

# **THE ROLE OF COMPREHENSION STRATEGY PRACTICES IN READING LITERACY ACHIEVEMENT OF GRADE 4 AND 5 LEARNERS**

A dissertation of limited scope

by

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## ABSTRACT

What is the role of reading comprehension strategy practices in Grades 4 and 5 learners' reading literacy achievement in the South African Progress in International Literacy (PIRLS) 2006 study? Herein lies the main question of this study.

South Africa's participation and perpetually poor performance in more than one international study highlights literacy as a serious problem in South Africa. The results of literacy studies such as SACMEQ II 2000, the 1999 MLA study, and in particular, the South African PIRLS 2006 study, revealed the predicament in which South African primary education finds itself. The results of these studies emphasise the consistently poor reading literacy achievement by South African primary school learners.

The findings that emanated from the South African Progress in International Literacy (PIRLS) 2006 study, showed considerable differences between the various groups of learners in South Africa. The following examples will indicate the differences in reading literacy achievement. The South African Grade 4 learners achieved an average score of 253 (SE=4.6). The Grade 5 learners achieved an average score of 302 (SE=5.6). Both these scores fall far below the fixed international average of 500 (Howie et al. 2007, p. 23). However, in an analysis of the eleven official languages in the PIRLS 2006 study, learners from the Afrikaans language group achieved the highest scores with the Grade 5 girls achieving an average of 427 (SE=11.6).

The aim of the study was to identify the effective reading comprehension strategies used at a primary school where the highest scores in South Africa were achieved, then to determine the role that reading comprehension strategies played in literacy achievement as uncovered in the PIRLS 2006 study. This research was conducted at an Afrikaans speaking school in Gauteng where the learners achieved the highest scores in PIRLS 2006.

Based on a review of the literature, the study focused on five reading comprehension strategies, namely, identifying main ideas; making inferences; questioning; mental imagery and summarising. These reading comprehension strategies were underpinned by the processes of comprehension outlined for PIRLS 2006 and the PIRLS 2006 model of Contexts for the Development of Reading Literacy was used as a conceptual framework for this study.

A profile of Afrikaans Grade 4 and 5 teachers was compiled based on the analysis of the PIRLS 2006 Afrikaans teacher questionnaire data. Teacher profiles consisted of teachers' biographical information such as age and gender, and their academic and professional background.

The practice of reading comprehension strategies was tested on data from a case study of one Grade 4 and one Grade 5 Afrikaans teacher. The findings of the study showed that the use of teaching reading comprehension strategies are essential for learners to achieve any standard of reading literacy. A high standard of reading literacy mainly stems from teachers who perform reading comprehension strategy practices that will mirror the orchestration of instructional strategy activities and comprehension assessment activities. It appears that effective teachers of reading comprehension operate as conductors to guide learners during the reading comprehension process into a constant reader-text-activity dynamic, which enables readers to bring vocabulary and strategy knowledge to the act of reading. The role that reading comprehension strategy practice plays on learners' reading literacy achievement is illustrated in PIRLS 2006.

*Keywords:* Reading comprehension practice, reading comprehension strategies, identifying main ideas, making inferences, learners' reading literacy achievement, South African Progress in International Literacy (PIRLS), high performing primary school, profile of Afrikaans teachers.

## DECLARATION

I declare that *The Role of Comprehension Strategy Practices in Reading-Literacy Achievement of Grade 4 and 5 Learners* is my own work having been guided by my study leaders. All the sources that I have used or quoted have been indicated or acknowledged by means of a complete reference.

Jeanette Stols

August 2010

**UNIVERSITY OF PRETORIA**

**DECLARATION OF ORIGINALITY**

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## DEDICATION

This dissertation is dedicated to my husband Kobus, and my two sons Roelof and Dieter, who were caring and supportive. You have been my inspiration. Thank you for standing beside me on this long and difficult journey.

This dissertation was completed only with the help of God Almighty.

*When I am down and, oh my soul, so weary  
When troubles come and my heart burdened be  
Then I am still and wait here in the silence  
Until you come and sit a while with me.*

*You raise me up so I can stand on mountains  
You raise me up to walk on stormy seas  
I am strong when I am on your shoulders  
You raise me up ... to more than I can be.*

*You raise me up* performed by Josh Groban

## ACRONYMS

CEA	Centre for Evaluation and Assessment
CEPD	Centre for Education Policy Development
DoE	Department of Education
HSRC	Human Sciences Research Council
IDB	IDB Analyzer
IEA	International Association for the Evaluation of Educational Achievement
IEH	Institute for Education in Hamburg
IRA	International Reading Association
LiEP	Language in Education Policy
LOLT	Language of Learning and Teaching
LP	Learners Practicing
MLA	Monitoring Learning Achievement
MLP	Monitoring Learning Achievement Project
RNCS	Revised National Curriculum Statement
NRP	National Reading Panel
OECD	The Organisation for Economic Cooperation and Development
PD	Point difference
PISA	Programme for International Student Assessment
PIRLS	Progress in International Reading Literacy Study
RNCS	Revised National Curriculum Statement
RRSG	Rand Reading Study Group
SACMEQ	Southern and East Africa Consortium for Monitoring Educational Quality
SD	Standard Deviation

SE	Standard Error
SIS	Science International Services
TEP	Teacher Education Research and Development Programme
TIMSS	Trends in International Mathematics and Science Study
TT	Teachers Teaching
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
UP	University of Pretoria
USA	United States of America
ZPD	Zone of Proximal Development

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## CHAPTER 1 - INTRODUCTION

*Literacy is not a luxury; it is a right and responsibility. If our world is to meet the challenges of the twenty-first century, we must harness the energy and creativity of all our citizens.*

- President Clinton on International Literacy Day, 8 September 1994.

### 1.1 INTRODUCTION

The author set out to review literacy, literacy studies and the learners' literacy achievement in the context of South African Education (1.4). The study focuses on primary schools in South Africa who participated in the Progress in International Reading Literacy Study (PIRLS) 2006, but narrows it down to the classroom-based reading comprehension practices in Grades 4 and 5, taking into account the policy of the Department of Education on language and literacy (1.5).

This chapter introduces the study by first examining the background and the context of literacy (1.3), and the literacy studies conducted in the South African education system (1.6). The problem statement (1.7) and rationale (1.9) are introduced and the research questions (1.8) that guide the study are presented. The study is briefly outlined in the final section of this chapter (1.10).

### 1.2 AIM OF THE RESEARCH

The author's interest lies in the more successful schools to ascertain what they do in the classroom to reach the achievement in reading comprehension compared to the international standards. The answers in a case study could provide an in-depth understanding of, and insights into learners' classroom experience of comprehension strategy practices and literacy achievement. Therefore, the spotlight falls on the reading comprehension strategies that are likely to add to learners' levels of reading literacy and reading literacy achievements in Grade 4 and Grade 5 classrooms.

The findings that emanated from the South African PIRLS 2006 study show significant differences between the various groups of learners in South Africa. The South African Grade 4 learners achieved an average score of 253 (SE= 4.6). The Grade 5 learners achieved an

average score of 302 (SE=5.6). Both these scores fall far below the fixed international average of 500 (Howie, Venter, van Staden, Zimmerman, Long, Scherman & Archer, 2007, p. 23). In an analysis of the eleven official languages, the learners from the Afrikaans language group achieved the highest scores in PIRLS 2006, with the Grade 5 girls achieving an average of 427 (SE=11.6).

The aim of this study was to identify effective reading comprehension strategies at a primary school with a high level of reading literacy achievement, and to determine the role those strategies played in the literacy achievement as uncovered in the PIRLS 2006 study. The research was conducted at an Afrikaans speaking school that had the best reading achievement in Gauteng. (Gauteng as a province was chosen for the sake of convenience and for logistical reasons.)

With these aims in mind, the following section reviews the context of and background to literacy.

### **1.3 THE BACKGROUND AND CONTEXT OF LITERACY**

For the past hundred years the term ‘literacy’ was most often used in the context of ‘functional literacy’, or the ability to read and write (Hodges, 1999, p.3).

The definition of literacy has changed as society, culture and economy has changed (PISA, 2003, p.108). Just as the levels of literacy required to function socially have varied across cultures and time in the past, so at the dawn of the new century, educators needed to move toward broader goals to promote a new level of literacy.

In the age of information, the term ‘literacy’ has gathered broad and metaphoric meanings (Manzo & Manzo, 1995, p.3). The ‘new’ literacy has evolved from the exclusive focus on reading and writing to a more expansive and inclusive perspective (Dubin & Kuhlman, 1992). Literacy has thus gone beyond the ability to read and write, since it has to include an individual’s ability to speak, compute and solve problems at levels of proficiency necessary to function in school and at work, in the family and in society (National Institute for Literacy, 2009).

The term ‘literacy’ now implies an interaction between social demands and individual competence throughout life (Hodges, 1999, p.19). Literacy is no longer considered an ability

acquired only during the early years of schooling, but it is viewed as an expansion of knowledge, skills and strategies which an individual builds on to interact and participate in society during his<sup>1</sup> entire life.

The Organisation for Economic Cooperation and Development (OECD), the Institute for Education in Hamburg, has defined literacy as a basic human right and argues that literacy encourages hopes, not only in society as a whole but also in the individual who is striving for fulfilment and personal benefit by learning how to read and write (PISA 2003).

The International Association for the Evaluation of Educational Achievement (IEA) conducts studies to evaluate and monitor reading literacy around the world. One of the first studies was the Reading Literacy study of 1991. Thirty-one countries participated in this study, which tested two populations of 9 to 14-years-old students. Other projects of the IEA include the Progress in International Reading Literacy Study (PIRLS) of 2001 and 2006. The IEA decided to combine the terms ‘literacy’ and ‘reading’, and define ‘reading literacy’ as a means of understanding and writing language for a variety of purposes, whether it is to achieve personal or societal goals (Campbell et al., 2001, p.3). The IEA’s relationship to PIRLS and their conceptualisation of ‘reading’ and ‘reading literacy’ will be used in this study. PIRLS 2006 defines reading literacy as:

- The ability to understand and use those written language forms required by society and/or valued by the individual. Young readers can construct meaning from a variety of texts. They read to learn, to participate in communities of readers in school and everyday life, and for enjoyment (Mullis, Kennedy, Martin, Sainsbury, 2006, p.3).

#### 1.4 AN OVERVIEW OF THE SOUTH AFRICAN EDUCATION SYSTEM

South Africa has some 386 600 teachers and 26 000 schools, of which about 20 000 are primary schools (Grades R–7). Of these, only a small number are private schools, approximately 1 100 (Howie et al., 2007, p.382). Since 1994, curriculum revision has occurred in three waves, with the first involving the ‘cleansing’ of the curriculum of its racist elements, the second implementing outcomes based education through Curriculum 2005 (C2005), and the third, revising Curriculum 2005 and introducing the National Revised

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<sup>1</sup> Male gender pronouns will be used in this document for the sake of convenience.

Curriculum Statements (NRCS 2005).

The vision was for Curriculum 2005 (C2005) to be operating fully in all compulsory school grades by the year 2005. C2005 pivoted around the philosophical principles of outcomes based education. The emphasis was on ‘outcomes’ instead of input, on activity learning instead of passive learning, and of learner centredness instead of teacher centredness (Stoffels, 2005, p.532). During the third wave in 2000, C2005 was revised and reviewed and the Revised National Curriculum Statement was employed (Chisholm, 2003, p.1).

Even with a single National Department of Education and nine provincial departments, Johnson, Monk and Hodges (2000, p.180) point out that South Africa still has separate education systems operating in the country. Howie et al., (2007, p.382) agree, and add that the national education department largely hands over responsibility to the provincial departments. This means that although there is one national department, there is still separation among provincial departments in terms of equity, quality and access, and in addition, the provincial departments vary in aspects of delivery and quality.

Although the new democratic government committed itself to educational reform, and to provide a common unifying curriculum, schools in the provinces vary (Johnson et al., 2000, p.180). Model C’ schools (previously white only schools) are different from schools that were previously disadvantaged under the apartheid system.

## **1.5 THE POLICY OF THE NATIONAL DEPARTMENT OF EDUCATION ON LANGUAGE AND LITERACY**

The Department of Education’s Language in Education Policy (LiEP) recommends that a learner’s mother tongue be used as Language of Learning and Teaching (LOLT), especially in the Foundation Phase, which comprises Grades R to 3 (DoE, 2002). The Language in Education Policy (LiEP) is in line with the South African Constitution of 1996, which provides for the right of all children to be educated in their own language. However, the Bill of Rights is not uniformly implemented, nor is it standard practice in South African schools for every learner to be educated in his first language. The majority of schools provide one of the African languages for instruction in Grades 1 to 3, and the remaining schools use either English and Afrikaans (Howie et al., 2007, p.381).

South African schools are confronted with a complex language problem, as learners should

be taught in their mother tongue. Even though mother tongue education is offered in schools from Grades 1 to 3, these learners do not necessarily attend schools where their mother tongue is used as the language of learning. Therefore, while the Language in Education Policy is noble, it is not realistic, for many learners who, for example, speak Xitsonga at home, and have to attend a Sesotho school.

To complicate matters, the Language in Education policy calls for a switch from the mother tongue to English as the language of instruction at the end of the Foundation Phase (Department of Education, 1997). Suggested revisions to the policy propose an extension of mother tongue education to the end of Grade 5, as these quotations bear witness:

*The National Department of Education is in the early stages of developing a National Literacy Strategy 'to combat the problems with literacy' in South Africa (Howie et al., 2007, p.382).*

*Ongoing concerns surrounding the development of learners' literacy skills in South Africa has encouraged research into literacy teaching and learning (Van Staden & Howie, 2009, p.21).*

## **1.6 SOUTH AFRICA'S ACHIEVEMENTS IN NATIONAL AND INTERNATIONAL LITERACY STUDIES**

In this section, a brief overview of South Africa's participation in national and international literacy studies is described. The Systemic Evaluation at the end of 2001 was a national government initiative to monitor and assess learner performance nationally at Grades 3, 6 and 9, and international literacy initiatives involved the Monitoring Learning Achievement (MLA) study, the Southern and East Africa Consortium for Monitoring Educational Quality (SACMEQ 11) and the Progress in International Reading Literacy Study (PIRLS) 2006.

### **1.6.1 Systemic Evaluation by the South African Department of Education**

The Systemic Evaluation, a study conducted by the National Department of Education on literacy levels among Grade 3 learners at the end of 2003, revealed problems with literacy in primary schools in South Africa (DoE 2003). A sample of 51 307 learners from 14 000 schools were randomly selected and completed the three 'assessment tasks' (Fleisch, 2008, p. 4). These three assessment tasks were linked to the new curriculum in the three learning areas, namely literacy, numeracy and life skills. All three 'tasks' included both multiple choice and free response questions (Fleisch, 2008, p.7). The results showed that 61% of

learners could not read or write at the appropriate level for their age. These findings were supported by the findings that in some provinces up to 18.5% of the learners had failed Grade 3, and were repeating the year.

### 1.6.2 Monitoring Learning Achievement (MLA) Study

Apart from the national literacy studies, South Africa has also been involved in a number of international studies, each of which shows that South Africa's learner achievement lags behind in comparison to other countries and regions. One such international initiative was the Monitoring Learning Achievement (MLA) study conducted in 1999 (Chinapah, 2000). This study was one of the first large cross-national studies of quality and was part of the UNESCO/UNICEF *Education for All* campaign to monitor the quality of education in primary schools in participating countries. The study involved national samples of Grade 4 learners in literacy, numeracy and life skills. South Africa participated alongside a number of other African countries. Table 1-1 taken from Chinapah (2000) illustrates the ranking of countries according to their achievements in literacy.

**Table 1.1: Ranked scores for literacy, numeracy and life skills (MLA study 1999)**

Country	Literacy		Numeracy		Life Skills	
	%	SD	%	SD	%	SD
Tunisia	77,9	15,1	60,4	18,4	74,7	13,4
Morocco	67,6	15,5	56,4	18,9	62,3	16,2
Mauritius	61,0	21,0	58,5	19,2	58,0	20,0
Uganda	58,7	17,6	49,3	18,1	66,8	20,3
Madagascar	54,7	21,2	43,7	17,4	72,1	10,3
Mali	51,8	19,4	43,6	16,8	56,9	19,1
Senegal	48,9	18,1	39,7	15,6	45,7	16,2
<b>South Africa</b>	<b>48,1</b>	<b>n/a</b>	<b>30,2</b>	<b>n/a</b>	<b>47,1</b>	<b>n/a</b>
Botswana	48,0	15,0	51,0	15,0	56,0	15,0
Zambia	43,0	18,0	36,0	17,0	51,0	23,0
Niger	41,1	18,9	37,3	15,8	44,7	17,6
Malawi	35,0	14,0	43,0	14,0	77,0	14,0

Source: Adapted from Chinapah, 2000, p.7 & South Africa, MLA National Report, November 1999, p 7 and 8

The South African figures obtained from the MLA National Report (1999) reveal that the Grade 4 numeracy, literacy and life skills test was administered in 400 schools in all nine provinces with more than 10 400 learners participating in the study. The literacy task

consisted of 30 items focusing on word recognition, understanding of detail content, writing skills, spelling, and grammar, and retrieving and providing information (Fleisch, 2008, p.10).

South Africa was ranked just above Botswana, Zambia and Malawi in literacy (48.1%), below all eleven African countries in Numeracy (30.2%) and just above Senegal and Niger in life skills (47.1%) These findings are confirmed by Strauss and Berger (2000) who reported that average scores for the three tasks (literacy 48.1%, numeracy 30.2% and life skills 47.1%) are well below 50%, and as such serve as an indication of learners' inability to engage successfully with literacy, numeracy and life skills material as required by the curriculum.

### **1.6.3 Southern and East African Consortium for Monitoring Educational Quality (SACMEQ)**

A further international initiative for monitoring and evaluating the quality of basic education was run under the auspices of The Southern and East Africa Consortium for Monitoring Educational Quality (SACMEQ). SACMEQ has 15 Ministries of Education as members: Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania(Mainland), Tanzania (Zanzibar), Uganda, Zambia and Zimbabwe.

The first two research projects undertaken by SACMEQ were commonly referred to as the SACMEQ I and SACMEQ II projects. The duration of the first project was from 1991 to 1995, and it covered 1 000 schools, 20 000 learners and 7 countries. The duration of the second project was from 1995 to 2004 and it covered 2 300 schools, 14 000 learners and 14 countries.

As a democracy in its infancy, hardly a year old, South Africa did not participate in SACMEQ I in 1995. However, when SACMEQ II was conducted in 2000, South Africa seized the opportunity to participate. The SACMEQ II study covered the learning areas of reading and mathematics assessment, which were administered to a representative sample of Grade 6 learners in each country (Moloi & Strauss, 2005), and also investigated the social and academic backgrounds of the learners and their teachers.

