacher was included in the workshop so that she could at a convenient time, coach the teachers with respect to the procedure required for the reading pairs within the class time-slots allocated for intervention reading sessions. The workshop took place during the month of July in the subjects' Grade 9 year. It was held in a large classroom at the High School. Out of the 60 learners identified for the intervention programme, 56 learners attended the workshop. Each participant had been informed as to whom their reading partner was to be. The researcher introduced herself and provided a background to the research and why it was being conducted. The conditions on the Consent forms (Appendix A) were once again explained to the participants and that no subjects would be prejudiced in any way with respect to the research. They were thanked for their participation. Time was allocated for any questions or concerns that the learners had. The researcher then explained what

intervention procedures each mentor and mentee had to follow during each reading session. The background and steps for the intervention sessions were presented as follows:

This peer reading intervention was chosen due to its simplicity and its effectiveness in promoting reading in young learners. The intervention is based on the paired reading concept described in Bloom (1987) that aimed to include parents in assisting their children to develop their reading skills. For the purpose of this study, the stronger reader will be referred to as the *mentor* and the weaker learner reader as the *mentee*. The following steps provided by Bloom (1987) were used to assist the subjects in the Experimental Group to carry out the reading intervention.

- 1. The mentee selects the reading material
- 2. The mentee and the mentor read aloud simultaneously. The mentor adjusts his or her pace to suit that of the mentee. The mentor points a finger under the line of the text as the reading proceeds.
- 3. The mentee provides a pre-arranged signal to indicate that she/he is willing to read independently. Frequent praise is provided by the mentor to reward the mentee for reading independently.
- 4. Errors made by the mentee are corrected by the mentor without including a personal comment. This is followed by the mentor and mentee resuming their simultaneous reading.

After having explained the intervention procedure, each pair of readers sat next to each other at a desk so that both could comfortably read from the same book. Time was then allocated for practice sessions whereby each reading pair could attempt the 4 steps in the reading intervention. The researcher and the Guidance Teacher observed the different reading pairs and provided assistance when necessary.

Once the paired groups, teachers and Guidance Teacher had been instructed as to what intervention steps they needed to follow, it was planned that the peer groups would spend no less than 15 minutes reading daily during class periods, whether during the English periods, History, Geography, Life Orientation and so forth.

Reading material could be selected by the mentee but it was encouraged that the material would be related to the subject matter being taught at the time.

- The intervention programme commenced during the last week in July and ended in mid October of the Grade 9 year. During the intervention phase, the Experimental Group had a vacation break of one week in September. The reading intervention was thus administered for 11 weeks in total.
- During the 11 week intervention programme, the researcher was in frequent contact with the Guidance Teacher and would visit the school to ensure that the intervention was taking place according to plan and to provide assistance or advice where necessary. Before the vacation break in September, the researcher arranged a feedback session with the Guidance Teacher and the Experimental Group. The 28 pairs of subjects were asked to fill in brief questionnaires concerning their perceptions and experiences of the reading intervention (See Appendix D). Due to the time constraints of the learners and teachers, the researcher could not interview any of the subjects, but all questionnaires were completed and returned to the researcher at the end of the one hour session. Feedback was provided by the Guidance Teacher concerning the progress of the Experimental Group and any difficulties experienced were also noted by the researcher. This information was to be used later to facilitate the qualitative interpretation of data.
- At the end of the 11 week intervention period, namely in October of the Grade 9 year, the post-testing of the Comparison Group and the Experimental Group took place. The subjects were tested once again on the SDRT: (Brown Level) regarding the subtests Vocabulary and Comprehension. The researcher administered the SDRT at the school with the assistance of two other Masters students. The test results were collected by the researcher and collated for statistical analysis.

2.1.4 Ethical Considerations

- At the pre-test phase of the study the researcher emphasised that participation in the project was voluntary and that any subject could withdraw when he or she wished to do so.
- The confidentiality of all participants is to be preserved at all times. All data is to be kept confidential and no names of learners have been used in the data analysis.

CHAPTER 3 THE RESULTS

3.1 Data Analysis

To investigate the hypothesis, the data obtained was analysed quantitatively and qualitatively. Biographical data were yielded including the age, grade, gender and home language including the language of instruction at school (Appendix C). This was obtained at the pre-test phase when the SDRT was administered to the subjects at the end of their Grade 8 year.