Table 1.2 shows that of the 3 163 randomly selected learners in Grade 6 classes in South Africa, just more than half (number of learners in levels 1–3 expressed as a percentage of the total) were not 'reading for meaning'. These children were unable to demonstrate the ability

to read and make meaning of a simple reading comprehension task.

**Table 1.2: Distribution of South African scores in reading in the SACMEQ II study**

Levels		Frequency	Percentage
1	Pre-reading	385	12,2
2	Emergent reading	596	18,1
3	Basic reading	604	19,1
4	Reading for meaning	506	16,0
5	Interpretive reading	298	9,4
6	Inferential reading	223	7,0
7	Analytic reading	344	10,9
8	Critical reading	208	6,6
<b>Total</b>		<b>3 163</b>	<b>100</b>

Source: Moloï & Strauss, 2005

An item (number 54) from the SACMEQ II study appears in the box below to illustrate learners' inability to construct meaning from a written text (SACMEQ II). The exemplar item was designed to test reading for meaning (level 4). Learners were asked to read a short text and answer multiple-choice questions (Fleisch, 2008, pp.16-17).

## GRANDPA

Once upon a time, there was an old man. His eyes had become weak. His ears were deaf, and his knees would shake. When he sat at the table, he was hardly able to hold a spoon. He spilled soup on the tablecloth, and he often slobbered.

He lived with his son and daughter-in-law. They also had a small boy who was four years old, so the old man was a grandfather.

His son and his son's wife found it disgusting to see him spilling food on the table. And so they finally ordered him to sit in a corner behind the stove. Here, they served him his food on a small earthenware plate. Now, Grandpa didn't even get enough to satisfy his hunger. He sat there feeling sad. He looked at the table, where the others were eating, and his eyes filled with tears.

Then, one day his shaking hands could not even hold the plate. It fell to the floor, and was broken into many pieces. The young wife scolded him. But the old grandfather said nothing. He just sighed. Then the young wife bought him a very cheap wooden bowl. Now he had to eat from that.

One day while they were having dinner, the grandchild was sitting on the floor, and was very busy with some small pieces of wood.

What are you doing? asked the father.

I am making a bowl, the boy answered.

What is it for?

It is for my father and mother to eat from when I grow up.

Then the man and wife looked at each other for a long time. Then, they started to cry. At once, they asked the old grandpa to come back to the table, and from then on, he always ate with them. After that, if he sometimes spilt his food, they never said a word about it.

54. How did the grandfather feel when he sat behind the stove?

- Bored
- Tired
- Pleased
- Unhappy\*

The item (54) requires learners to be able to reach a conclusion about the main idea in the text. They had to read forward and backward. The reader cannot merely search for the correct

word in the passage, but must demonstrate an understanding of the core idea. The SACMEQ II reading scores suggest that at the time, half of all South African Grade 6 learners were unable to do this (Fleisch 2008, p.17).

The percentages and corresponding standard error of sampling<sup>2</sup> values for the Grade 6 learners reaching minimum and desirable levels of mastery in reading, are presented in Table 1.3 for the provinces and for South Africa overall. The sampling error is the difference between the sampling estimate and the true population score. A committee of South African educational experts drew up a list of essential test items, indicating how many of these a learner should be expected to answer correctly in order: a) to barely survive during the next year of schooling and: b) be guaranteed success during the next year of schooling. Those who could only answer the first set of questions reached the ‘minimum level of mastery’ and those who answered the second set of questions, correctly reached the “desirable level of mastery” (Fleisch, 2008 p.18).

**Table 1.3: Percentages and sampling errors of learners reaching minimum and desirable reading levels of mastery**

	Learners reaching minimum level of mastery		Learners reaching desirable level of mastery	
	%	SE	%	SE
Eastern Cape	18,5	5,88	5,1	2,96
Free State	16,3	6,76	3,2	1,89
Gauteng	65,9	11,83	43,2	16,58
KwaZulu-Natal	43,9	8,34	22,1	6,76
Mpumalanga	12,9	7,06	3,7	3,67
Northern Cape	30,3	5,90	8,7	3,51
Limpopo	15,5	5,54	5,9	4,26
North West	10,4	3,19	0,6	0,45
Western Cape	84,2	4,44	56,8	7,80
<b>South Africa</b>	<b>35,1</b>	<b>3,18</b>	<b>18,4</b>	<b>3,23</b>

Source: Moloï & Strauss 2005, p.183

Moloï and Strauss (2005) found that slightly more than 1 in 3 learners were reading at the minimum level of mastery and just less than 1 in 5 were reading at the desired level of

<sup>2</sup> See Creswell, 2005, p. 589 for more details

mastery (Table 1.3). This conclusion is based on the assumption that the sample was representative of the country as a whole, and that the test was a good gauge of the children's reading achievement levels.

However, there are significant differences in the range of achievement between the provinces. The two provinces with the highest percentages of learners who reached both the minimum and desired levels of mastery in reading were the Western Cape (84,2% and 56,8%) and Gauteng (65,9% and 43,2%), and according to Fleisch (2008 p.19), the national situation is bleak and the picture in some provinces even bleaker. The deplorable state is best illustrated in the North West Province where only 10,4% of learners read at the minimal level, and less than 1% achieved the desirable level.

The results of the SACMEQ studies and the 1999 MLA study reveal the predicament in which the South African primary education finds itself. To confirm these findings, reading literacy achievement results emerging from the PIRLS 2006 study will be discussed in the next section.

#### **1.6.4 The Progress in International Reading Literacy Study (PIRLS)**

The Progress in International Reading Literacy Study (PIRLS) 2006 is an international reading literacy trend study conducted under the auspices of the International Association for the Evaluation of Educational Achievement (IEA). PIRLS 2001 was the first study in a planned 5-year cycle, and was followed by PIRLS 2006. The 2006 study was implemented in 45 education systems, including Belgium with two educational systems and Canada with three. South Africa participated for the first time in 2006 and over 30 000 Grade 4 and Grade 5 learners were sampled to participate.

The international average for PIRLS 2006 was set at 500 (Ogle, Sen and Pahlke, 2003:4). The international average is only a fixed number against which all countries can be compared. This is calculated so that all participating countries contribute equally to the average.

PIRLS 2006 South African was conducted by the Centre for Evaluation and Assessment at the University of Pretoria, and the findings revealed that South Africa achieved the lowest score of the forty-five participating education systems. Newspaper headlines in South Africa announced these distressing findings with punchy headlines:

*If you're reading this, you're one of the few* (The Star, 2007, p.9).

*SA vaar swakste in toets* (Rademeyer, 2007, p.1).

**Table 1.4: International and South Africa's average scores according to gender and grade**

	International			South Africa					
	Grade 4			Grade 4			Grade 5		
	Boys	Girls	PD	Boys	Girls	PD	Boys	Girls	PD
Average Score	492	509	17	235	271	36	283	319	36
Standard Error	0,6	0,6	-	5,0	5,0	-	5,5	6,3	-

Source: Howie, Venter, Van Staden, Zimmerman, Long, Scherman & Archer, 2007

Table 1.4 shows that the South African Grade 4 learners achieved an average score of 253 (Standard Error = 4.6) and the Grade 5 learners, who were also tested in the South African study to track the progress in their reading ability from Grade 4 (Mullis et al., 2007, p.106), achieved an average score of 302 (SE=5.6). Both these scores fall far below the fixed international average of 500.

Internationally, girls out-performed boys: Grade 4 girls scored 509 (SE=0.6) points and the Grade 4 boys scored 492 (0.6). These figures show a 17-point difference (PD) between the girls and the boys in the international study. In South Africa, the Grade 5 girls had an average achievement score of 319 (SE=6.3), scoring 36 points more than the Grade 5 boys with 283 (SE=5.5). The difference between the South African Grade 4 girls' average achievement score of 271 (5.0) and the Grade 4 boys' average achievement of 235 (5.0) was also 36 points. This gender difference was amongst the highest in the world (Howie et al., 2007, p.24).

An analysis of the eleven official languages, showed that the Afrikaans Grade 5 girls achieved the highest scores at an average of 427 (SE=11.6) depicted in Figure 1.1. This average score is 81 score points below the international average for the Grade 4 girls. English home language learners, who wrote the assessment in English, were the best performing group with an average achievement score of 458 (19.0) in Grade 4, and 513 (13.6) in Grade 5 (Howie et al., 2007, p.26).

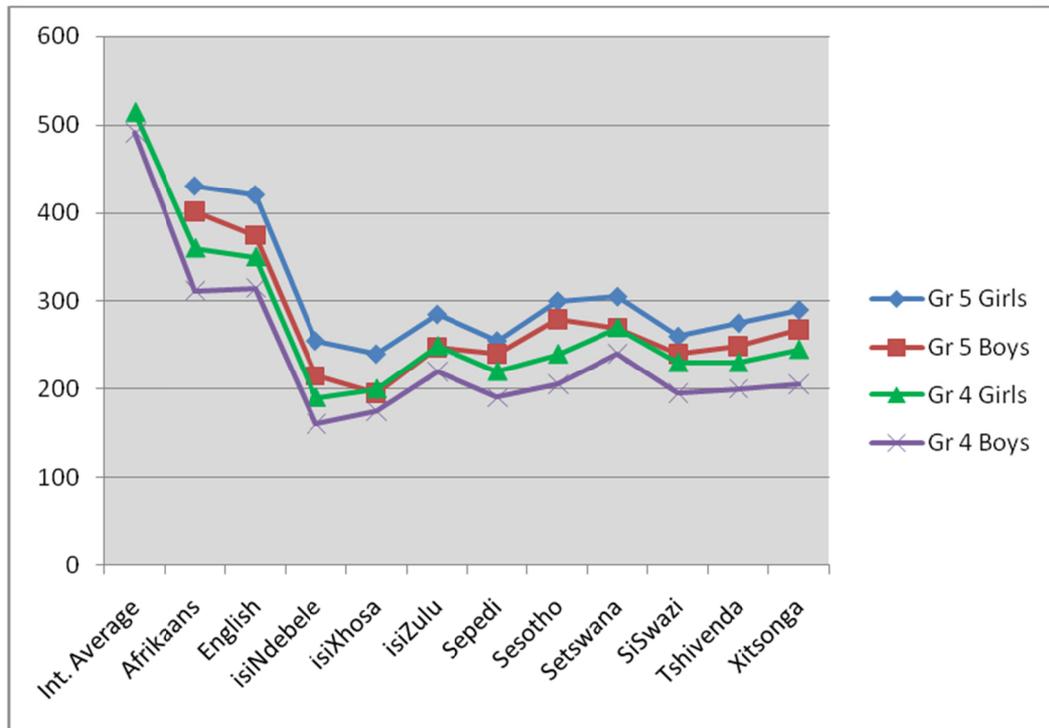


Figure 1.1: Average achievement according to test language and gender per grade

It is noteworthy that the top average performance in any African language was achieved by Grade 5 girls in Setswana, 307 (SE= 12.2). This score is below that of the lowest performers in the English group, namely Grade 4 boys who achieved an average reading literacy score of 315 (SE- 18.4) (Howie et al., 2007, p.25).

The overall reading achievement in PIRLS 2006 involves a combination of the two aspects of reading literacy: the processes of comprehension and the purposes for reading.

The *processes of comprehension* refer to processes employed by the learner when attempting to comprehend what is being read. These include:

- focussing on and retrieving explicitly stated information
- making straightforward inferences
- interpreting and integrating ideas and information
- examining and evaluating text and language elements.

The *purposes for reading* are two-fold:

- reading for literary experience

- reading for information (Mullis et al., 2007, p.3).

In addition to the overall reading achievement scores of learners, and the international comparisons for learner achievement, the PIRLS 2006 results also include benchmark results. Benchmarking in PIRLS 2006 describes the performance of learners on items answered correctly. The range of performance shown by learners was represented by four benchmarks.

Mullis et al. (2007, p.67) report that the benchmarks for PIRLS 2006 were:

- Advanced International Benchmark: 625

At the Advanced International Benchmark of 625, learners are able to integrate ideas across relatively challenging text to provide full text-based interpretations. Learners are able to understand the function or organisational features in texts (Mullis et al., 2007, p.67).

- High International Benchmark: 550

At the High International Benchmark of 550, learners are considered competent readers. Learners are able to retrieve important details across the text and are able to provide text-based evidence for inferences. At this level, learners are able to recognise main ideas, some textual features and are able to integrate ideas across text (Mullis et al., 2007, p.91).

- Intermediate International Benchmark: 475

At the Intermediate International Benchmark of 475, learners are able to understand the plot of stories at a literal level and are able to make connections and inferences across texts (Howie et al., 2007, p.32).

- Low International Benchmark: 400

Reading tasks on the Low International Benchmark of 400, required learners to recognise, locate, and reproduce information that was explicitly stated in texts, especially information that was close to the beginning of the text. Learners who were able to reach the Low International Benchmark showed some success in answering questions requiring straightforward inferences (Mullis et al., 2007, p.78).

The four benchmarks provide valuable insights into the performance of learners in the PIRLS 2006 assessment. In South Africa, only 17–18 % of English and Afrikaans learners in either grade could reach the High and Advanced International Benchmark and none of the African

learners was able to do so. The disparity in the percentages of learners in other countries who reached the top two benchmarks, and the South African learners who could barely reach the lowest one, clearly indicates that “substantial intervention is needed to improve South African learners’ reading literacy” (Howie et al., 2007, p.34).

More than 50% of the English and Afrikaans learners and 80% of African language learners in South African who were tested in PIRLS 2006 were unable to attain the low benchmark of 400. Therefore, the results indicate that the majority of learners in South Africa do not have basic reading skills and strategies to cope with academic tasks.

## 1.7 PROBLEM STATEMENT

South Africa’s perpetually poor performance in more than one international literacy study highlights literacy as a significant problem in education in South Africa. The result of the literacy studies such as SACMEQ II, the 1999 MLA study, and in particular the South African PIRLS 2006 study, revealed the predicament in which South African primary education finds itself. The results of these studies emphasised the consistently poor reading literacy achievement by South African primary school learners. The implication of poor literacy levels among young learners is that they not only leave primary school illiterate, but also their illiteracy tends to continue after entering secondary school (Van Staden, 2006, p.8).

‘Reading without comprehension’ is a general phenomenon in South Africa. If comprehension, the use of written text and the ability to construct meaning using written language, is central to literacy and being literate, an accurate understanding of the problem of learners’ reading comprehension is required (Steelman, Pierce & Koppenhaver, 1994, p.201). Papanastasiou (1999, p.1) explains that “the main purpose of education is to ensure that school learners acquire the necessary skills to read with understanding” and Joubert, Bester and Meyer (2006, p.119) claim that “reading without understanding is futile”.

Reading comprehension is the essence and ultimate goal of all reading instruction. Opitz and Ford (2006), Rathvon (2004), Shuy, McCardle and Albro (2006) and Wolfe and Nevills (2004) concur that comprehension can be regarded as a vital product of reading. It is paramount that reading comprehension be taught from the very beginning of the reading process, as recommended in the Reading teacher’s handbook of the Department of Education (DoE, 2008). The teachers of the early grades need to ensure that learners are not simply

“barking at print”, but that they can understand and interpret what they are reading (DoE, 2008, p.14). Consensus in the research shows that understanding what is read is of absolute importance, and that without this understanding, reading is ineffective. It is therefore imperative that learners comprehend what they read, and this makes the teaching of reading comprehension strategies vital classroom practice.

Against this background, this study poses particular questions and attempts to find answers to Grade 4 and Grade 5 learners’ literacy achievement scores in a high performing reading literacy environment.

## 1.8 THE MAIN RESEARCH QUESTION

In this study, reading comprehension strategies according to the PIRLS 2006 assessment framework are defined as the techniques of retrieving ideas, making inferences, questioning, interpreting and integrating ideas and summarising (Mullis et al., 2006, p.12). This study then used case study approach in an attempt to reveal the role that reading comprehension strategies played in learners’ reading achievement and particularly in the high scores achieved by a particular group in PIRLS 2006.

The research comprised one main question divided into three sub-questions. The details regarding the questions are discussed in more detail in the Research Design and Methods, Chapter 3.

The main research question is:

*What is the role of the comprehension strategy practices in Grades 4 and 5 learners’ reading literacy achievement in the PIRLS 2006 study?*

The main question was divided into three sub-questions.

Sub-Question 1: *What are the characteristics of teachers in a high performing classroom environment?*

Sub-Question 2: *What comprehension strategies do teachers use in a high performing reading literacy environment?*

Sub-Question 3: *What assessment activities do teachers in a high performing reading literacy*

*environment use to measure the effectiveness of the strategies?*

## 1.9 RATIONALE

The rationale for this study is to reveal the role of effective comprehension strategies for those learners who obtained high literacy achievement scores in PIRLS 2006 – specifically in the light of so many learners who, at Grade 4 and 5 levels, were unable to reach even the lowest levels of performance.

The researcher was interested in identifying comprehension strategies the teachers of these learners used and understanding how they were taught and applied in their classrooms. The study uses the PIRLS 2006 test results as data source. The study's relevance is found in the low reading achievement scores in South African primary schools. Research indicates that learners' academic success in the future can be predicted by their reading level at the end of Grade 3 (Wolf & Nevills, 2004, p.2), particularly as the third grade is the pivotal point for developing long-term reading proficiency (Sherman, 2002, p.5).

If 80% of learners in South Africa (based on the PIRLS 2006 findings) do not have basic reading skills, then one can assume that the learners struggled with reading and reading comprehension as early as in the Foundation Phase. These difficulties could influence their academic success in the future and affect the progress of the country. Education departments and teachers ought to examine the problem and offer solutions, as a literate population is indispensable to the social and economic development of a nation (Mullis et al., 2006, p.v). Learners need to have basic reading skills, as reading is a key that opens the world of information (Joubert, Bester & Meyer, 2006, p.83). Reading is fundamental to all forms of personal learning and intellectual growth (Mullis et al., 2006, p.v).

The value of this study is that it aims at identifying effective comprehension practices used by teachers whose learners achieve highly in reading literacy. By identifying these practices, interventions at any level could be more focussed in rehabilitating and changing ineffective teaching strategies, routines, activities or techniques. If learners do not have adequate comprehension skills to enable all other learning, they would probably have little hope of coping in the later grades (Van Staden, 2006, p.8).

## 1.10 OUTLINE OF THIS STUDY

The dissertation is divided into six chapters.

**Chapter 1** serves as an introduction to the study and provides the background to it.

**Chapter 2** describes the PIRLS 2006 study and introduces the PIRLS 2006 Assessment Framework that was selected to define the role of comprehension strategy practices in the classroom.

**Chapter 3** reports on the literature review with reference to those aspects dealt with in the PIRLS 2006 framework and aspects associated with effective reading comprehension strategies.

**Chapter 4** describes this study's research design and methodology. The epistemological paradigm of the study is established before discussing the methodology (a case study) and elaborating on the mixed sequential approach (qualitative and quantitative methods) to collect and analyse data. The site and sample of the study are introduced in this chapter. Methodological norms and validity are dealt with.

**Chapter 5** gives an account of the analysed quantitative and qualitative data. The portrayal of the teachers' questionnaire data, as well as the teacher interviews and classroom observations are described using a reflective approach.

**Chapter 6** reflects on the study, the research process, and on possible future research questions. This chapter also draws conclusions and makes recommendations.

## CHAPTER 2 - THE PROGRESS IN INTERNATIONAL READING LITERACY STUDY (PIRLS) 2006

*'Reading fosters an imaginative dialogue between the text and the reader's mind that actually helps people to think'*

- Stratford Sherman

### 2.1 INTRODUCTION

PIRLS 2006 was designed as a survey and consisted of reading literacy assessment instruments and background questionnaires. The first part of Chapter 2 provides a detailed discussion of PIRLS 2006, paying attention to the design (2.2), target population (2.2.1), sampling (2.2.2), and the instrumentation used for data collection (2.3) which include literacy assessment instruments (2.3.1) and background questionnaires (2.3.2) and finally, there is a discussion on data collection and quality assurance measures (2.3.3) used in PIRLS 2006 study.

The PIRLS 2006 Assessment Framework is introduced in the penultimate part of the chapter (2.4). The PIRLS model of Contexts for the Development of Reading Literacy (2.5) is discussed as the most appropriate conceptual framework to answer the research questions posed by this study and an explanation of the reasons for selecting this particular model is found in this section.

### 2.2 THE PIRLS DESIGN

The PIRLS 2006 study administered reading literacy assessments and questionnaires to a nationally representative sample of Grade 4 and Grade 5 learners.

The PIRLS 2006 assessment included a written test of reading literacy to measure Grade 4 learners' reading literary achievement. (Mullis et al., 2006, p.2). The PIRLS 2006 design used a matrix sampling technique. The passages and accompanying items were divided into groups or blocks, and individual learner booklets are made up of these blocks according to a plan. In PIRLS 2006, the seven hours of testing time was divided into ten 40-minute blocks of passages and items (Mullis et al., 2006, p.3).

PIRLS 2006 collected an extensive range of questionnaire data from learners, their parents, school principals and teachers which provided details of home conditions, curricula and instructional practices in the area of reading competence, as well as characteristics and policies specific to their schools (Mullis et al., 2006, p.2).

### **2.2.1 The South Africa PIRLS 2006 Target Population**

The international target population that PIRLS 2006 required, was the grade that represented four years of formal schooling (counting from the first year of primary school) unless this resulted in an average learner age of less than 9.5 years. In South Africa, PIRLS 2006 was administered to a nationally representative sample of Grade 4 learners. However, the South African study design made provision for the inclusion and assessment of Grade 5 learners to the sample.

South Africa tested in the eleven official languages to conduct the assessment in each learner's language of instruction (Martin, Mullis & Kennedy, 2007, p.106). The Department of Education's Language-in-Education Policy recommends that a learner's mother tongue be used for teaching and learning, especially in the Foundation Phase, Grades R to 3 (DoE, 2002). However, the Language-in-Education Policy calls for a switch from the mother tongue to English as the language of instruction at the end of the Foundation Phase (DoE, 1997).

### **2.2.2 The South African PIRLS 2006 Sample**

PIRLS 2006, South Africa, was administered by the Centre for Evaluation and Assessment, Faculty of Education at the University of Pretoria. In May 2005, the pilot study was conducted with a sample of 38 schools. The main study, which comprised 441 schools, was conducted in October and November 2005, and the last schools were tested in January 2006 (Howie et al., 2007, p.8).

Originally 441 schools were sampled, but only 429 (98.5%) were eligible for inclusion in the study at Grade 4 level. The corresponding figure for Grade 5 was 397 schools (96.5%). In Grade 4, 16 073 learners took part in PIRLS 2006 and in Grade 5, 14 657 learners participated (Howie et al., 2007, p.19).

The South African sample was stratified by language and by province in order to ensure a representative sample of the Grade 4 learner population. The Grade 5 sample coincided with

the Grade 4 sample. When any Grade 5 classes were available, learners from these classes were automatically included in the assessment along with the Grade 4 classes that were selected. A separate Grade 5 sample was therefore not drawn. The rationale for adding Grade 5 learners to the PIRLS 2006 sample was based on concerns that Grade 4 could be regarded as a transition phase in schooling in South Africa, and the desire to examine the progress or differences in reading knowledge and skills from Grade 4 to Grade 5 needed to be examined (Howie et al., 2007).

## **2.3 THE SOUTH AFRICAN PIRLS 2006 INSTRUMENTS**

### **2.3.1 Reading Literacy Assessment Instruments**

Learner achievement was measured by administering objective tests to a sample of learners representing the national populations. Their reading literacy achievement was measured by using a selection of five literary passages drawn from children's storybooks and five informational texts.

To conduct the assessment in each learner's language of instruction, assessment instruments were translated into all 11 official languages: Afrikaans, English, isiNdebele, isiXhosa, isiZulu, Sepedi, Sesotho, Setswana, SiSwati, Tshivenda, and Xitsonga (Mullis et al., 2007). The instrument development and field test activities were carried out between October 2004 and April 2005.

### **2.3.2 Background Questionnaires**

Information about the learners' backgrounds, attitudes and interests was collected through self-report questionnaires. Questionnaires were also adopted for collecting information from teachers about their experiences, attitudes and classroom practices, and from school principals about the characteristics of the schools the learners attended. Parent questionnaires, that included aspects of parents' behaviour and attitudes towards reading and early literacy practices in the home, were given to parents to complete.

### **2.3.3 The South African PIRLS 2006 Data Collection and Quality Assurance**

Each country was responsible for carrying out all the aspects of the data collection by using standardised procedures developed for the study by the IEA. These standardised procedures

included planning the data collection, selecting and training the data collection staff, implementing the data collection using quality control procedures and documenting the national data collection.

Manuals provided explicit instructions on all the aspects of the data collection – from contacting sampled schools to packaging and shipping materials to the IEA Data Processing Centre in Hamburg, Germany. Manuals were also prepared for the test administrators and for the officials at the cooperating schools.

For Southern Hemisphere countries, data collection for the main survey was scheduled for October and November 2005, and for the Northern Hemisphere between April and May 2006.

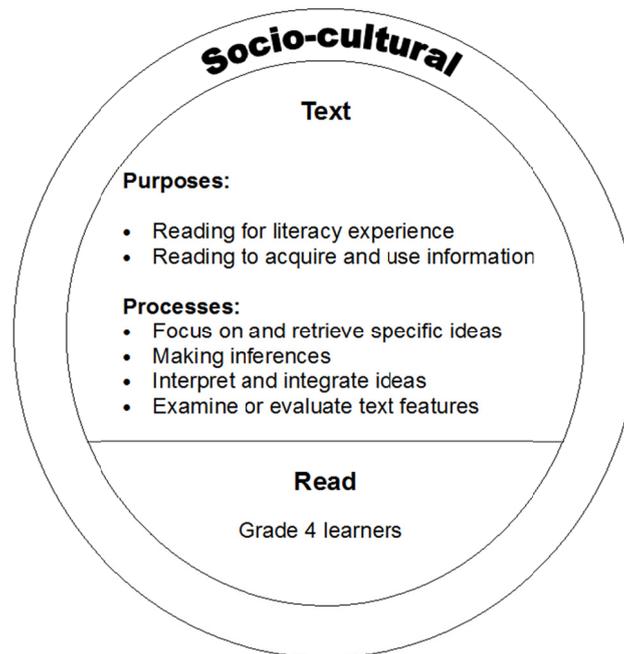
PIRLS 2006 also implemented an international programme for site visits for the international quality control monitors. The control monitors observed the test administrations in the sample schools in each country. The National Research Coordinators organised national quality control programmes (based on the international models) to ensure that data across the countries were comparable. The national quality control monitors visited a random sample of 10% of the participating schools, monitoring the testing sessions, and recording their observations for later analysis (Ogle, Sen & Pahlke, 2003, p.29). These visits were in addition to those done by the international quality control monitors.

#### **2.4 THE PIRLS 2006 ASSESSMENT FRAMEWORK**

PIRLS 2006 examines the processes of comprehension and the purposes for reading (Mullis et al., 2006, p.11). The PIRLS 2006 Assessment Framework acknowledges the interrelationship and interaction between the reader, the text and the socio-cultural context, and highlights its appropriateness for this study in identifying appropriate comprehension strategy practices which have a positive effect on reading literacy achievement. This Assessment Framework was intended as a blueprint for the IEA's 2006 assessment of reading literacy (Mullis et al., 2006, p.vi).

The visual model of the PIRLS 2006 Assessment Framework illustrates that reading is a constructive and interactive process that involves interaction between the reader and the text (Mullis et al., 2006, p.4). Within this framework, there are interrelationships and interactions

between the reader, the text and the socio-cultural context (see Figure 2.1).



**Figure 2.1: The PIRLS 2006 Assessment Framework model (Adapted from Mullis et al., 2006, p.12)**

In the PIRLS 2006 Assessment Framework, the word ‘readers’ refers to Grade 4 learners. In the South African study, Grade 5 readers were also tested to track the progress in their reading ability from Grade 4 to Grade 5 (Mullis et al., 2007, p.106).

The PIRLS 2006 assessment focused on two reading purposes: reading for literary experience and reading to acquire and use information (Snow, 2002, p.xiv). Reading for literary experience was accomplished through narrative fiction, and to acquire and use information, enlightening articles and instructional texts of a factual nature were used.

Meaning is constructed through the interaction between reader and text. As proposed by Mullis et al. (2006, p.12), readers construct meaning in the reading process through a number of ways. This happens when they focus on and retrieve specific ideas, make inferences, interpret and integrate ideas and information and examine or evaluate text features.

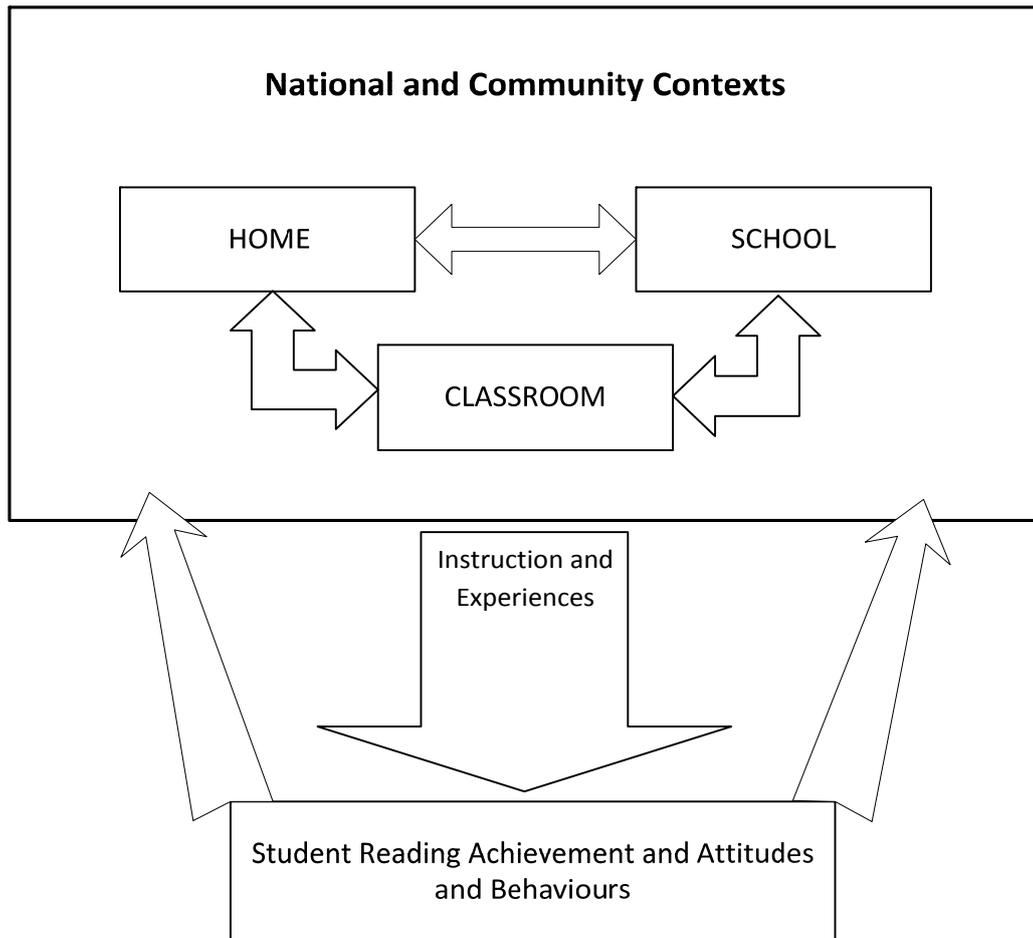
The socio-cultural context includes the interaction between the readers’ context, the readers and their reading matter. The basis for classroom communication, comprehension and learning is then established through these interactions (Rand Reading Study Group, 2002).

In the context of this study, the learners were likely to have come from privileged

backgrounds and been liberally exposed to a variety of reading material. The school and classroom reflect the context of the neighbourhood and society (Snow, 2002, p.16) and these influences need to be acknowledged as they influence the readers' progress and development and which in turn, affect their reading achievement.

## **2.5 THE CONCEPTUAL FRAMEWORK**

The PIRLS model of Contexts for the Development of Reading Literacy was selected to guide this study's inquiry (Mullis et al., 2004, p.25). This decision was primarily made because this model encompasses aspects relating to learners' literacy outcomes, as a product of the instruction and practices of teachers in a variety of contexts, such as the school and the classroom. The PIRLS model (Figure 2.2.) was instrumental in delineating the conceptual framework of this study as it embraces the development of reading literacy. This model is an illustration of how the means whereby learner outcomes, which includes both achievement and attitudes, forms as the result of the instruction received and experience gained in a variety of contexts (Mullis et al., 2004).



**Figure 2.2 PIRLS Model of Contexts for the Development of Reading Literacy (Mullis et al., 2004, p.25)**

According to Mullis et al. (2004, p. 24) the model in its entirety can be viewed as a system that forms an integral relationship among influences of the home, school and classroom on the reading literacy of learners, and how the interaction between these are related and shaped within the community which includes the home, and school and classroom environments (Mullis et al., 2004, p.24).

Although this whole model illustrates, and can be regarded as influences on learner outcome (and comparatively interacts with each other), the purpose of this study focuses on the specific aspects concerning the success with which situations within the school and classroom affect reading literacy achievement. The importance of the home, and influence of the parents and others within the community can foster and nurture an environment for learning, but is not the concern within the aim of this study (Mullis et al., p.26).

For the purpose of this study, the PIRLS 2006 model will be used within the context of this

figure (2.2) to illustrate the position of the *school* and *classroom* in the success of reading literacy achievement. The PIRLS model of Contexts for the Development of Reading Literacy as a conceptual framework for this study (Mullis et al., 2004, p.25) will therefore be strictly defined by the role that comprehension strategy practices play in the classroom and the reading literacy achievement of learners who took part in the PIRLS 2006 study.

The main research question was unpacked into three sub-questions which were aligned with the PIRLS model of Contexts for the Development of Reading Literacy. These sub-questions are:

Sub-Question 1: *What are the characteristics of teachers in a high performing classroom environment?*

Sub-Question 2: *What comprehension strategies do teachers use in a high performing reading literacy environment?*

Sub-Question 3: *What assessment activities do teachers in a high performing reading literacy environment use to measure the effectiveness of the strategies?*

Aspects of the PIRLS model of contexts, such as the school and classroom contexts, point out the model's appropriateness in steering this study towards identifying the role that comprehension strategy practices play in developing learners' reading comprehension and as such, affect their achievement in reading literacy and evidenced in the results of PIRLS 2006.

## CHAPTER 3 - LITERATURE REVIEW

*'Reading is Thinking'*

- Chris Tivani

### 3.1 INTRODUCTION

The literature review attempts to paint a broad picture and in-depth understanding of comprehension strategy practice. By examining the literature on comprehension strategy practice, the researcher identified a number of empirical studies focusing on the importance of strategy practices relevant to comprehension. The literature provides insights into how the nature and knowledge of comprehension strategies and the methods to develop them can be understood.

This chapter then presents a review of literature on aspects of comprehension strategy practices. Each aspect was selected from the research-based findings of two influential reports: The Report of the National Reading Panel (National Reading Panel, 2000) and the RAND Report on Reading Comprehension (RAND Reading Study Group 2002). These effective comprehension strategy practices include reading literacy (3.2), reading comprehension (3.3), knowledge of vocabulary (3.4), knowledge of comprehension strategies (3.5), models to develop comprehension strategies (3.6) and types of comprehension assessment activities (3.7).

### 3.2 READING LITERACY

The definition of literacy has changed over time. A more traditional concept of literacy encompassed more than just an individual's ability to read. However, literacy now implies an interaction between social demands and individual competence (Hodges, 1999, p.19). In the age of information, the term 'literacy' has gathered broad and metaphoric meanings (Manzo & Manzo, 1995, p.3) and within this age, new forms of literacy have emerged, such as the computer, scientific and even media literacy (Hodges, 1999, p.19). In line with the changes in literacy to encompass broad and metaphoric meanings, the definitions of reading and reading literacy have also changed and expanded (OECD, 2003).

The PIRLS 2006 definition of reading literacy as quoted by Mullis et al., (2006: p.3) is:

The ability to understand and use those written language forms required by society and / or valued by the individual. Young readers can construct meaning from a variety of texts. They read to learn, to participate in communities of readers in school and everyday life, and for enjoyment.

The PIRLS 2006 definition implies that reading literacy involves understanding and using written information for a variety of purposes. Thus, reading literacy is essential for individuals and society to function effectively through life and through time.

### 3.3 READING COMPREHENSION

If being literate means to construct meaning from written text, then reading comprehension is central to literacy (Steelman et al., 1994, p.201). Reading comprehension is the essence of reading and essential not only for academic learning in school, but for lifelong learning as well (Durkin, 1993).

The Rand Reading Study Group (RRSG), under the chairmanship of Catherine Snow (2002), explains that reading comprehension is the process of simultaneously extracting and constructing meaning through the dynamic interplay between the reader and the text. During this interaction, the reader is the one doing the comprehending, and the text is what needs to be comprehended. Snow (2002, p.29) advocates that effective teachers of reading comprehension perform practices that mirror the “orchestration” of knowledge about readers, texts, purposive activities and contexts.

The reader brings to the act of reading his cognitive capabilities addressing attention, memory, critical analytic ability, making inferences, and visualisation, his motivation which involves a purpose for reading, an interest in the content and his knowledge with vocabulary, topic knowledge, linguistic and discourse knowledge and finally, knowledge of comprehension strategies and experience (Snow, 2002, p.xiv).