The Statistical Analysis System (SAS) Version 8 was utilised to conduct the statistical analyses. The first level of analysis consisted of descriptive statistics whereby the means or average scores at pre-test and post-test stages of all the weak and strong readers in the Experimental and Comparison Groups were compared regarding the variables, Vocabulary, Comprehension and overall Academic Performance. T-tests were also used to compare the means of the scores achieved by the strong and weak readers in both the Experimental and Comparison Group. This was carried out to ascertain if there was a significant difference between the means. The second level of analysis consisted of inferential statistics. Inferential statistics employed focused only on tests of significant difference. An Analysis of Covariance (ANCOVA) was utilised to control for possible initial differences and the pre-test scores served as covariates.

3.2. Quantitative Results

Descriptive Statistics

Howell (1995) explains that descriptive statistics are used to describe a set of data. Table 2.2 in Chapter 2 reflected the pre-test means for the strong and weak readers for the Experimental Group facilitating the selection of the strong and weak readers. Tables 3.1.1 and 3.1.2 illustrate the means (or average scores) pertaining to the pre-

test and post-test results obtained by the strong and weak readers of both the Experimental and Comparison Groups, for the three variables Vocabulary, Comprehension and Academic Performance. The number of subjects per group (n) has also been indicated, including the Standard Deviation (SD) of each mean for all three variables. In analysing the data, it was found that the post-test means for the Academic Performance variable of both the Experimental and Comparison Groups were lower than those yielded at the pre-test phase. There also appeared to be an increase in post-test scores or means for the Vocabulary and Comprehension variables for the weak readers in both the Experimental and Comparison Groups. T-tests were conducted to determine whether any significant differences existed between the mean scores yielded by the Experimental and Comparison Groups with regard to all three variables. A discussion of these results follows.

The Experimental Group

Table 3.1.1 and Figures 1-3, show the means of the Experimental Group. It can be seen that there was a significant difference between the strong readers' Academic Performance means of the pre-test and post-test phase (t= 2.78, p < 0.05). This indicates a significant decrease in the academic results at the post-test phase. The means of the Vocabulary and Comprehension variables were almost the same at the pre-test and post-test phases indicating no significant differences.

Regarding the weak reading group, the results illustrated in Table 3.1.1 show a significant increase between the pre-test and post-test scores of the Vocabulary variable (t= -3.14, p < 0.05). Similarly, there is a significant difference between the pre-test and post-test scores of the Comprehension variable (t= -7.38, p< 0.05). It may be that the increased exposure to reading material has resulted in an improvement in vocabulary and comprehension skills. However, there is a significant decrease (t=3.40, p< 0.05) between the pre-test and post-test means for the Academic Performance of the weak readers. It may be that the promotion to Grade 9 at the post- test phase created a more challenging work-load for the strong and weak readers, resulting in an overall decrease in Academic Performance.

Comparison Group

In the Comparison Group, as illustrated in Table 3.1.2, the overall Academic Performance (t=3.78, p<0.05) of the strong readers decreased significantly at the post-test phase. For the strong readers, there was also a slight improvement in the scores for the Vocabulary and Comprehension variables but the differences were not significant.

The Academic Performance (t=2.49, p<0.05) of the weak readers also indicated a significant difference between the pre-test and the post-test means. There is a significant difference (t=-2.80, p<0.05) between the pre-test means and post-test means of the Vocabulary variable, indicating a possible improvement in this area. A significant difference (t=-7.38, p<0.05) between the pre-test means and post-test means of the Comprehension variable is also indicated. The significant decrease in Academic Performance of both the weak and strong groups may indicate that like the Experimental Group, the subjects found the work more challenging in their Grade 9 year.

Figures 1, 2 and 3 illustrate the similarities between the Experimental and Comparison Group especially with respect to a decrease in Academic Performance means of both the strong and weak reading groups. It is interesting to note the improvement in Vocabulary and Comprehension skills of the weak readers in both the Experimental and Comparison Group.

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Analysis of Covariance (ANCOVA)

A Generalised Linear Model: Analysis of Covariance (ANCOVA) with two factors was conducted. In this analysis, the F- ratio or F test is employed and is based on the analysis of variances instead of on the means (Rosnow & Rosenthal, 1996). The ANCOVA removes the obscuring effects of pre-existing individual differences among subjects. Furthermore, it is an attempt to reduce unexplained variances and increase explained variances. The ANCOVA assesses how much of the effect in the dependent variable is due to its covariates with some other factor other than the independent variable. In this study, the covariant was the pre-test score, thus eliminating differences between members of the same subject group, including individual differences in order to allow for more sensitivity between group comparisons. The results of the ANCOVA to examine the differences between the Experimental and Comparison Groups' pre-test and post-test results in comparing the three variables is presented in Table 3.1.3.

Table 3.1.3: ANCOVA: Between Experimental and Comparison Groups – Pre and Post test results For the variables Comprehension, Vocabulary and Academic Performance.