Reading comprehension will be established only when the learner has extracted and created meaning from the reading passage. However, readers can construct meaning at various levels of conceptual difficulty and thinking (Herber, 1978) illustrated in Figure 3.1 namely, a literal level, an interpretive level and an applied level.

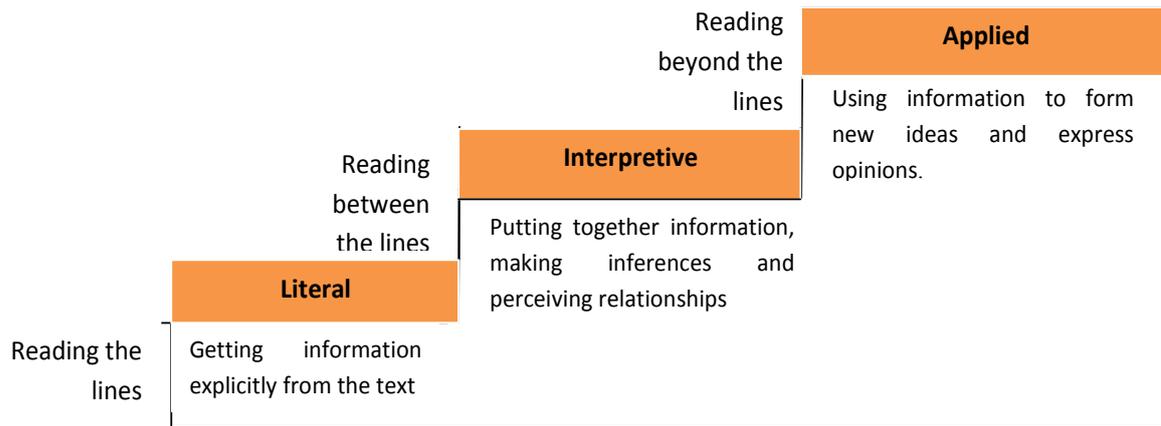


Figure 3.1: Three levels of reading comprehension

At the first level, the literal level, learners read the lines merely to extract the main idea and get the gist of the author’s message. At the second or interpretive level, learners read between the lines and make inferences and some interpretations. At the third and applied level, learners read beyond the lines. Reading at this level is akin to critical discovery and reflection. When constructing meaning from text at the applied level, learners are able to synthesise information, to question and evaluate the author, to think critically and to form new, fresh ideas from the text (Vacca & Vacca, 2009, pp.25–27).

If there is a constant reader-text-activity dynamic during the reading comprehension process, the reader brings to the act of reading knowledge of vocabulary as well as strategy knowledge (Snow, 2002, p.11). The complete reading comprehension repertoire, as mentioned previously, includes cognitive capacities, motivation, vocabulary, and knowledge of specific comprehension strategies (Snow, 2002).

This study will not include the whole repertoire of the reader’s capabilities and knowledge as found in Snow (2002, p.13). The two aspects to be discussed are strategy knowledge and knowledge of vocabulary. The reason for this choice is that the aim of the study is to describe how a strategic stance to reading comprehension, contributes to learners’ reading literacy achievement. Research by Cromley and Azevedo (2007), Hirsch (2003) and Wolfe and Nevills (2004) points to the fact that vocabulary and comprehension strategy knowledge, contribute strongly to reading comprehension.

To comprehend text successfully, skilled readers become strategic in the way they approach

difficult text. Good readers have developed strategies they use to understand what they are reading (Vacca, Vacca & Mraz, 2010, p.20). Skilled readers activate vocabulary knowledge and put into play, text comprehension strategies to understand what they are reading. Figure 3.2 suggests that decoding, reading fluency, vocabulary and comprehension are interrelated processes and illustrate what good readers do when they engage in the process of comprehending text (Vacca, Vacca & Mraz, 2010, p.20).

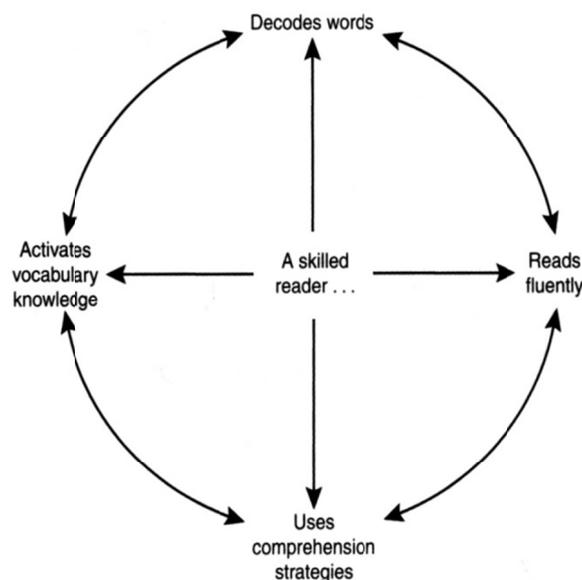


Figure 3.2: A skilled reader comprehending text

### 3.4 VOCABULARY KNOWLEDGE

Research done by Hirsch (2003, p.16) confirms that vocabulary knowledge strongly correlates with reading and comprehension. Wolfe and Nevills (2004, p.154) claim that comprehension and vocabulary develop simultaneously and are dependent upon each other. Recent research by Cromley and Azevedo (2007, p.311) found that vocabulary and reading strategies contribute strongly to comprehension, while Cain and Oakhill (2006, p.701) tend to differ, stating that knowledge of word-meaning may be related to comprehension, though limited vocabulary knowledge does not always impair comprehension. However, Hirsch (2003, p.16) adds weight to his argument by claiming that vocabulary experts agree that reading comprehension depends on a person knowing between 90 and 95 percent of the words in a text. In the light of research conducted by Hirsch (2003) and Wolfe and Nevills (2004), the general understanding is that there is a relationship between vocabulary and

comprehension. However, Wolfe and Nevills (2004, p.118) state that no single answer exists as to whether comprehension is attained through vocabulary development, or reading speed, or fluency. They claim that these skills develop simultaneously as a child becomes a proficient reader.

From Hirsch's perspective (2003, p.21), it is essential that word-knowledge be stimulated and developed early, as the acquisition of word knowledge is a cumulative and gradual process. Hirsch (2003) suggests that vocabulary knowledge correlates strongly with reading comprehension, claiming that in acquiring vocabulary, a small early advantage grows and develops into a big vocabulary advantage, but instruction and practice in vocabulary is necessary to develop reading comprehension (Hirsch, 2003, p.21). Snow (2002, p.16) concurs with this and acknowledges that changes in knowledge, like vocabulary knowledge, will occur with the instruction a reader receives.

### **3.5 KNOWLEDGE OF COMPREHENSION STRATEGIES**

Afflerbach, Pearson and Paris (2008, pp.368–371) define a reading strategy as an effortful, deliberate, controlled process or systematic plan. Yet at the same time, the authors describe reading as an automatic process, an ability to perform a complex act, such as reading comprehension. Reading skills and reading strategies have important implications for reading practices. If learners are able to make the connection, an effortful reading strategy is likely to become an automatic reading skill (Afflerbach et al., 2008).

There is a definite order for applying the reading-strategy-skill connection, Afflerbach et al., (2008, p.365) claim. When embarking on the reading journey, the first step is strategy teaching. The second step is to reach the reading comprehension destination. The final step occurs when the learner has acquired a reading comprehension skill. Keene and Zimmerman (1997), like Harvey and Goudvis (2000), Booth and Swartz (2004) and Miller (2002), emphasise the importance of using comprehension strategies while reading. Effective comprehension strategies include knowledge of different types or genres of texts, constructing summaries of what they have read, generating questions, making prediction about what is to come and clarifying text.

Dewitz and Dewitz (2003, p.6) produced evidence illustrating that strategy instruction improves reading comprehension. Strategy instruction involves helping learners to develop a

repertoire of comprehension strategies that foster and promote comprehension, but this study will not include the whole repertoire of the reader's capabilities and knowledge as found in Snow (2002). Only vocabulary and strategy knowledge will be examined.

Dewitz and Dewitz (2003, p.6) confirm that strategy instruction enables the teacher to assist learners to use a variety of comprehension reading strategies. They also suggest that the emphasis of the strategies should be determined by the thinking processes and demands of the text used by the learners. However, Cunningham and Shagoury (2005, p.84) stipulate that teaching comprehension strategies does not happen in isolation as multiple comprehension strategies are usually taught in classrooms where classroom dynamics continue to play out. Dynamics refers to the interaction between the reader and the text and between the teacher and learner.

When skilled readers have difficulty comprehending what they are reading, they often become strategic in the way they approach these texts. Duke and Pearson (2002 p.205) explain that we know a great deal about what good, skilled readers do when they read: "Reading comprehension research has a long and rich history ... much work on the process of reading comprehension has been grounded in studies of good readers". These comprehension strategies include summarising, making predictions, generating questions and vocabulary knowledge (Vacca et al., 2010, p.20).

The National Reading Panel (2000) noted three themes in the research on the development of reading comprehension skills and explain that reading comprehension is a complex cognitive process. This can only be understood if the role of vocabulary development and vocabulary instruction is clearly described. Comprehension is an active process, involving an intentional interaction between the reader and the text. This means that teachers need to equip learners to develop and apply reading comprehension strategies to improve their understanding, as this is intimately linked to learners' achievement (p.13).

According to Keene and Zimmerman (1997), the best way to teach comprehension strategies is to teach them one at a time by devoting a great deal of time to each one. The authors emphasise teaching individual strategies, such as identifying main ideas, making inferences, questioning, mental imagery and summarising. Emerging from the literature is that skilled readers use a repertoire of such strategies to construct meaning. The USA National Reading Panel (2000) also highlights five reading comprehension strategies, namely, predicting,

clarifying, questioning, summarising and imagining.

These five comprehension strategies link with the PIRLS 2006 definition of reading literacy as learners have to understand written language in order to construct meaning from a variety of texts and are almost aligned with the PIRLS 2006 Assessment Framework which focuses on four such strategies, namely, retrieving specific ideas, making inferences, interpreting and integrating ideas and examining text features. Figure 3.3 delineates the reading comprehension strategies referred to in this study but exclude the the strategy of examining text features.

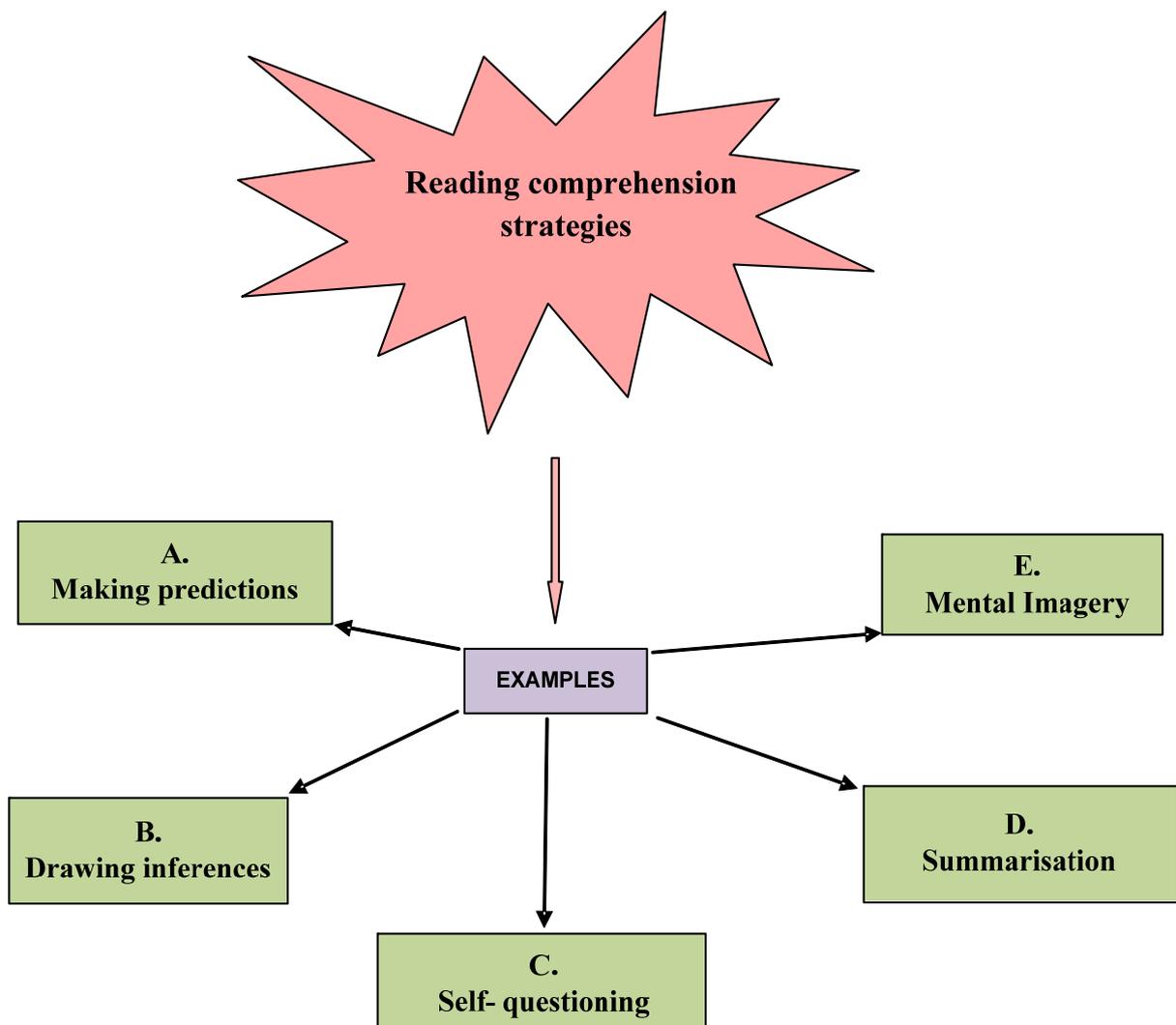


Figure 3.3: Reading Comprehension Strategies

The reading comprehension strategies listed in Figure 3.3 are explained in the following section:

### **A. Making predictions**

Prediction strategies have the function of activating thoughts about the content before reading (Vacca & Vacca, 2009). When making predictions, learners use previous knowledge and experience to make educated guesses about the material to be read. Block and Pressley (2002, p.255,257) concur with Vacca and Vacca (2009) and define predicting as “equivalent to the activation of prior knowledge” (p.255) and argue that “relating text to prior experiences or making predictions about text content are so foundational that they should be emphasized a great deal very early in schooling” (p.257).

In the Primary Framework for Literacy and Mathematics (2006, p.37), it is argued that the ability to predict what a text entails is the first step to successful comprehension. To predict what a text is about can be obtained by using its title as a clue. The opening sentences can help the reader to decide if the text is appropriate to their purpose.

### **B. Drawing inferences**

Booth and Swartz (2004, p.28) argue that predictions and inferences are linked. Therefore, predictions are inferences that are constantly confirmed or changed. According to Hirsch (2003, p.19), Miller (2002, p.114) and Booth and Swart (2004, p.22), reading comprehension depends on the reader to infer, to take risks, and to fill in blanks when answers to questions are not explicitly stated in the text. Readers have to make coherent sense of what they read. The ability to draw inferences is a vitally important part of the process of comprehending (Sarroub & Pearson, 1998). Cramer and Rosenfield (2008, p.126) concur that learners not only read words in a text, but they have to understand the passages to the extent that they can make predictions and inferences about the text.

Cain, Oakhill and Byrant (2000, p.32) ask an important question: Does proficiency in inference-making lead to good reading comprehension, or does good reading comprehension result in superior inference-making? The authors' research findings point to a correlation between skilled comprehenders who draw more inferences than less skilled comprehenders who draw fewer inferences. However, the correlation does not indicate the direction of the

relationship between the two skills (Cain et al., 2000, p.31).

### **C. Self-questioning**

An important instructional comprehension strategy is to teach learners to generate their own questions about written material. When teachers ask questions that beget questions in return, they use an active comprehension strategy (Vacca & Vacca, 2009, p.202). Teachers need to provide opportunities for learners to generate their own questions and seek answers to these self-generated questions. The prediction is that in this way, learners are supported in becoming strategic readers. A reader becomes strategic when developing comprehension strategies to approach challenging and difficult texts (Vacca et al., 2010, p.20).

Cunningham and Shagoury (2005, p.69) and Miller (2002, p.125) argue that proficient readers purposefully and spontaneously ask questions about the text on a regular basis, during and after the process. In Miller's view (2002, p.140) readers' ability to ask questions about what is being read deepens their comprehension. In a study conducted by Keene and Zimmerman (1997, p.99), a common concern arose about struggling readers who tend not to ask questions as they read. Self-questioning links with the PIRLS 2006 assessment, as learners generate questions while responding to the PIRLS 2006 assessment.

### **D. Summarisation**

During the process of summarisation, central and important ideas are stressed and less relevant details minimised (Trabasso & Bouchard, 2002, p.182). Instructions to summarise can make learners more aware of how a text is structured and how ideas are related. Trabasso and Bouchard (2002) argue that learners can be taught to apply various summarisation rules, like identifying and inventing topic sentences, deleting redundancies and trivia. These rules can be taught through example and feedback.

Learners can first summarise individual paragraphs and then learn to construct a summary of summaries. In this way, learners gain experience by summarising single or multiple-paragraph passages.

### **E. Mental imagery**

The idiom 'A picture is worth a thousand words', may explain why comprehension is

increased when mental imagery is employed. Learners' ability to visualise what they are reading is important for developing comprehension (Vacca & Vacca, 2009, p.194). Mental imagery is a strategy that can improve listening and reading comprehension (Gambrell & Koskinen, 2002, p.305). According to these authors, learners do not spontaneously use mental imagery as a comprehension strategy, but will do so if teacher-support and scaffolding are provided.

In a study conducted by Bales and Gambrell (1985 as cited in Block and Pressley, 2002, p.307), Grade 4 and 5 learners were asked to read passages that "contained obvious inconsistencies". One of the groups received explicit instruction prior to the reading comprehension to create images whilst reading, and the control group did not receive that instruction. The findings of the study showed that the group who used mental imagery were 70% more successful in identifying the inconsistencies than the control group. This study shows that learners who do not use the strategy of imagining spontaneously can be taught to use it intentionally and effectively.

However, proficient readers use mental imagery spontaneously and see images in their minds. When they read, they create pictures of what the print suggests, or they describe it metaphorically by "making movies in their heads". Reading words causes the learner to see pictures, which is understandable, since words are only symbols, a code for capturing ideas and feelings (Booth & Swartz, 2004, p.28). This idea is confirmed by research conducted by Pearson, Dole, Duffy, and Roehler (1992, p.22) who showed that proficient readers construct meaning by creating visual and other sensory images from text during and after reading.

### 3.6 METHODS TO DEVELOP COMPREHENSION STRATEGIES

Three methods of teaching reading comprehension strategies are reciprocal teaching, explicit teaching and scaffolding teaching and are described below.

#### A. Reciprocal teaching

Reciprocal teaching is a classic method for teaching reading comprehension strategies, developed by Brown and Palinscar (1984) to improve learners' text comprehension skills through scaffolded instruction (Spörer, Brunstein & Kieschke, 2009, p.272). Through this method, learners are taught how to apply the various comprehension strategies by the teacher

who models the process. The method dictates that when children read a piece of text paragraph by paragraph, they learn to practise strategies and this practice enables them to make connections such as predicting what will happen in the next paragraph, and generating questions during and after the reading process.

The reciprocal teaching approach is historically important in that it was the first empirically validated approach to the teaching of a package of comprehension strategies developed by Brown and Palinscar (1984) and according to Dougherty Stahl (2004, p. 606), reciprocal teaching still has a strong research base in the primary grades.

## **B. Explicit teaching**

Explicit teaching is based on explanation and application. Studies conducted by Duffy, Roehler, Meloth and Vavrus (1986) emphasised direct explanation of strategies as a particular form of explicit teaching. In this study, six interrelated instructional actions were emphasised:

- Teachers introduce the selection to be read.
- Teachers make an explicit statement about what strategy needs to be studied.
- Teachers model strategies to provide learners with a ‘window into the mind’ to be a successful strategy user.
- Teachers provide scaffolding practice to enable learners to practise the strategy with gradually diminishing amounts of assistance and support from the teacher.
- Learners then read a piece of text for content and apply the newly learned strategy.
- Teachers provide explicit statements about the strategy, its use in other settings and its implementation (in the final lesson).

Although Duffy (2002) acknowledges direct explanation as an effective technique to teach comprehension strategies, he advocates that it is not a cure-all. He admits that sometimes direct explanation is appropriate; sometimes something else is. Therefore, the best practice entails one that is appropriate for the situation.

Snow (2002, p.33) claims that if teachers teach comprehension strategies explicitly it will make a difference to learner outcomes – especially for low-achieving learners. She states that this principle of explicit strategy instruction that increases comprehension is supported by an

empirical study by Wong and Jones in 1982.

The USA National Reading Panel's report (NRP) (2000) summarised studies that show the effects of instruction on learning strategies and on reading comprehension. Case studies of excellent teachers indicate that these exemplary teachers provide explicit strategy instruction in the classroom (Pressley et al., 2001, p.54). However, according to Snow (2002, p.66), the examples of these studies do not imply that the teaching and application of explicit strategy instruction increases comprehension.

### **C. Scaffolding**

Scaffolding is another strategy instruction model (Harris & Pressley 1991; Rodgers et al., 2004; Vacca & Vacca 2009). Scaffolding requires teachers to operate in the learners' Zone of Proximal Development (ZPD) (Vygotsky 1935, Vygotsky 1978).

The ZPD is that space where children are unable to perform tasks on their own because they lack understanding, yet they have the potential to comprehend through proximal interaction. Proximal development means being guided and supported by an expert, such as a teacher. The teacher scaffolds the learning experience until learners have more strategy knowledge. This relationship is anchored in the dual partnership of an expert and a novice who are continuously engaged in a dialogue situation (Snow, 2002, p.16). Scaffolding is only temporary, and help can be withdrawn if the child can function independently and without assistance to reach a higher level of development (Rodgers & Rogers 2004, p.2-3). Scaffolding implies that the teacher is also involved in a decision-making processes. This means deciding about the amount of assistance to give, the timing of giving that assistance, and the end goal of instruction when the learners become self-regulated in their strategy use.

The aim of this study is to find evidence for the three methods of teaching comprehension strategies, namely reciprocal teaching, explicit teaching and scaffolding, employed by teachers in those classrooms of schools that performed well in the PIRLS 2006 assessment.

### **3.7 TYPES OF READING COMPREHENSION ASSESSMENT ACTIVITIES**

Linked to the methods of teaching reading comprehension strategies are the various types of reading comprehension assessment activities that can be linked to each strategy. The four types of comprehension assessment activities that will be discussed are questioning, multiple

choice questions, open-ended questions and reading aloud. Except for reading aloud, the PIRLS 2006 assessment encompassed all of these comprehension assessment activities.

Blachowicz and Ogle (2001, p.62) and Johnston and Rogers (2000, p.382) agree that reading assessment is vital to determine instructional needs. They suggest that the connection between assessment and instruction is direct and certain. Johnston and Rogers (2000, p.387) claim that teachers are the primary agents of assessment, and as such, assessment has an impact on their instructional activities. However, there are signals warning teachers that some learners are incapable comprehenders and strategy users, and teachers should become aware of this as when they assess, teachers also teach (Blachowicz & Ogle, 2001, p.62).

There is consensus about the work of Blachowicz and Ogle (2001, p.62), Cain and Oakhill (2006) and Rathvon (2004, p.160) that verifies that different types of reading comprehension assessment activities should be used for early primary learners, and these comprehension assessment activities are discussed below.

#### **A. Questioning**

Blachowicz and Ogle (2001, p.78) make the point that instructional activities must focus on direct and good questioning, as questions affect the thinking strategies that are essential for learners' development of comprehension. It is most important for teachers to ask a variety of questions for learners to respond in different ways to the materials they read.

Good questioning practices involve refraining from frequently asking questions that require only recall – rather there should be a focus on higher-level thinking that will develop higher-level cognitive processes (Blachowicz & Ogle, 2001, p.78).

If teachers use the three levels of reading comprehension (the literal, interpretive and applied levels), they can help to engage learners in instructional routines that revolve around question generation and question answering (Vacca & Vacca, 2009, p.27). Questions are then used to guide reading comprehension at different levels, to help learners not only to recall information, but also to make inferences, express opinions and form new ideas (Duke & Pearson, 2002).

There is a range of questions that teachers can use to instruct and assess reading comprehension. However, multiple choice and open-ended questions seem to be effective in

developing learners' comprehension.

### **B. Multiple choice questioning**

Cain and Oakhill (2006, p.703) state that a multiple choice type of assessment has higher processing demands, as different responses need to be compared. The PIRLS 2006 assessment instruments consisted of five literary and five informational passages which were used to assess the reading purposes and comprehension processes. Each of these passages contained six multiple choice questions and six structured-response items (Mullis et al., 2006, p.5).

### **C. Open-ended questioning**

According to Cain and Oakhill (2006, p.704), the advantages of open-ended questions are twofold: inference-making skills are tested and incorrect responses can be analysed to determine the source of the errors. Dewitz and Dewitz (2003, p.3) agree, stating that the types of erroneous responses might help teachers to design comprehension instructions, as it might be a window opening onto the process of learners constructing meaning.

Cramer and Rosenfield (2008, p.128) declare that open-ended questions discriminate between different levels of comprehension. It is imperative that open-ended questions be used to measure learners' comprehension. The authors comment that this type of questioning is utilised in many standardised achievement tests; however, they believe that if prior instruction and practice has not taken place in the classroom, this type of questioning will not be successful.

### **D. Reading aloud**

The National Department of Education (2008, p.26) defines reading aloud as the time when the teacher reads to the whole class or to a small group, using material that is at the listening comprehension level of the learners. This activity provides learners with new vocabulary, exposes them to a variety of literature, and contributes to their oral and written language development. Reading aloud should occur every day in the early stages of reading instruction to stimulate the children's interest in books and reading (National Department of Education 2008).

Miller (2002, p.28), Hirsch (2003, p.21) and Strickland, Galda and Cullinan (2004, p.94) concur that reading aloud to children is an important activity for teachers to do as it contributes to future success of reading and reading comprehension. Hirsch (2003, p.21) claims that learners benefit from read-alouds until the eighth grade. Miller (2002, p.29) lists the value of reading aloud as it offers teachers the opportunity to display fluency and reading behaviours, to share different genres, to build meaning through think-alouds and to offer children the time and tools to do the same.

### 3.8 CONCLUSION

In this chapter, a review of the literature was undertaken to gain an understanding of various aspects of the teaching of reading comprehension. Firstly, the definition of concepts pertaining to reading such as reading literacy and reading comprehension was discussed. The various levels of reading comprehension were outlined and then important comprehension strategies were examined. Diverse models, used in the development of comprehension strategies, were depicted and thus argued as models which could be used in classroom practice. This review assisted the researcher in gaining insight into the teaching of reading comprehension.

The following chapter, Chapter 4, deals with the research design and methodology used in this study.

## CHAPTER 4 - RESEARCH DESIGN AND METHODOLOGY

*Case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context.*

- Robert Yin (2003)

### 4.1 INTRODUCTION

The research in this study encompassed the design of secondary data analysis and a case study to explore and explain the role of effective comprehension strategy practices in Grade 4 and Grade 5 learners' reading literacy achievement in the PIRLS 2006 study. The function of the main research question is not to have an in-depth inquiry, but rather to explain what is meant by the role of reading comprehension strategy practices. The role of reading comprehension strategy practices refers to the contribution these strategies used in classroom practice might have played in the outcome of the reading literacy achievement of learners who took part in the PIRLS 2006 study.

This chapter is devoted to the research design and methodology that was followed in this study. The research design (4.2) is a case study that is further explained and substantiated in this chapter. The paradigm from which this research was conducted is also included in this chapter, as well as the secondary analysis and mixed methods methodology (4.3) that were used in this design. This study takes the form of a secondary analysis of the PIRLS 2006 data, and the research approach that informed the study are elaborated on. The site and sample (4.4.2) of the case study (4.4.1) are introduced, after which the instrumentation development (4.4.4) was discussed. The research procedures (4.6) are outlined discussing the classrooms observations (4.7.1) and the teacher interviews (4.7.2). A discussion of methodological norms and validity is discussed in Section 4.8. The ethical considerations (4.9) that were taken into account during the course of the study are outlined in the last part of the chapter.

To answer the research sub-questions, it was necessary to use a variety of research methods. In order to describe the characteristics of teachers in high performing classroom environments similar to those the researcher observed for purposes of this study, a secondary analysis of the PIRLS 2006 data was undertaken with a quantitative description of teachers being provided based on the data that was gathered from teachers of Grade 4 and Grade 5

learners. In addition, qualitative methods such as observations and interviews were used to identify and highlight comprehension strategy classroom practices and assessment activities teachers in high performing reading literacy environments use, and finally, in the form of interviews with participating teachers were conducted to query and probe.

The following section provides a detailed description of the design followed for the purposes of this study.

## 4.2 THE RESEARCH DESIGN

The research design indicates the general plan of the scientific inquiry to generate empirical evidence to answer the research questions. This plan includes the methods of data collection and the analysis of these data (McMillan & Schumacher, 2006, p.22). The research design of this study takes the form of secondary data analysis (McMillan & Schumacher, 2006, p.25) by mainly making use of a case study approach, using quantitative and qualitative sequential mixed methods.

For the purposes of this study, reading comprehension strategies are defined as those processes outlined by the PIRLS 2006 study namely retrieving specific ideas, making inferences, interpreting and integrating ideas and examining text features. This study will not focus on the strategy of examining text features.

The main research question for this study, is:

*What role did the comprehension strategy practices play in the Grade 4 and Grade 5 learners' reading literacy achievement in the PIRLS 2006 study?*

For the sake of clarity, the main question was divided into three sub-questions.

Sub-Question 1: *What are the characteristics of teachers in a high performing classroom environment?*

Sub-Question 2: *What comprehension strategies do teachers use in a high performing reading literacy environment?*

Sub-Question 3: *What assessment activities do teachers in a high performing reading literacy environment use to measure the effectiveness of the strategies?*

The first sub-question will describe the context of the high performing classroom environment and a secondary analysis of the PIRLS 2006 data, more specifically an analysis of the Afrikaans teacher questionnaire data, was required to focus specifically on a high performing Afrikaans school and teachers teaching Afrikaans. An Afrikaans school was chosen, as learners from the Afrikaans language group achieved the highest scores in the PIRLS 2006 study. The teachers' data of the teachers teaching Afrikaans as main language were chosen to provide a detailed account of those characteristics that are associated with teachers in a high performing classroom environment. A quantitative approach was used to answer the first sub-question.

The second and third sub-questions attempt to provide an in-depth description to classroom practices. A case study approach was selected as the most suitable design to address the sub-questions in the sampled classrooms. The context, the classroom, features a high performing reading literacy environment, and the comprehension strategies and assessment activities that Afrikaans teachers employ could provide rich and detailed data for the study. A qualitative approach was followed to answer the second and third sub-questions.

### **4.3 MIXED-METHODS APPROACH**

The rationale for using a mixed-methods approach was to collect both quantitative and qualitative data and integrate the data at different stages of inquiry (Creswell, 2005, p.517). A mixed-methods approach involves the gathering of numeric information and text information. Using a sequential mixed-method, this study involved first gathering the quantitative statistical overall achievement results and background information followed by gathering the qualitative data. Therefore, this study first conducted a secondary analysis of the PIRLS 2006 overall achievement results and background information data, followed by the case study which included classroom observations and interviews with primary school teachers.

The research is fully effective with both quantitative and qualitative approaches being applied. Mackenzie and Knipe (2006, p.7) which means that a mixed-methods study explains in detail the initial quantitative statistical results and then confirms it through qualitative research (Creswell, 2005 p.517). That a mixed-method research "often has greater impact, because figures can be very persuasive to policy-makers whereas stories are more easily remembered and repeated by them for illustrative purposes" is the arguments of Gorard (2004, p.7).

## 4.4 THE RESEARCH METHODS

The research methods of this study will be discussed in the remainder of this section.

### 4.4.1 A Case Study

Stake (1995), Cohen, Manion and Morrison (2007) and Merriam (1989) emphasise the importance of a case study being a single unit, embraced by definite boundaries.

In this research, the specific boundaries of the case study design were the Afrikaans language teachers and the Grade 4 and Grade 5 learners. The teachers were from the same primary school. For purposes of this research, a case study gives a greatly detailed description and analysis of the social unit. The investigation is set in a real-life (classroom) context reinforcing Yin's statement that a case study is "... an empirical inquiry that investigates a contemporary phenomenon within its real-life context" (2003, p.13).

### 4.4.2 Sampling

In this study, purposeful sampling was done, specifically to include the best performing schools from the larger sample of schools that participated in PIRLS 2006 (McMillan & Schumacher, 2006, p.319). The researcher based the sample on the overall achievement, but participants were selected only from the Afrikaans language group.

The learners from the Afrikaans language group achieved the highest scores nationally with Grade 4 achieving an average of 364, (13.5%) and the Grade 5 girls, an average of 427 (11.6%) (Howie et al., 2007, p.25). The rationale for the Afrikaans language selection was that it might reveal insight into the relatively good achievements of the Grade 4 and Grade 5 learners. This study aims to illuminate the classroom practices that contributed to the learners' ability to achieve the high scores.

For purposes of this study, the purposely selected sample included one high performing Afrikaans school, consisting of one Afrikaans Grade 4 teacher with one Grade 4 class and one Afrikaans Grade 5 teacher who takes responsibility for two Grade 5 classes. The following section describes the procedures followed to identify the highest performing Afrikaans school in Gauteng.

The PIRLS 2006 achievement results from the highest performing Afrikaans school in

Gauteng were obtained from the International Database Analyzer (IDB Analyzer) of the International Association for the Evaluation of Educational Achievement (IEA). The IDB Analyzer enabled the researcher to compute descriptive statistics. Descriptive statistics is used to describe data. For this data analysis, the study first computed the percentages and means of the best performing primary schools in Gauteng (Table 4.1).

The descriptive statistics emerging from the research in primary schools in Gauteng revealed that an Afrikaans primary school had the highest mean for overall performance. Table 4.1 illustrates the reading achievements of the 37 schools in Gauteng who participated in PIRLS 2006. The reading average of each school is relative to the PIRLS 2006 international average that was set at a fixed 500 points.

**Table 4.1: Gauteng schools' overall reading achievement averages**

Schools in Gauteng	N	Reading Average	SE (%)
90	21	455.63	8.58
<b>91</b>	<b>25</b>	<b>525.42</b>	<b>7.19</b>
92	29	405.03	6.35
94	42	191.91	2.74
95	35	275.84	10.99
96	43	203.47	11.85
97	37	382.6	4.05
98	38	219.01	9.37
99	27	251.34	14.19
100	27	329.62	6.57
101	29	528.07	4.81
102	34	424.87	4.22
103	41	197.3	17.67
105	29	198.32	9.71
106	38	160.33	10.49
107	23	602.85	9.77
108	37	233.46	13.74
109	28	582.88	11.41
110	33	232.53	7.85
111	42	225.26	14.81
112	43	268.97	28.89
114	35	231.51	12.1
115	30	211.72	21.24
116	42	234.19	7.87
117	32	193.54	8.51

Schools in Gauteng	N	Reading Average	SE (%)
118	32	163.28	11.15
119	26	436.2	7.08
120	36	190	8.04
121	35	319.08	9.61
122	34	277.86	13.49
123	43	348.09	4.4
125	38	375.87	11.26
126	38	375.87	11.26
127	58	181.54	2.26
128	42	225.21	13.49
129	37	165.56	1.22
130	25	364.3	11.15

The three highest averages in the Gauteng schools were obtained by school number 107, with 602.85, school number 109 with 582.88 and school number 101 with 528.07<sup>3</sup>. This study, however, focuses only on the best performing Afrikaans school in Gauteng (School 91) which obtained the highest performing score of 351.70 (SE=12.04).

School 91 is an Afrikaans Primary School, founded in 1971, and at the time of assessment with a registered 824 pupils and 34 teachers. The school had an acting principal, as the new principal was appointed only at the end of the 2009 first term. The language of instruction is Afrikaans. The school has a five-day week with nine, 35-minute periods a day. There are two breaks of 15 minutes each. The junior classes (Grades 0–3) run from 7:30–13:00 and the senior classes (Grades 4–7) from 7:30–13:30 each day. The first period on a Monday is always assembly period. Extra-mural classes include art, drama and sport.

#### 4.4.3 Sampling of Classrooms

The acting principal of School 91 nominated one Grade 4 and one Grade 5 teacher for participation in this study. Both teachers taught Afrikaans as first language. Only the Grade 5 teacher was at the school when the PIRLS 2006 assessment was conducted, but she was not part of the Afrikaans Department at that time. This may beg the question why this study is

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<sup>3</sup> The schools were numbered to preserve their confidentiality

focusing on these teachers if neither of them were teaching Afrikaans at the school when the PIRLS 2006 assessment was conducted. PIRLS 2006 sampling was done on learner level, not on school level. The PIRLS 2006 sample was representative of the learners, and not of schools or teachers. In light of the school's good performance in PIRLS 2006, the classroom-based practices of previous years probably established a solid reading comprehension foundation well before the PIRLS 2006 assessment was conducted. The school's profile had thus not changed since the PIRLS 2006 study even if the teachers had changed.