Variables	DF	LS Means	F	Sig.
Comprehension:				
Pre-test: Comparison & Exp. Group	1	46.44	284.31	0.0001*
Post-test: Comparison & Exp.	1	47.42	1.18	0.2799
Group				
Vocabulary:				
Pre-test: Comparison & Exp. Group	1	31.34	247.11	0.0001*
Post-test: Comparison & Exp.	1	31.32	0.04	0.8461
Group				
Academic Performance:				
Pre-test: Comparison & Exp. Group	1	59.8	396.66	0,0001*
Post-test: Comparison & Exp.		59.98	0.47	0.8604
Group				

^{*} p = < 0.01

The results in Table 3.1.3 indicate that there was a significant difference (F= 284.31,

p =<0.01) between the Comparison and Experimental Group with regard to the pre-

test scores of the Comprehension variable. There was however, no significant

difference between the Experimental and Comparison Group concerning the post-test

Comprehension scores. This would indicate that the intervention programme did not

create a significant improvement in the comprehension skills of all subjects within the

Experimental Group when compared to the post-test scores of the Comparison Group.

There is a significant difference (F= 247.11, p =< 0.01) between the Comparison and

Experimental Group regarding the pre-test scores of the Vocabulary variable. No

significant differences are indicated between the Experimental and Comparison

Groups concerning the post-test Vocabulary scores. This would indicate that the

intervention programme did not create a significant improvement in the vocabulary

skills of all subjects within the Experimental Group when compared to the

Comparison Group.

There was a significant difference (F= 396.66, p= <0.01) between the Comparison

and Experimental Group pertaining to the pre-test scores of the Academic

Performance variable. There was however, no significant difference between the total

Experimental and total Comparison Group concerning the academic scores at the

post-test phase. This would suggest that the intervention programme did not create a

significant improvement in the subjects of the Experimental Group with regard to

their overall Academic Performance. This is meaningful in that it was expected that

both the strong and weak readers would benefit from the reading intervention due to

the additional exposure to diverse new reading material.

3.2.1 Conclusion: Quantitative Analysis

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In comparison of the pre-test and post-test Vocabulary, Comprehension and Academic Performance means of the Experimental and the Comparison Group, a null hypothesis is supported, thus indicating that the reading abilities of Experimental Group had not improved significantly after the 11 week intervention programme. There was a significant decrease in the scores of the Academic Performance variable of both the Experimental and the Comparison Group. This may be attributed to the increase in the level of difficulty with respect to learning material, namely the change from Grade 8 at the pre-test stage to Grade 9 at the post-test stage.

3.3 Qualitative Results

A qualitative analysis was used to analyse the written responses of the subjects from this study. The qualitative data obtained by the questionnaires involved content analysis. The idea for the design of the questionnaires was derived from Rosnow and Rosenthal (1996) where questionnaires referred to as the *critical incident technique* allow for subjects to provide an open-ended description of an observable or experienced action. In the present study, the subjects both strong and weak readers (mentors and mentees) of the Experimental Group were given two questions to answer concerning their experience of the intervention programme (See Appendix B). The questions were designed to be openended so that the responses could later be analysed according to themes and trends.

In the present study, both strong and weak readers (mentors and mentees) of the Experimental Group were given two questions to answer with regard to their experience of the intervention programme. The questions were designed to be as open-ended as possible, so that the responses could later be analysed according to themes and/or trends. Each respondent was asked to indicate whether he or she was a weak or strong reader. The respondents could choose to answer the questionnaire anonymously or indicate their student numbers or names if they wished to do so. The researcher explained that the feedback from the questionnaires would be used for research purposes only and that no names or learner identities would be included in the research report.

The themes identified in the responses have been organised under the two questions given to the subjects. To facilitate the administration of the questionnaires, the Experimental Group respondents were divided into two groups:

- The Positive Group those who perceived the reading programme as helpful
- The Negative Group those who perceived the reading programme as unhelpful

Cohen et al. (1982) argued that the tutors in peer intervention programmes gained an increase in confidence and experienced added learning from the interventions. It was thus considered reasonable to examine whether the strong readers found the intervention programme meaningful according to their own unique experiences. The criticisms and perceptions of both strong and weak readers were also thought to be valuable with regard to the future formulation of similar intervention programmes.

A total of 53 response papers were returned. The Positive Group yielded 20 responses and the Negative Group 2 yielded 33 responses.

RESPONSES OF THE POSITIVE GROUP: (those who perceived the reading programme as helpful)

QUESTION 1: Please describe how and why the peer reading programme is helping you.