The learners in the one Grade 4 class totalled 28, and the two Grade 5 classes totalled 27 and 28 respectively.

#### **4.4.4 The Development of Instruments for the Case Study**

For the instrument development to be planned, it was essential to begin with the research questions to determine what data would be needed, prior to discussing how the data would be collected in a valid and reliable way (Section 4.2). Justifying the choice of the instruments was embedded in each of the research questions. For purposes of utilising a case study method, data collection instruments included a teacher's questionnaire (administered as part of data collection activities during PIRLS 2006), classroom observations and teacher interviews.

For the PIRLS 2006 study, the teacher questionnaires were developed and used to collect information from the teachers on their biographical information as well as instructional strategies and activities such as reading activities, comprehension assessment and development of reading comprehension skills or strategies used in the teaching and development of reading literacy. The data obtained from the teacher questionnaires were necessary to answer the first sub-question that focuses on the characteristics of the teachers in a high performing classroom environment.

Non-participant observations were employed to get an idea of what goes on in the classroom under 'normal' circumstances. The researcher's role in this study was predominantly that of information gatherer, rather than fulfilling a participant's role. The researcher observed and interacted with teachers in order to establish an 'insider's identity' without participating in classroom reading comprehension activities (Merriam, 1998, p.101). To establish an 'insider's identity' the researcher remained the outsider looking inside the

classroom practices. The researcher adopted a non-intrusive, passive role and merely noted down what was being observed in the classroom (Cohen et al., 2007, p.398).

Observations in the classrooms attempted to establish the kinds of teacher classroom practices used when engaging learners in reading comprehension activities, then to identify reading comprehension strategies and assessment activities that were being used by teachers in a high performing reading literacy environment. Observations helped establish the contribution of the teachers' teaching practices on learners' reading comprehension performance. Analysis of data from this instrument answered the second and third sub-questions.

Semi-structured interviews were conducted with two Afrikaans primary school teachers of the Grade 4 and Grade 5 class respectively. The semi-structured interviews used a mix of more or less structured questions, but allowed for flexibility, depending on what took place in the interviews (Merriam, 1998, p.74). The interview questioning was also guided by what emerged from the classroom observations and allowed for further questioning and probing.

## **4.6 RESEARCH PROCEDURES**

The SA PIRLS 2006 achievement data and the Afrikaans teacher questionnaires were used for quantitative data. Qualitative data was collected at the sampled school, Number 91 during the first week of March 2009 during the Afrikaans lesson periods.

### **4.6.1 Non-Participant Classroom Observations**

The observations conducted in the classrooms of the sample school were guided by an observational checklist, or recorded on an observational schedule to enable the non-participant observer to explore all the strategies that the teacher employed during reading comprehension instruction (Appendix F and G).

The observation schedules consisted of two sections, namely teacher comprehension strategy activities and learner assessment activities. The observation schedule (see Schedule 1) was developed using the six reading comprehension strategies identified in the review of the literature which consisted of making inferences, self-questioning, making connections, building vocabulary, visualisation, and summarising and then the five assessment activities, namely, answering multiple-choice questions, formulating constructed responses, answering



Schedule 2

Schedule 2	1	2	3	4	5
TEACHER COMPREHENSION STRATEGY ACTIVITIES	Not at all	Once a day	Once a week	More than once a day	More than once a week
Teach inference-making					
Teach self questioning					
Teach connection making					
Teach vocabulary					
Teach visualisation					
Teach any comprehension strategy (e.g. identifying main ideas, or summarising)					
LEARNER ASSESSMENT ACTIVITIES					
Answering multiple-choice questions					
Formulate constructed responses					
Answer orally or summarise orally					
Reading aloud					

All classroom observations took place during the observation week until saturation of the desirable information was obtained. Saturation can be reached only if additional analyses no longer contribute to discovering anything new about a phenomenon (McMillan & Schumacher, 2006, p.323). A time schedule was followed during the class visits, which took place alternately in the Grade 4 and Grade 5 classes over a period of a week. Classroom observations took place prior to the interviews to prevent the teachers from focusing (in class) only on what was asked during interviews. In this way, the researcher ensured that the interview questions would not lead to expected or predictable behaviour but that she could draw on her observations to question and probe during the interviews.

#### 4.6.2 Semi-Structured Interviews

At the end of the class observation sessions, semi-structured interviews were conducted, audio-recorded and transcribed. Semi-structured interviews were used rather than questionnaires which were given to teachers during the PIRLS 2006 study as the researcher wished to establish an in-depth understanding of effective teachers' practice. It was thought that this practice would be more successful through interviews than through questionnaires (McMillan & Schumacher, 2006, p.350).

## 4.7 ANALYSING THE INFORMATION

The analysis of quantitative data involves the preparing of the data, the reporting and discussing of results (Creswell, 2005, p.174). The analysis of the quantitative data (teacher questionnaires and the Gauteng Primary schools' overall reading achievement scores) was performed by means of the International Database Analyzer (IDB). The IDB Analyzer enables the researcher to compute descriptive statistics.

The analysing of the qualitative data requires an understanding how to make sense of the classroom observations and teachers' interviews to form answers to the research questions. The qualitative data were analysed inductively from the particular (the detailed data and transcriptions from the interviews and the field notes) to the general (the codes and themes obtained in the interviews) (Creswell, 2005, p.231). The qualitative analysis procedures, such as the thematic and content analyses, were determined for the observations and the interviews.

### 4.7.1 The Non-Participant Classroom Observations

The non-participant observations were analysed using observation templates (Maree, 2007, p.85), which focused on the descriptions of the reading teacher's actions in the context in which they occurred.

Observations were employed in two stages: rich evidence of what actually took place were observed and noted, and the researcher's reflections of what happened were noted.

### 4.7.2 Semi-Structure Interviews

The interviews were transcribed verbatim from the audio-recordings and then the interview data were analysed by means of content analysis. Content analysis includes the familiarisation of the text, the transcription of the data, then analysing what is in the text to develop a coding scheme and subsequently clustering the codes into themes.

The purpose of the coding process of the interviews is to make sense out of the text data, to label text data with codes, to examine codes for overlap and redundancy and to form descriptions and broad themes. There are no set guidelines for coding data, but according to Creswell (2005, p.237), there are some general procedures. The coding procedures

distinguish between three types of coding: open coding, axial coding and selective coding (Voss, Tsiriktsis and Frohlich, 2002; Creswell, 2005). The coding procedures were guided by the second and third sub-research questions (Section 4.2).

### **Open coding**

Cognisance was taken of the second and third sub-research questions when the interview data were fragmented and sentences and ideas in the data were given names and regrouped into the initial categories. Sentences or phrases that were related to a single code are called a text segment. During the open coding process, 52 codes were identified (See Appendix L)

### **Axial coding**

According to Creswell (2005 p.416), the next step in the coding process is axial coding, which should group similar codes and look for redundant codes and codes that overlap. The initial 52 codes as identified in the interviews were reduced to 14. For detailed examples, refer to Appendix M.

### **Selective coding**

Creswell (2005, p.238) suggests collapsing the codes into themes in the final stage of the coding process, explaining that it is advisable to reduce the codes to broad themes rather than work with an unwieldy set of codes.

The fourteen codes were thus collapsed into four themes (See Appendix N) Each theme was divided into sub-themes (See Chapter 5, Section 5.5, Table 5.17).

The transcriptions and coding of the interviews are captured on a compact disk and stored at the offices of CEA at the University of Pretoria for safekeeping.

## **4.8 METHODOLOGICAL NORMS AND VALIDITY**

A number of procedures were employed to ensure the trustworthiness and credibility of the research project. Triangulation was established through corroborating evidence by means of three methods: questionnaire data, observations and interviews. The quantitative documentation, through teacher questionnaires and learners' achievement results in the PIRLS 2006 study were used as an initial source of evidence. The qualitative data through

firstly, observation schedules were used to identify teacher confirmation strategy activities and learner assessment activities which led to the achievement levels of the sampled learners who participated in PIRLS 2006. Observations were confirmed or contradictory information was resolved (Denzin & Lincoln, 2000) during the second means of qualitative data collection, interviews which were conducted with two teachers. According to Creswell (2005, p.252), it is important to triangulate qualitative inquiries among different data sources to heighten the accuracy of a study and Denzin and Lincoln (2000, p. 393) explain that work may be crosschecked through member checks.

This research was tested for validity by member checking the separate interviews and corresponding observation schedules to ensure that what the individuals were saying, was actually implemented in classroom practice. The researcher had to decide what form the member check would take so participants were invited to view the observation templates (Appendix F and Appendix G).

The analyses of the interviews, the teacher questionnaires and the observation schedules, aimed to provide a trustworthy audit trail, giving a rich descriptive answer of the research questions of the study.

#### **4.9 ETHICAL CONSIDERATIONS**

Ethical clearance was obtained from the Ethical Committee at the Faculty of Education at the University of Pretoria to conduct this research as partial fulfilment for a Master's degree in Assessment and Quality Assurance.

Permission was granted by the Minister of Education at the Gauteng Department of Education (Appendix E) to conduct the research in Gauteng province and consent was obtained from the Department and the relevant Education District office to pay class visits to the sampled school. This consent letter served as permission to enter the school and classroom to conduct the research (Appendix E).

Participants signed consent letters (Appendix A) in which the purpose of the research was described and where the participants were assured of their anonymity and confidentiality, as pseudonyms were used. A description of each participant's role in the research, and the length of the interview time were indicated. The consent letter was dated and signed, and

returned by the participants prior to fieldwork.

Consent for using recording equipment was obtained (Appendix B). In this letter, participants were informed that all the interviews would be recorded on audiotape to ensure authenticity.

Permission was granted from the University of Pretoria to use the original PIRLS 2006 data (Appendix I). This letter stated that ethical procedures in the original PIRLS 2006 research project were employed through ethical clearance from the Ethical Committee at the Faculty of Education, University of Pretoria, permission was granted to conduct PIRLS 2006 by the Department of Education, South Africa and informed consent was obtained from the relevant school principals and parents.

#### **4.10 CONCLUSION**

In this chapter, the research design and methodology of the study were described. Firstly, the secondary analysis of the PIRLS 2006 data was explained and a description of the case study was given. The research methods included the following aspects such as sampling of the Afrikaans school and sampling of the classrooms was described and then the development of the instruments was given. The research procedures were guided by the classroom observations and the semi-structured interviews conducted with two teachers at the sampled Afrikaans school. To ensure credibility of the research, the methodological norms were addressed. Lastly, attention was given to ethical considerations as prescribed by the Ethical Committee of the Faculty of Education.

In Chapter 5, the results of the study are discussed.

## CHAPTER 5 - DISCUSSION OF RESULTS

*'Teaching reading IS rocket science'*

- Louisa Moats 1999

### 5.1 INTRODUCTION

In this chapter, the analysis of the quantitative data obtained from the PIRLS 2006 teacher questionnaires, and the qualitative data obtained by the classrooms observations and the interviews with the two teachers, are discussed.

The first part of this chapter focuses on the quantitative data obtained from the PIRLS 2006 teacher questionnaires as completed by Afrikaans Grade 4 and Grade 5 teachers who participated in the PIRLS 2006 assessment (5.2). Data from an analysis of Afrikaans teachers who completed the questionnaire is used to compile a profile of the Afrikaans teachers. Thus, the first section of this chapter addresses the first sub-research question regarding the characteristics of teachers in a high performing classroom environment.

The second part of this chapter focuses on the qualitative analysis of data (the classroom observations) to answer the second and third sub-questions (5.3). The classroom observations were aimed at identifying and exploring the comprehension strategies and assessment activities teachers used in a high performing reading literacy environment.

The third part highlights the analysis of the interviews to show the relationship between classroom-based practice and the teachers' verbal responses (5.4). The analysis of the interview data included a brief reference of the coding procedures of the interviews and a more detailed discussion of the themes as coded in the interviews (5.5).

The aim of the chapter is an attempt to answer to the questions posed in Chapter 1 with the main research question being:

*What role did the comprehension strategy practices play in the Grades 4 and 5 learners' reading literacy achievement play in the PIRLS 2006 study?*

The main research question was divided in three sub-questions:

Sub-Question 1: *What are the characteristics of teachers in a high performing classroom environment?*

Sub-Question 2: *What comprehension strategies do teachers use in a high performing reading literacy environment?*

Sub-Question 3: *What assessment activities do teachers in a high performing reading literacy environment use to measure the effectiveness of the strategies?*

## **5.2 PART 1: AFRIKAANS TEACHERS IN THE PIRLS SAMPLE**

The first part of this chapter describes the characteristics of the Afrikaans teachers who participated in PIRLS 2006. The PIRLS 2006 teacher questionnaires, designed to gather information on the teachers' academic and professional backgrounds, their classroom resources, and the instructional materials and activities they used to teach reading, and to promote the development of learners' reading skills and strategies, consisted of 42 variables. In this study, the researcher focused only on the variables selected from the teacher questionnaire that related to the research questions. Therefore, the following section provides a detailed description of teacher responses to the teacher questionnaire at the time of data collection during PIRLS 2006. This section of the chapter focuses on biographical information (5.2.1) and on reading instruction and reading activities (5.2.2) as well as instructional strategy activities (5.2.3).

### **5.2.1 Teacher Characteristics Variables**

A total of 1 546 Grade 4 and 1 678 Grade 5 teachers completed the PIRLS 2006 Teacher Questionnaire. The data analysis in this study was limited to providing results of descriptive statistics from the responses of Afrikaans teachers of the Grade 4 and Grade 5 learners. The biographical information was limited to the age, gender and the academic and professional background of teachers.

According to the PIRLS 2006 questionnaire data, the profile of the Afrikaans Grade 4 and Grade 5 teachers who took part and submitted the teacher questionnaire, revealed that the average Afrikaans Grade 4 and Grade 5 teachers were middle-aged women between 40 and 49 years with a three-year college diploma as a professional qualification.

### 5.2.1.1 Average age

In the PIRLS 2006 Assessment, almost half (45 %) of the Grade 4 learners had teachers in the 40–49 age category (Table 5.1). A third of the 1678 Grade 5 learners had teachers (34.2%), within this same age group.

**Table 5.1: Average age of Grade 4 teachers**

Age category	N	Percent
25-29	26	1.7
30-39	330	21.3
40-49	695	45.0
50-59	423	27.4

In the PIRLS 2006 study, only 2.3% of teachers to Grade 5 learners were under 25 years of age (Table 5.2). The category below 25 was not even represented in the Grade 4 group. The two participating teachers of the Grade 4 and 5 learners in this study were under 25 years of age.

**Table 5.2: Average age of Grade 5 teachers**

Age category	N	Percent
Under 25	38	2.3
25-29	33	2.0
30-39	486	29.0
40-49	574	34.2
50-59	444	26.5

The low number of young, up-and-coming teachers under the age 25 is of concern for the Afrikaans teacher profiles of Grade 4 and 5 learners, as well as for the overall South African teacher profiles. The reasons for this phenomenon might be that some young teachers (usually white) prefer to leave South Africa for more lucrative teaching posts overseas, or merely choose to leave the teaching profession after only a few years (Van Staden & Howie, 2009, p.24).

### 5.2.1.2 Gender

The Grade 4 female teachers dominated the PIRLS 2006 sample by 85%, over male teachers with 12.5% (Table 5.3).

**Table 5.3: Gender of Grade 4 teachers**

Gender	N	Percent
Female	1 314	85.0
Male	193	12.5

Table 5.4 indicates that the representation of female teachers in the Grade 5 group was less dominant (56.4 %), compared to the 37.4 % male teachers.

**Table 5.4.: Gender of Grade 5 teachers**

Gender	N	Percent
Female	947	56.4
Male	628	37.4

### 5.2.1.3 Academic and professional qualifications

In the questionnaire, teachers were asked to indicate their highest level of formal education. The majority of teachers to Grade 4 (54.9%) and Grade 5 (64.3%) learners' highest level of formal education was a college diploma. At one end of the scale, a small percentage of teachers to Grade 4 learners (2.5 %) and Grade 5 learners (0.7%) had not completed Grade 12. At the other end, a small percentage of teachers to Grade 4 learners (8.5%) and Grade 5 learners (12.1%) had postgraduate degrees (Figure 5.1 and 5.2).