Themes:

• Personal growth and academic achievement

Many participants expressed that they had experienced some personal growth and more self- confidence as well as an improvement in their academic performance. For example: a) "I am happy to help someone else and when we do read I also learn new words and their meanings"; b) "I've enjoyed the group discussions and my marks have improved than before"; c) "Giving us more confidence and pace of our reading"; d) "It helps vocabulary"; e) "I have learnt new words and it makes me feel good"; f) "Just a little bit of practice goes a long way and you get more confident reading with someone else that is willing to help you".

• Positive attitude towards the reading intervention

Evident in many of the responses was a positive attitude towards the reading intervention, for example: a) "My partner and I help each other to figure out hard words...so far a positive experience, I think this programme would do very well with people who are

strong with Maths and those who are weak with Maths"; b) "I've had a great time even though the first time I felt stupid but now that has all changed I think very soon I'll be a strong reader and teaching someone who is struggling"; c) "The peer reading programme has made a difference to both the strong and weak readers and it should stay available so that it can help those who can't read, pronounce, etc."; d) "The programme was a great idea".

QUESTION 2: Describe your experiences so far regarding the peer reading programme.

Themes:

• Time

Many participants expressed regret that there was not enough time to practice the reading sessions, for example: a) "Me and my partner do not find much time together to read because of tests and classwork"; b) "if teachers could set out 10 minutes of a lesson for us it would work much more effectively"; c) "It does work although I've had trouble finding time to do it because the teacher gets cross"; d) I think it would work more if we have enough time and so far in some classes but there isn't much time to read"; e) "We have not had many chances to read together"; f) "I read with my partner during Sub's and when ever we have extra time"; g) "My experiences so far have been positive ...and I feel that we don't have enough time to read in class because we have so much work to do"; h) "I've improved but we've had such little time together because of tests, projects and we'd appreciate if we had an opportunity to have more time to spend together"; g) "We have had few opportunities to read together and I think we would have both benefited more if we were given more time and opportunity to read...and the few times we have read it was great!".

Enjoyment

Several of the participants from Group 1 expressed enjoyment when doing the reading programme, for example: a) "This has been a great experience I've not only learned the basics of reading but how fun reading is"; b) "I've had a great time even though the first time I felt stupid"; c) Well, I've enjoyed the group discussions, enjoyed working with Sippi and lastly I'm happy that my marks have improved than before"; d) "We had a really fantastic time reading together after school and has helped me with my reading"; e) "I really enjoyed my time helping someone to read and I felt I learn't a bit

to"; f) "I learned new words which makes me feel good"; g) "My experiences on the reading programme is that I'm have a lot of fun, because I'm improving in most my reading assignments and a bit on my spelling. My mentor has helped me I am really thankful of having this opportunity of improving my reading. THANK YOU!".

To summarise the responses for question 1, it would seem that most of the participants in the Positive Group thought that the reading programme was beneficial and that they had learnt more about themselves, their partners and that they had improved their vocabulary. There was also a positive attitude towards the reading programme, for both the stronger and weaker reader. A sense of enjoyment for these participants was also evident. A strong theme from most of the responses was the lack of time available to carry out the intervention as planned.

RESPONSES OF THE NEGATIVE GROUP: (those who perceived the reading programme as unhelpful)

QUESTION 1: Please describe how and why the peer reading programme is not helping you.

Themes:

• Time

Most of the participants expressed the view that they had very little opportunity to carry out the reading intervention as planned, for example: a) "We don't always have the chance to read with each other; b) "We don't always get the opportunity "; c) "Not been able to get time to do it. Teachers have not giving us time to do the programme and we haven't had opportunities to do any"; d) "It hasn't helped at all because we haven't got any time to read and any way I'm not interested"; e) "It hasn't helped really because there has been no time to read"; f) "If we had more time it would be more beneficial"; g) "Its not helping me because I don't get time to work with my partner but it's a good idea"; h) "We have too many things to do, so we don't get the chance to do it"; i) "I think with more time and effort my partners' reading will improve dramatically".

• Attitude toward the intervention programme

Although some of the respondents indicated that they thought the programme was beneficial, for example: "It is a programme that will work if we do more reading in the classroom", many of the respondents in Group 2 displayed a negative view towards the intervention, for example: a) "It has not helped because I don't like been treated like I'm stupid and I can read for my self I don't need a guid dog"; b) "I feel it to be a waste of MY TIME"; c) "A few of the people were not really interested which did'nt do much good". Some responses were ambivalent about the intervention programme, for example: "My experiences so far regarding the peer reading programme is great because its giving us the opportunity to improve our reading skills, but we're not taking that opportunity maybe it's because we don't have enough time or maybe we're just lazy to put some effort in and read" and "I think reading with your peer is quite an experience but to be honest I've gained nothing".