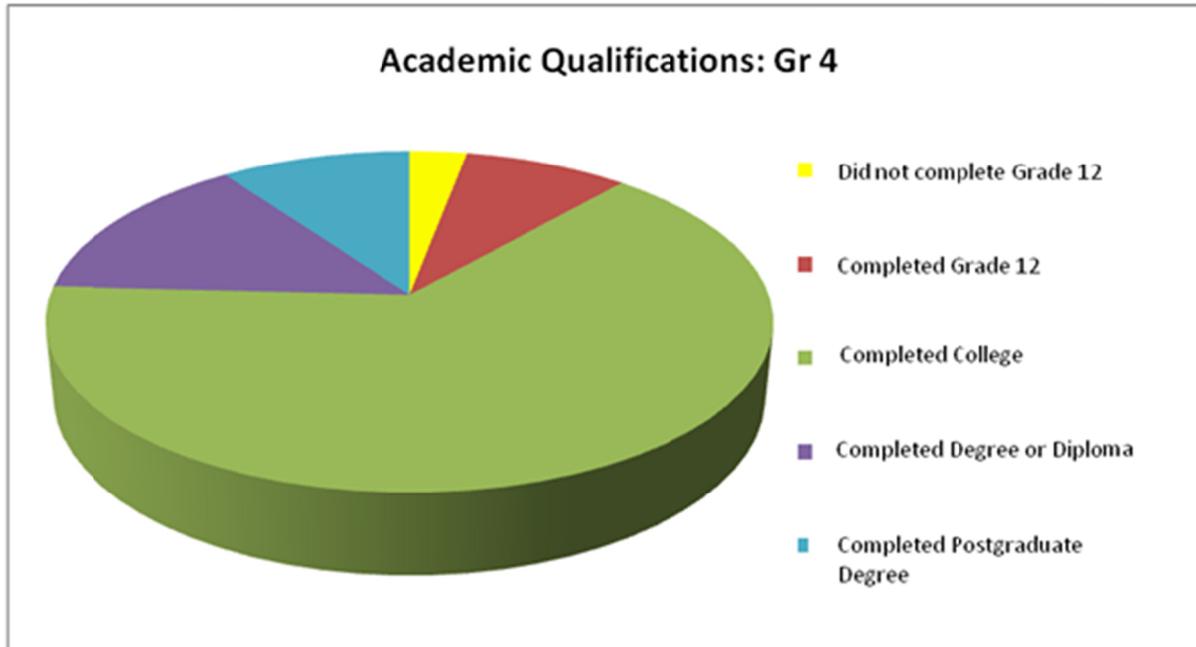


Figure 5.1: Highest level of qualification of Grade 4 teachers

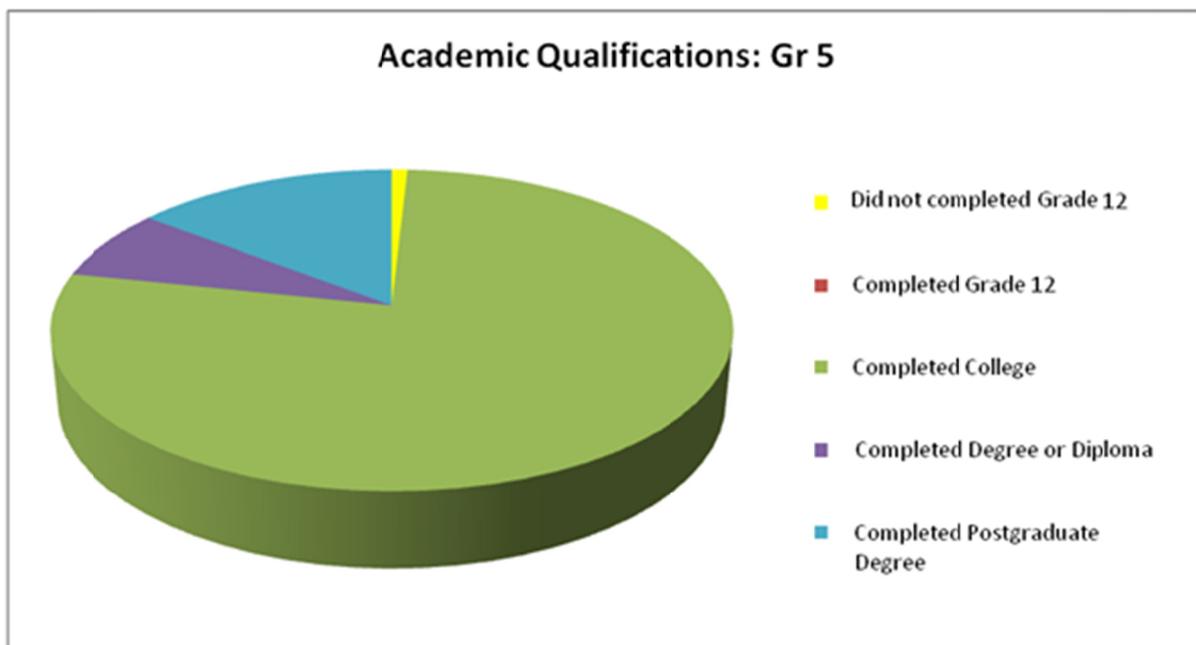


Figure 5.2: Highest level of qualification of Grade 5 teachers

### 5.2.2 Description of Teachers' Instructional Variables

The following reading instructions and reading activities which teachers reportedly engaged learners in were reported on were reading aloud to learners, encouraging learners to read

silently (independently) and teaching vocabulary systematically.

### 5.2.2.1 Reading aloud to learners

Table 5.5: Grade 4 Teachers - Reading aloud to learners

	N	Percent	Mean	SE
Every day or almost every day	835	44.43	344.83	25.54
Once or twice a week	497	41.97	318.39	66.09
Once or twice a month	175	13.59	439.60	35.81
Never or almost never	0	0	0	n/a

Table 5.6: Grade 5 Teachers - Reading aloud to learners

	N	Percent	Mean	SE
Every day or almost every day	779	45.92	429.40	19.88
Once or twice a week	626	45.88	455.15	20.64
Once or twice a month	151	8.20	324.29	28.26
Never or almost never	0	0	0	n/a

Tables 5.5 and 5.6 show that in the PIRLS 2006 study, Grade 4 (44%) and Grade 5 (46%) learners had teachers who engaged them ‘every day or almost every day’ in reading aloud. This activity was done at least once or twice a month, and none of these grade’s teachers indicated that they had ‘never or almost never’ read aloud to learners. Reading aloud to learners is a teacher-centred rather than a learner-centred activity, which only involves learners passively where the teacher might assume that learners understand what is being read (Van Staden & Howie 2008, p.26). In both cases, the highest scores in the Grade 4 and Grade 5 Afrikaans groups were not found in the category where teachers read to learners ‘every day or almost every day’.

The achievement of Grade 4 learners whose teachers read to them only ‘once or twice a month’, achieved a mean of 439.60 (13%). However, the learners whose teachers read to them ‘every day or almost every day’ achieved a higher mean of 344.83 (44%). In the Grade 5 group the highest score of 455.15 (46%) was attributed to teachers who read aloud to learners ‘once or twice a week’. The statistics in the study therefore suggested that the frequency of reading aloud to learners is not positively associated with higher reading scores.

However, reading aloud to learners could provide them with new vocabulary, expose them to a variety of literature, and contribute to their oral and written language development. The Department of Education suggests that reading aloud every day in the early stages of reading instruction could stimulate the children's interest in books and reading (DoE, 2008). This instructional activity is supported by research (Miller, 2002; Hirsch, 2003; Strickland, Galda & Cullinan, 2004) which suggests that reading aloud to learners contributes to future success of reading and reading comprehension.

### 5.2.2.2 Encouraging learners to read silently (independently)

The format of the PIRLS 2006 reading assessment (consisting of reading booklets composed of reading passages for each learner individually) required learners to read independently.

Table 5.7: Grade 4 Teachers – Encouraging reading silently

	N	Percent	Mean	SE
Every day or almost every day	596	35.77	380.85	28.39
Once or twice a week	500	25.70	325.96	28.18
Once or twice a month	287	19.05	388.77	27.79
Never or almost never	124	19.48	269.77	167.24

Table 5.8: Grade 5 Teachers – Encouraging reading silently

	N	Percent	Mean	SE
Every day or almost every day	533	7.78	426.24	25.92
Once or twice a week	597	30.47	426.17	18.14
Once or twice a month	401	34.49	428.62	28.33
Never or almost never	25	3.83	571.19	5.76

The Grade 4 teachers reported that learners who read silently on their own 'every day or almost every day' constitute 35.8%. These Grade 4 learners obtained the second best scores of 380.9. The Grade 4 learners whose teachers gave them the opportunity to read only 'once or twice a month' achieved the highest score, 388.8 (19%) (See Table 5.7). In the Grade 5 group, the teachers who reported to 'never or almost never' giving learners the opportunity to read silently on their own, achieved the highest scores 571.2 (4%) (See Table 5.8). Drawing from the statistics, one could be inclined to make the assumption that learners who were not given opportunities to read on a daily basis on their own, may have focused more on decoding than on constructing meaning.

Research has shown (Snow, 2002; Vacca & Vacca, 2009) that in order for learners to develop reading literacy, engaging with text on a regular basis through reader-text-activity such as silent reading, will assist in moving them from a literal reading level through the interpretive level to an applied level (Snow, 2003).

### 5.2.2.3 Teaching vocabulary systematically

Teachers were asked to report on the time allocated for teaching new vocabulary systematically to learners. Although the majority of Grade 4 and 5 teachers reported that they taught new vocabulary systematically to learners ‘once or twice a week’, these learners did not achieve the highest scores (see Tables 5.9 and 5.10 under the percentage and mean sections).

**Table 5.9: Grade 4 Teachers - Teaching new vocabulary systematically**

	N	Percent	Mean	SE
Every day or almost every day	704	43.34	395.03	22.95
Once or twice a week	587	47.27	302.44	49.18
Once or twice a month	216	9.38	345.51	34.41

**Table 5.10: Grade 5 Teachers - Teaching new vocabulary systematically**

	NN	Percent	Mean	SE
Every day or almost every day	505	37.54	443.85	27.25
Once or twice a week	723	40.80	392.02	21.38
Once or twice a month	328	21.66	489.52	23.10

The highest scores of 395 (23%) were obtained by 43% of learners whose teachers reported that they taught Grade 4 learners new vocabulary systematically ‘every day or almost every day’ (Table 5.9). The highest score (489, 22%) for Grade 5 learners, however, was achieved by the learners whose teachers reported that they taught new vocabulary systematically only ‘once or twice a month’ (Table 5.10).

From the data in Table 5.9, it seems that the systematic teaching of new vocabulary every day or almost every day in Grade 4 might achieve high performing scores. Not only did this single variable have an influence on achievement, but reading achievement was influenced or

determined by a combination of variables. From the information presented in Table 5.10 however, teaching new vocabulary systematically as often as every day might not be necessary as it seems teaching new vocabulary only once or twice a month might still produce high performing scores. However, none of the Afrikaans Grade 4 or Grade 5 teachers in PIRLS 2006 indicated that they seldom, if ever, taught new vocabulary.

Research by Cromley and Azevedo (2007), Hirsch (2003) and Wolfe and Nevills (2004) points to the fact that vocabulary and comprehension strategy knowledge, contribute strongly to reading comprehension. Hirsch's findings (2003, p.21) show how essential it is for word-knowledge to be stimulated and developed early, as the acquisition of word-knowledge is a cumulative and gradual procedure. Instruction and practice in vocabulary is necessary to develop reading comprehension (Hirsch, 2003, p.21). Snow (2002, p.16) agrees that changes in knowledge, like vocabulary knowledge, will occur in the light of the instruction a reader receives. Appropriate instruction will foster reading comprehension and might indicate the systematic teaching of new vocabulary as illustrated by Table 5.9 and Table 5.10.

### **5.2.3 A Description of Instructional Strategy Activities**

The second sub-question of the study investigates the comprehension strategies that teachers in a high performing reading literacy environment use. The reading comprehension instructional strategy activities are derived from the PIRLS 2006 Teacher Questionnaire and in particular, Item 17. These strategies, which include identifying the main idea, and high order comprehension strategies such as the ability to compare what was read with own experiences, describing the style or structure of a text and making inferences and generalisations, are described in greater detail below.

#### **5.2.3.1 Identifying the main idea**

In the analysis of Item 17 (PIRLS 2006), one of these strategies in the teacher questionnaire (identifying the main idea) provides answers to this sub-question querying the reading comprehension strategies used by teachers in a high performing reading literacy environment.

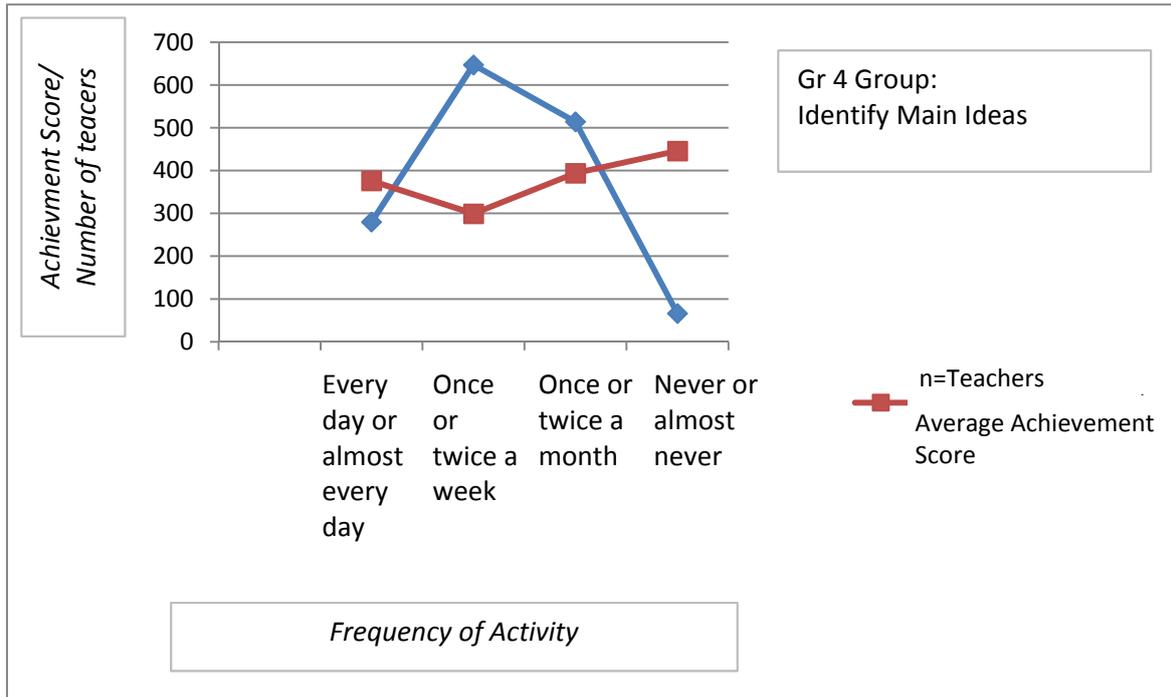


Figure 5.3: Grade 4 - Identifying the main idea

Figure 5.3 illustrates that the majority (48%) of Grade 4 learners had teachers who reported giving learners the opportunity to identify the main ideas only ‘once or twice a week’. These learners obtained the lowest score of 229 (SE). However, the minority (3.64%) of the Grade 4 learners whose teachers had ‘never or almost never’ exposed them to identifying main ideas, obtained the highest score of 446.92 points. From this result, it seems that the Grade 4 learners who were ‘never or almost never’ exposed to identifying the main idea, still obtained the highest score.

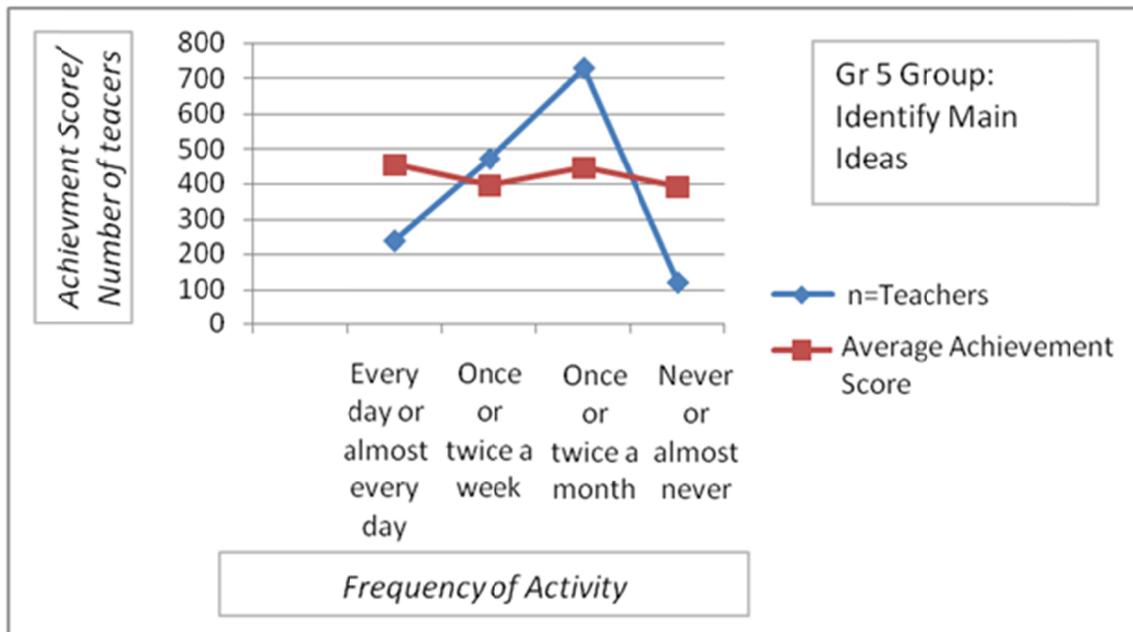


Figure 5.4: Grade 5 - Identifying the main idea

The results illustrated in Figure 5.4 emerge from the PIRLS 2006 Grade 5 data. The teachers to Grade 5 learners who ‘never or almost never’ gave their learners the opportunity to identify main ideas, achieved the lowest score of 391.8 (8%). However, the teachers to Grade 5 learners who gave their learners had the opportunity to identify main ideas ‘every day or almost every day’, had the highest score of 445.9 (20.9%). However, more in-depth research is needed to shed light on these opposing results of the Grade 4 and 5 groups.

### 5.2.3.2 High order comprehension strategies

The PIRLS 2006 assessment included in its assessment framework items of a higher order. This study focuses only on three high order comprehension strategies which include comparing what was read with own experiences, describing the style or structure of a text and making inferences and generalisations.

The results of the three high order comprehension strategies for the Grade 4 learners are presented in the next three graphs: The circles indicate the percentage of learners in each group.