QUESTION 2: Describe your experiences so far regarding the peer reading programme.

Theme:

• *No experience of the intervention programme*

Many of the respondents revealed that they had not experienced the peer reading at all, for example: a) "No experience at all"; b) "I have not had any experiences with the reading programme since the first meeting"; c) "Well, we hav'nt experienced anything yet"; d) "no experiences"!

• Respondents preferring to read without a peer

A number of respondents indicated that they preferred reading alone, for example: a) "I'm getting better on my own"; b) I've done good so far by myself"; c) "Don't like reading with other people I like reading alone"; d) "I do read often alone which benefits me".

To summarise, most of the respondents indicated that they had experienced very little, if any peer reading sessions due to time constraints, with several respondents stating they had no experience of the intervention at all. Some respondents preferred reading without a peer and found that reading alone was more beneficial to them. Regarding the responses yielded for Question 2, very few respondents indicated that the programme did not work for them because of the relationship with their peer reader. It was noted that most of the

respondents who displayed a negative view towards the intervention programme, were weak readers. The stronger readers were on the whole, more optimistic about the programme.

The following chapter includes an interpretation and a discussion pertaining to the quantitative and qualitative results reported in this chapter.

CHAPTER 4

DISCUSSION

This section discusses the research findings in relation to the aims that motivated the present study. The study evaluated the efficacy of a peer reading intervention for Grade 9 learners, specifically aimed at improving the reading and comprehension skills of the (L2) English Second Language Learners. The measures used were The Stanford Reading Diagnostic Test (SDRT) – Brown Level's subtests, Vocabulary and Comprehension, the Academic Performance (school averages) of the subjects and a brief qualitative questionnaire.

4.1 Interpretation and Implications of Findings

The research hypothesis for the study was presented in Chapter 2, namely:

After an eleven week peer reading intervention programme with an intervention group (Experimental Group), there will be a significant difference in the reading abilities and overall academic performance of the Experimental Group and the Comparison Groups respectively, as reflected in the pre- and post-test scores of the subtests Vocabulary and Comprehension, including the post-test academic results.

To test the research hypothesis, the following statistical procedures were conducted:

- Descriptive statistics were provided whereby the means of the Vocabulary,
 Comprehension and Academic Performance scores at pre-test and at post-test
 stages of all the weak and strong readers in the Experimental and Comparison
 Groups were compared pertaining to the variables; Vocabulary, Comprehension
 and Academic Performance.
- T-tests were conducted to establish whether any statistically significant differences existed between the means of the strong readers at the pre-test and

post-test phase for the Experimental Group and for the Control Group. The same procedure was done for the weak readers in both the Experimental and Control Group.

• The second level of statistical analysis included an Analysis of Covariance (ANCOVA) which examined whether any statistically significant differences existed between the Experimental and Comparison Group. In this procedure the covariant takes out individual differences before comparing the groups. Each subject thus acts as his own 'control'. In this analysis, the F-ratio or F test was employed and is based on the analysis of variances instead of on the means.

A qualitative analysis was also conducted using the critical incident technique, whereby 2 open-ended questions were asked of the participants regarding their experiences of the intervention programme. The themes identified in the qualitative analysis and the participants' opinions will be integrated into the following discussion of the results.

The Experimental Group: A comparison of means (using t-tests) within the strong reading group

The strong reading group was selected on the strength of their academic performance and the pre-test scores on the SDRT (Brown Level) subtests Comprehension and Vocabulary. The strong reading group showed a significant (t=2.78, p < 0.5) decrease in academic performance at the post-test phase. This indicates that the intervention did not impact significantly on their overall academic performance. However, academic abilities and the interests of learners may also be limiting factors in academic performance. It is possible that the decrease in overall academic performance was due to greater academic demands subsequently placed on these subjects since the pre-test phase taken a year before, namely whilst the subjects were in Grade 8. A significant decrease (t=3.78, p,<0.05) in Academic Performance of the strong readers in the Comparison Group could be due to the same reasons. The means for the Vocabulary (t = -1.45, p > 0.05) and Comprehension (t = -1.28, p > 0.05) variables also reported no significant differences. From these results, it is thus indicated that the strong reading group did not benefit from the intervention, especially regarding their academic performance and reading skills. However, in the qualitative analysis provided in Chapter 3, several strong readers indicated that they viewed the reading intervention as beneficial and were motivated to continue with the intervention if they had more time to do so. Several strong readers also indicated that the intervention had been a positive experience in creating a greater understanding of their peers' needs. This outcome suggests that the intervention programme may have positive social ramifications, in that it may foster a greater sense of responsibility and caring between the learners. Hall (2006) states that one of the characteristics of peer mediated interventions is that they have academic and social benefits for learners.

The Experimental Group: A comparison of means (using t-tests) within the weak reading group

The pre-test and post-test comparison of means within the group of weak readers yielded significant differences regarding all three variables, Vocabulary, Comprehension and Academic Performance. The means between the pre-test and post-test scores for the Vocabulary variable show a significant increase between the pre-test and post-test scores (t = -3.14, p < 0.05). An increase in the Vocabulary scores may indicate that the extra reading due to the intervention programme, could have improved these participants' knowledge of vocabulary. Similarly, the significant increase at the one percent level of significance, (t = -7.38, p < 0.01) in the means of the pre-test and post-test Comprehension variable indicates an improvement in comprehension skills. The improvement in the Vocabulary and Comprehension subtests may also be due to the maturation process of the participants. The subjects' exposure to new learning material, knowledge gained from peers subsequent to the post-test phase may have contributed to higher scores regarding these two subtests.

The significant decrease (t = 3.40, p < 0.05) in Academic Performance indicates that although the intervention may have contributed to the improvement of reading skills, it did not impact on the overall academic performance of the weak readers. This may mean that the weak readers, who are already finding the demands of Grade 9 too challenging, are falling further behind because they do not have adequate reading skills to support academic activities.

In the qualitative analysis, the majority of respondents, whether they found the intervention helpful or not, indicated that they felt it would have been more beneficial it they had been given *more time* to experience the intervention in the classroom. It is

possible that certain weak and strong readers did benefit from the intervention when it was administered, but the majority in both groups, expressed disappointment or regret that they had not been afforded more time in the classroom to read with their peer reading partners. Lephala, Shandu, Southey, Spencer and Thoka (2005) explored the efficiency of a number of language interventions. It was found that the investment of time was a decisive factor for the students to improve their language skills. This finding would support the views given by the weak and strong readers in the Experimental Group, confirming that for the intervention to be beneficial, it required the necessary time to exercise the intervention on a consistent basis.

Analysis of Covariance (ANCOVA): Between the Experimental and the Comparison Group – Pre-test and Post-test results comparing the Comprehension, Vocabulary and Academic Performance variables

There were significant differences at the one percent level of significance between the Experimental and Comparison Group, pertaining to the pre-test results with regard to all three variables, namely, Comprehension (F = 284.31, p < 0.01), Vocabulary (F = 247.11, p < 0.01), and Academic Performance (F = 396.66, p < 0.01). However, with respect to the abovementioned three variables, there were no overall significant differences between the pre-test and post-test results of the Experimental and the Comparison Group. A null hypothesis is thus supported. The reason for this outcome may be revealed in the analysis of the qualitative data and the evidence found in the literature to support these findings.

In analysing the qualitative responses and sourcing the findings in the literature, there may be several reasons why the reading intervention did not yield significant differences between the Experimental and the Comparison Groups. In the literature review provided in Chapter 1, cultural factors were discussed regarding the importance of a supportive home and school environment regarding the successful learning of a first and second language. Foertsch (1998) and Snow (1992) support that the type of culturally based communication patterns young children learn at home, provide a foundation for their reading and writing behaviours in the classroom. Reflected in the responses of the qualitative analysis, some weak readers that regarded the intervention as unhelpful, displayed a negative view towards extra reading,

particularly with a peer. It is thus possible that there is a correlation between poor academic performance and a negative attitude towards new learning experiences, for example the paired reading intervention. In her earlier work, Saville-Troike (1976) posits that negative parental attitudes towards learning may impact on their children's motivation to participate in new learning experiences, ultimately affecting their academic performance.

Evident from some of the qualitative responses, was the attitude towards reading with a peer which may be influenced by the fear of ridicule and lowered self-confidence. This could have impacted on the motivation of some of the weak readers to participate in the reading intervention. Identifying whether the weak reader needs emotional support and encouragement before commencing with a reading intervention programme may be helpful. Encouragement may serve as a motivator to participate in the intervention, despite any difficulties presented. Educators thus need to have the appropriate training and skills to address these issues when presented with them in a learning context. Pretorius (2002) emphasised that many South African educators cannot communicate adequately in English and do not have the training and resources to assist L2 learners with their language difficulties. Saville-Troike (1976) states that every teacher of English as a second language, is in a position of teaching a second culture as well, thus filling the role of a cross-cultural interpreter in addition to serving as a second language educator. The educator's understanding of the barriers faced by the L2 learner may thus facilitate the efficacy of new learning interventions. This is demonstrated in the following discussion.

Visser (2005) states that supportive peer relationships can promote the sharing of knowledge and experience, provide valuable role models and improve coping skills. Small-group guided readings in which learners practice the reading strategies and skills demonstrated by the teacher or instructor are particularly effective not only for academic gains, but for the sharing of knowledge and the psychological support it provides (Meeks & Austin, 2003). This view is shared by the researcher, who administered a nine month reading group programme consisting of 10, Grade 8 L2 learners at a private girls school in Johannesburg. The researcher familiarised herself with the learners' cultural background, needs and attitudes towards learning and reading. Before commencing with the programme, the researcher provided the

learners with questionnaires to fill in. From their responses, it was evident that the learners lacked self-confidence and the motivation to do extra reading. Once the researcher had an understanding of what the reading group's needs were, she rolemodelled strategies and methods demonstrating how to read and to obtain meaning from a wide variety of texts. Each learner was afforded the opportunity to read aloud and interpret the sections of the text for the group. Group members were encouraged to affirm each other and assist each other with grammar, vocabulary and pronunciation. This concept was taken from the intervention devised by Bloom (1987) used in the present study. The risk free context of being able to make mistakes, ask questions about the reading material and discuss the reading matter contributed to a positive and motivated learning experience for these learners. In questionnaires administered during and at the end of the reading programme, the responses indicated that all 10 learners had begun to enjoy reading, looked forward to the weekly reading group session and experienced better results in English and their other subjects. The researcher and the class teacher also noted an increase in confidence in the learners. They seemed to enjoy voicing their opinions and ideas more during the year and were less afraid to make mistakes. It may be that the reason why this reading intervention was successful, is that not only was there a consistent time slot allocated for the intervention, but extra time was taken to understand the learners' needs, especially their need for encouragement and affirmation.

Kulik and Kulik (1992) identified several characteristics that ensured the success of peer mediated interventions, with the emphasis being on the teachers' commitment and involvement in the procedure. There is also strong support in the literature, (for example, Ruddell, 1994) that reading practice improves reading ability and learning. From the qualitative responses in the present study, the learners appeared to lack their teacher's support and consistent time allocations to exercise the intervention. This may be an important contributing factor as to why the 11 week reading intervention did not contribute to significant differences in Vocabulary and Comprehension scores between the Experimental and Comparison Group at the post-test phase. A consistent theme identified in both the weak and strong readers' comments was the absence of time to exercise the intervention in the classes as planned. Many responses revealed that there were too many projects and tests to spend extra time on the intervention. Some responses indicated that teachers were not providing support and the time for

the participants to do the intervention. The Guidance Teacher repeatedly obtained feedback from the teachers involved in the intervention programme. It was noted by the researcher that the teachers were under pressure to meet administration and departmental deadlines and often could not afford to provide extra reading time in the classrooms. Saville-Troike (1976) emphasises that conflicting attitudes toward language create one of the greatest difficulties in cross-cultural communication between educators and learners. It may be that this factor played a role in the lack of motivation in some of the teachers to exercise the intervention as planned. Visser (2005) states that the whole-hearted participation and commitment of the role-players in the school is essential for the effective implementation and sustainability of an intervention programme. Recommendations pertaining to this important factor follow later in the chapter.

An interesting observation to emerge from this study was that some of the participants showed a preference for individual, silent reading as opposed to group reading. The implications of this observation may merit further investigation, especially in the light of the present Outcomes Based Education (OBE) system which favours group learning. Lephalala et al. (2005) mention that learners who have different learning styles, may need an instructional method that suits their style in order to achieve better academic results. It may be that certain weak readers did not feel that the peer reading intervention suited their learning needs and thus were less motivated to participate in the intervention sessions.

In conclusion, a number of possible explanations for the confirmation of the null hypothesis emerged. Insufficient time invested by both teachers and participants in exercising the intervention programme may have been an important factor. The attitude from several participants towards the intervention programme also seems to play a significant role in the commitment towards a successful outcome. It was observed that many participants viewed the intervention programme as beneficial but seemed to be discouraged by the lack of time allocated for the intervention during the classroom periods.

4.1 LIMITATIONS AND SHORTCOMINGS OF THE STUDY

Measures used

Added to the use of the Stanford Reading Diagnostic Test (SDRT) – Brown Level's subtests, Vocabulary and Comprehension, the Academic Performance namely, the school averages of the participants, the use of behaviour rating scales may have served to gain a greater understanding of how the readers all viewed the idea of a peer reading programme before it commenced. Time and logistical constraints did not allow for a small pilot study which would have revealed any problems regarding teacher's involvement in the study and might have afforded the opportunity to address the administration of the intervention in more effective ways at the school. A teacher questionnaire may have assisted in understanding the difficulties they experienced regarding time allocation and commitment towards exercising the reading intervention.

Training and involvement of the teachers or facilitators

Although time constraints were given as an obstacle regarding the consistent application of the intervention in the classroom, more attention could have been given to the way in which the reading times were allocated. A workshop before and during the intervention period with the teachers might have served to allow them to voice their opinions and increase their feelings of involvement in the intervention programme. Visser (2005) supports that the facilitators of the intervention programme require constant encouragement and support to overcome obstacles during the intervention period. Time constraints and availability of the researcher also did not allow for the provision of additional support regarding a closer monitoring of the intervention programme on a more regular basis.

4.3 RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The study could also be extended by including a more diverse selection of schools from different areas. From the researcher's experience regarding the small reading group at a private school in Johannesburg, it would appear that the attitude towards extra learning resources differs according to socio-economic contexts. A replication of this study using a wider sample representing learners from all socio-economic groups may provide useful information regarding how the intervention programmes could be tailored to suit the school contexts.

The whole-hearted participation and commitment of all the role-players in the school is essential for the effective implementation and sustainability of the reading intervention. Future studies regarding similar intervention programmes could devise methods whereby the teachers feel consulted regarding the peer reading process. Visser (2005) confirms that a peer intervention programme tends to be successful when the teachers feel fully involved, supported and encouraged.

From the qualitative observations of the present study, it was noted that the participants who felt that they could not derive any benefit from the peer reading intervention, may not have fully understood *how* the intervention could be of benefit. The researcher's experience with the reading group at the private school, revealed that once the participants had asked questions and established a relationship with the researcher/tutor, they became increasingly motivated to read *outside* the reading group and displayed greater enthusiasm towards the reading programme. Visser (2005) supports that the intervention leader or coordinator should establish a trusting relationship with the peers and the teachers as this assists in sustaining commitment towards the intervention process.

Identifying whether the weak reader needs emotional support as well as academic support *before* commencing with a reading intervention programme may be helpful.

The use of behaviour rating scales or interviews before the intervention takes place may reveal whether participants have learning styles not suited to peer reading sessions or that they require a more emotionally supportive context from the teacher. This was apparent in the small reading group at the private school, discussed earlier. The tutor (namely the researcher) played an important role in 'modelling' how to affirm readers when they read correctly. A non-judgemental and accepting environment also served to encourage the weak readers to learn from their mistakes and not feel humiliated by them. The researcher had to devise ways in which the readers could feel more confident and less guarded in the group context. Allowing the mentor and mentee to exchange roles may serve to increase the confidence of both parties. In certain situations, teachers may not feel comfortable dealing with learner's emotional problems. Guidance and support from a suitably trained facilitator for example, may help teachers to deal with these problems and to expand their skills.

Several peer, or group reading interventions found in the literature have been devised by experienced professionals. It would be interesting to conduct a study regarding the needs and perceptions that the learners have regarding the improvement of their own literacy skills and how they would formulate a peer reading intervention. This may provide greater insight regarding the difficulties that these learners experience. It may also assist weak readers to take ownership of their own learning process and increase their motivation to participate.

Weak readers with learning disabilities need to be identified prior to the intervention since they experience word-recognition difficulties which are related to deficits regarding phonological and visual processing. These learners may need a more specialised form of learning support. Lephalala et al. (2005) mention that learners who have different learning styles, may need an instructional method that suits their style in order to achieve better academic results. This could pose a challenge for the Outcomes-Based Education (OBE) approach introduced in 1998.

4.4 CONCLUSION

The possibility that a vast number of L2 learners may not have had the advantage of optimal cognitive and academic development in their mother tongue places an immense burden on the educators, many of whom may not be highly proficient in the English language or have not had sufficient training to overcome these difficulties. The observations from the qualitative results in this study, indicate that many teachers may not have sufficient time to devote to extra learning programmes due to administration and teaching deadlines. Van Zyl (2002) found that teachers are struggling with the increasing demands to meet departmental administration requirements. Findings in the literature and well as observations from the present study, suggest that support from the teachers and the school management is essential in establishing a context in which a peer reading intervention may function successfully. The qualitative analysis revealed that many participants regarded the intervention as beneficial and enjoyed the experience with their peer reader. Several participants expressed regret that they could not experience the intervention on a more consistent basis and that time was serious constraint. It is encouraging that many participants expressed the hope that the intervention programme should continue.

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