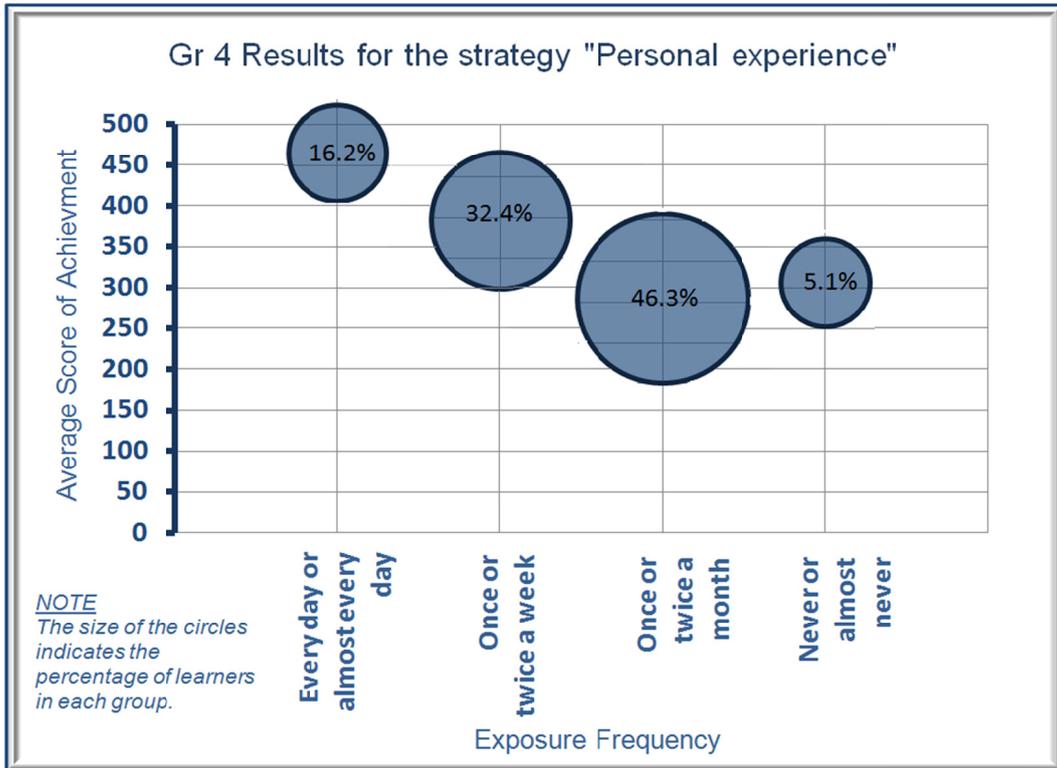


Figure 5.5: Grade 4 Results for the strategy "Personal experience"

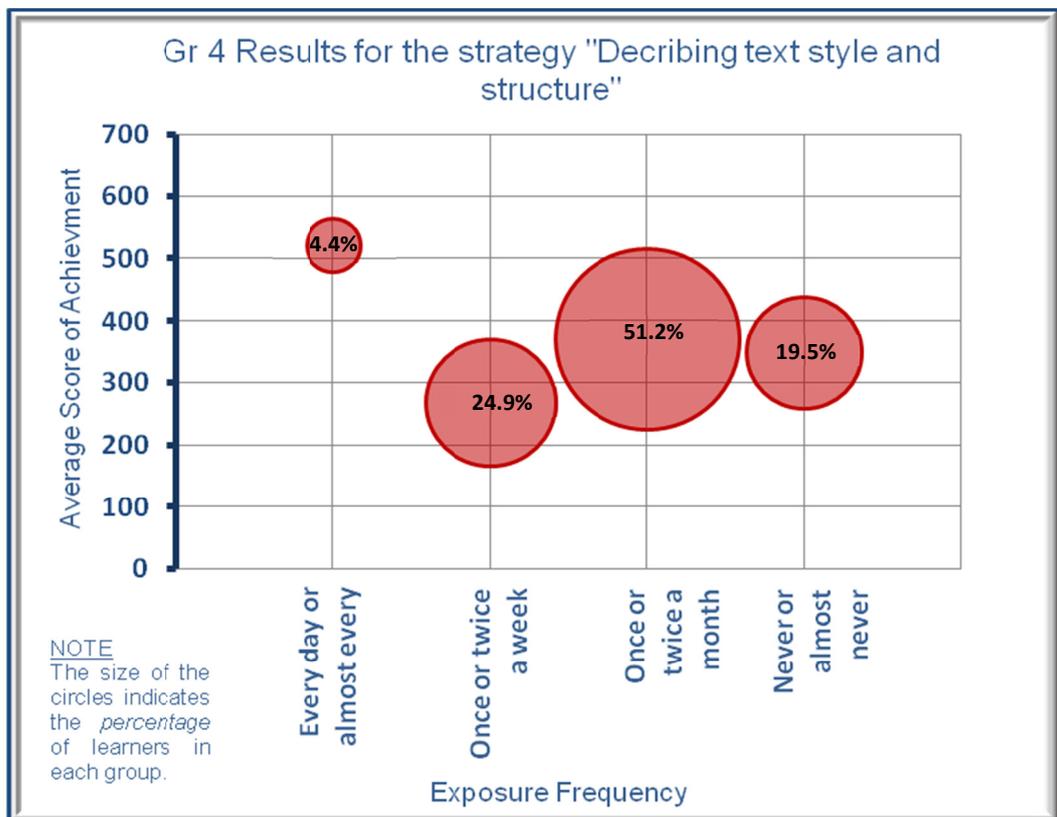


Figure 5.6: Grade 4 Results for the strategy "Describing text style and structure"

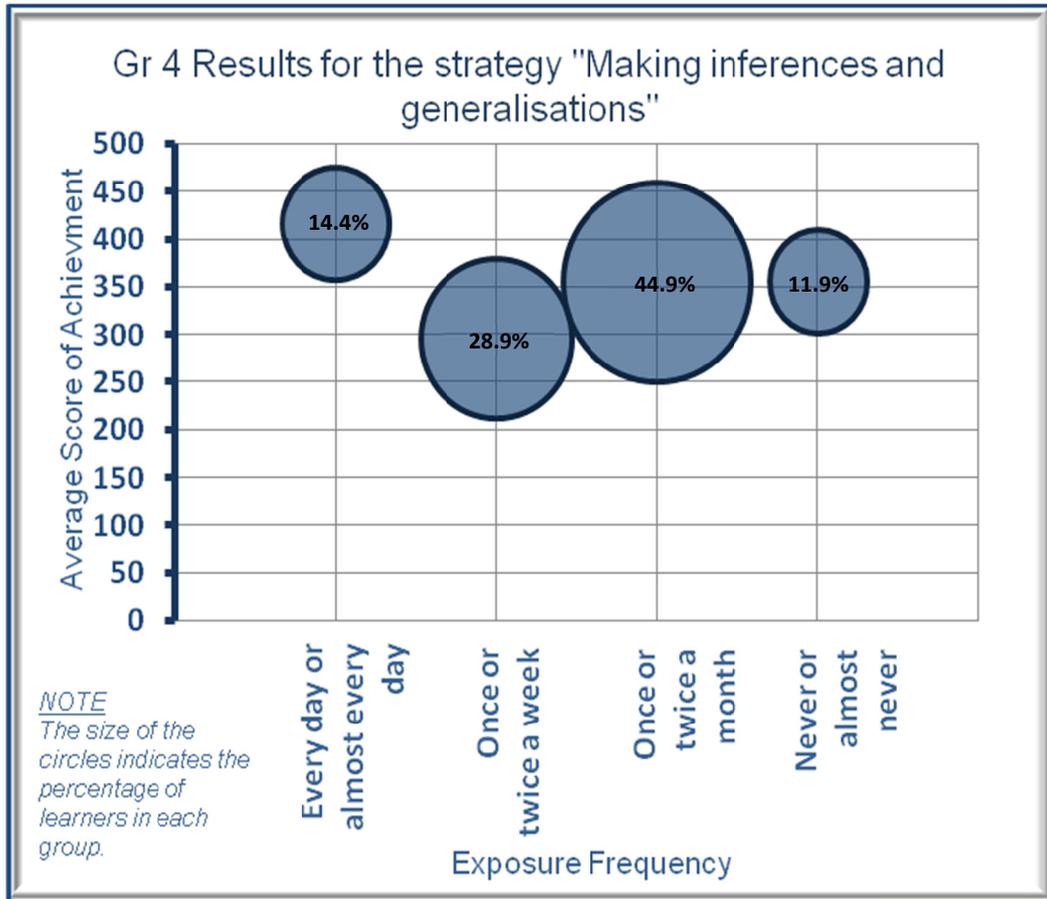


Figure 5.7: Grade 4 Results for the strategy "Making inferences and generalisations"

Figures 5.5 to 5.7 show that a relatively small percentage of teachers exposed the Grade 4 learners to the three strategies 'every day or almost every day', and the majority of learners had significantly less exposure to any of these three higher order reading comprehension strategies. The learners with daily exposure were the group that achieved the highest scores. The group that was exposed to the three strategies on a weekly basis obtained the lowest scores.

The results of the three high order reading comprehension strategies for the Grade 5 learners are presented in the next three graphs:

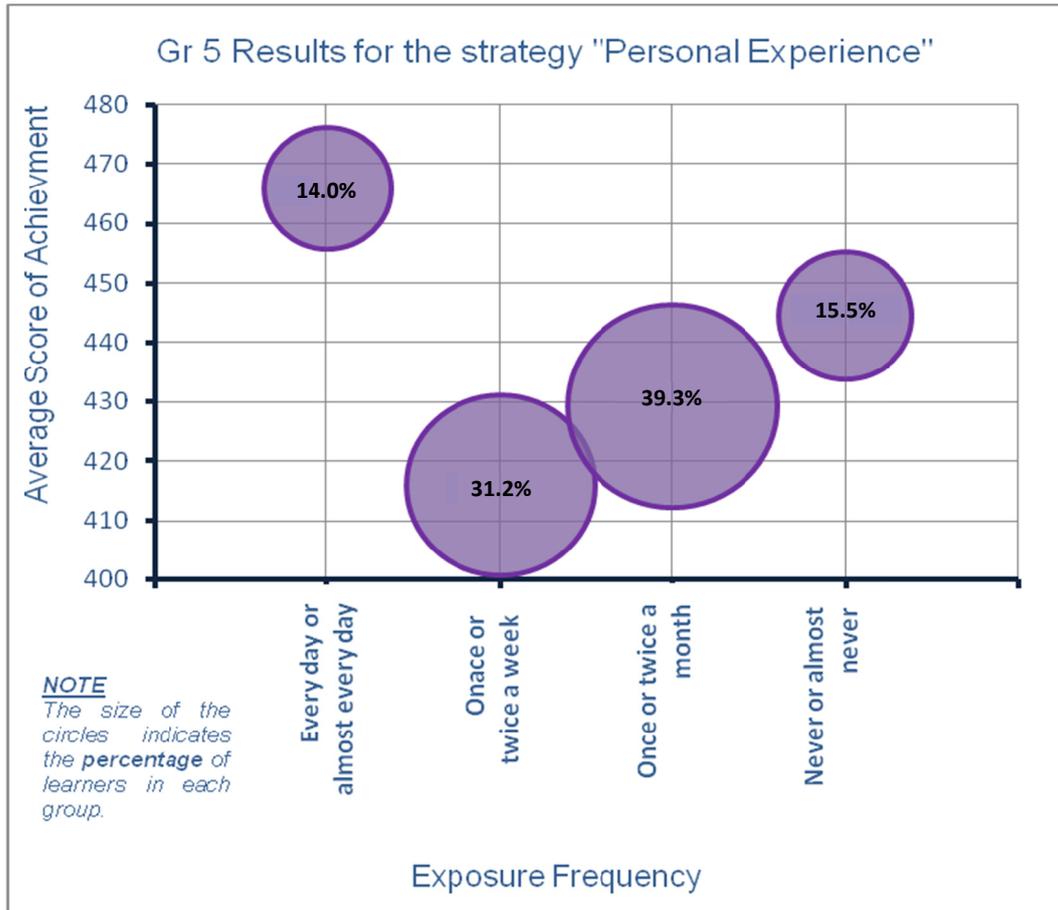


Figure 5.5: Grade 5 Results for the strategy "Personal experience"

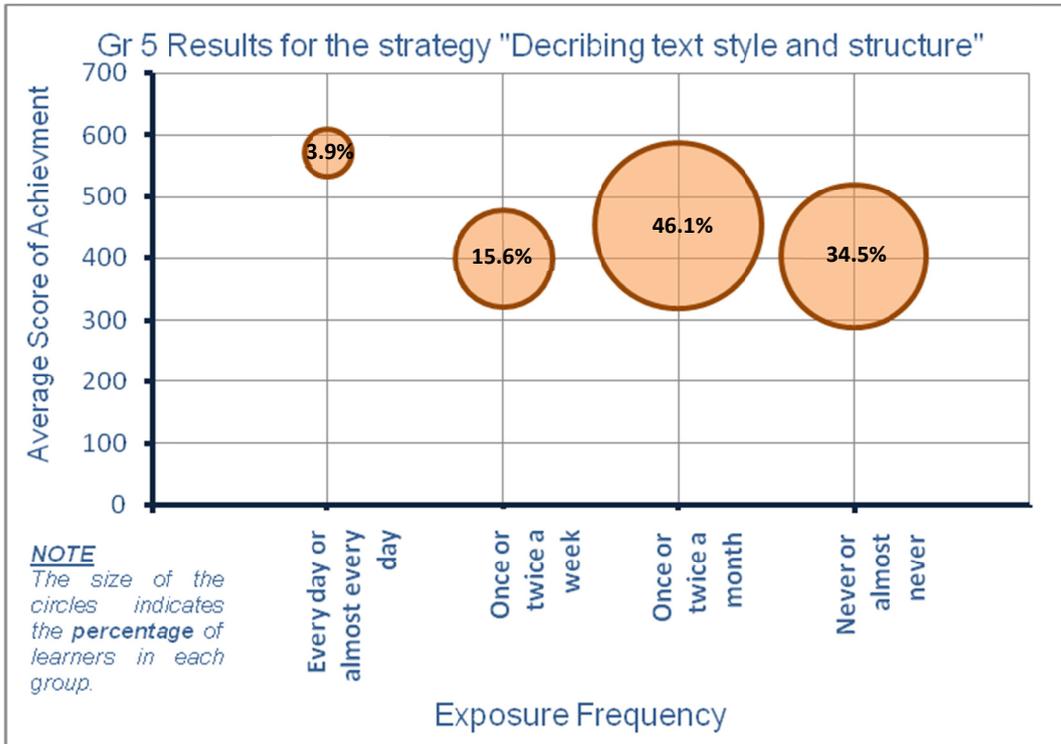


Figure 5.6: Grade 5 Results for the strategy “Describing text style and structure”

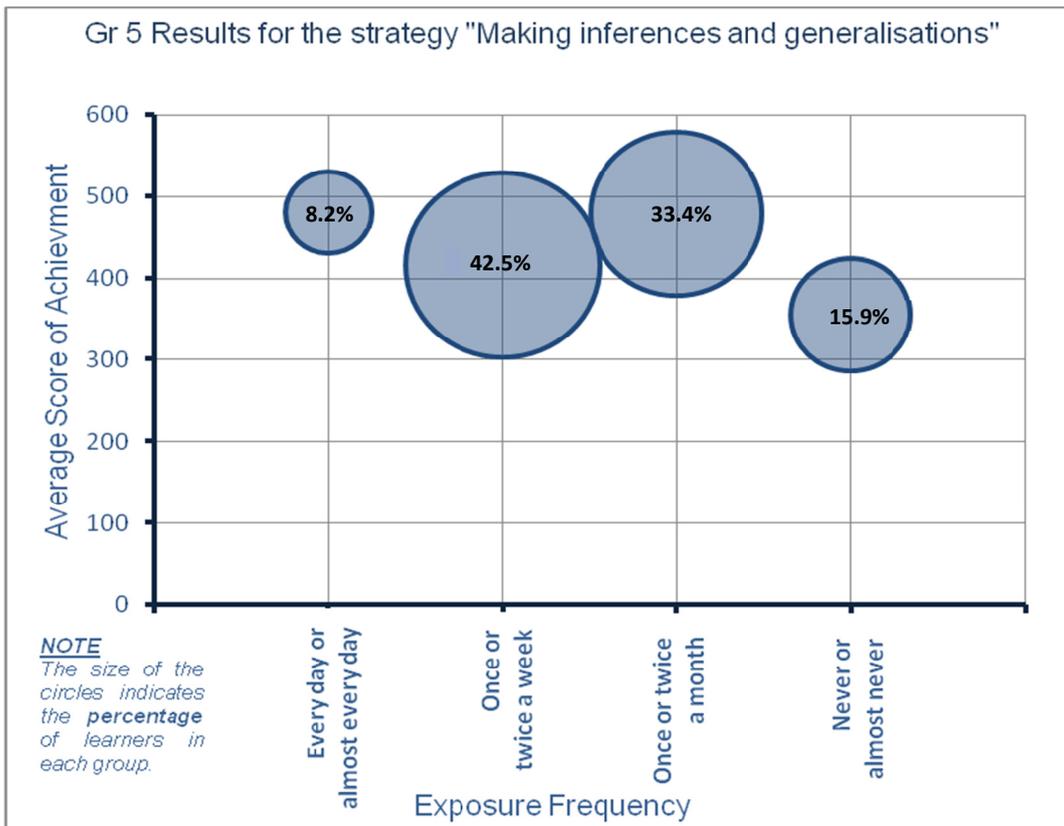


Figure 5.7: Grade 5 Results for “Making inferences and generalisations”

Figures 5.8 to 5.10 show that the results of the Grade 5 learners were similar to the results of the Grade 4 learners. The highest achievers again are those who were exposed ‘every day or almost every day’ to the three strategies, while the majority of learners have significantly less exposure. The learners with daily exposure were also the group that achieved the highest scores. The group that was exposed to the three strategies on a weekly basis again obtained the lowest scores.

Research has shown that as reading comprehension is an active process, involving an intentional interaction between the reader and the text, teachers need to equip learners to develop and apply reading comprehension strategies to improve their understanding (National Reading Panel, 2000, p.13). It seems that the best way to teach comprehension strategies is to teach them one at a time by devoting a great deal of time to each one and this means regular weekly, if not daily practice (Keene & Zimmerman, 1997).

#### **5.2.3.3 The ability to compare what was read with own experiences**

The highest score for the ability to compare what was read with their own experiences, was achieved by the Grade 4 group with 466.6 points (16.2%). The Grade 5 group’s highest score was 465.8 (14.0%). The Grade 4 and Grade 5 learners who were exposed ‘every day or almost every day’ to comparing what was read with their own experiences were in the minority. The Grade 4 learners who were engaged in comparing what was read with their own experiences only ‘once or twice a week’, received the lowest scores 280.5 points (46.3 %). Similar to the Grade 4 group, the lowest score of 416 points (31.2 %), was obtained by the Grade 5 learners who could practise the skill only ‘once or twice a week’.

#### **5.2.3.4 Describing the style or structure of a text**

The analysis of the PIRLS 2006 teacher data could provide only one variable in which both Afrikaans Grade 4 and Grade 5 learners met the international average score of 500 points. Grade 4 and Grade 5 teachers had to indicate whether learners were given the opportunity to describe the style or structure of the text they read. Grade 4 learners whose teachers gave them ‘daily’ opportunities to describe the style or structure of what they read, achieved a high score of 521.3 (4.4%) while the Grade 5 learners earned the highest score of 571.2 (3.8%). Only a small minority of Grade 4 (4.4%) and Grade 5 learners (3.8%) were helped to develop this particular reading comprehension skill.

The lowest scores for Grade 4 (267.2, 24.9%) and Grade 5 learners (399.4, 15.6%) were obtained by the learners who were exposed ‘weekly’ to describe the style or structure of what they had read.

### 5.2.3.5 Making inferences and generalisations

A small percentage of Afrikaans Grade 4 (14.4%) learners and Grade 5 learners (8.3%), who were given opportunities ‘every day or almost every day’ to make inferences and generalisations on what they read, achieved the highest scores. The highest score for Grade 4 learners was 415, 8 (SE=58.5) and for Grade 5 learners 480,3 (SE=39.2). These statistics raise the concern that only a small percentage of learners were exposed ‘daily’ to these higher order reading skills and that there might be a positive association between the frequency of exposure and achievement scores.

From the data that was examined in the PIRLS 2006 study, it seems that reading comprehension strategy practice in Grades 4 and 5 does play a role in the reading literacy achievement of learners. Of relevance is that the higher order of comprehension strategies and skills need to be practiced as frequently as possible. From the data analysis, it appears that when learners were not exposed to these higher order skills on a daily basis, Grade 4 and Grade 5 reading achievement scores failed to meet the international average score of 500 points.

## 5.2.4 Description of Reading Comprehension Assessment Activities

Sub-question 2 of the study, which enquires about the assessment activities teachers in a high performing reading literacy environment used to teach reading comprehension, was addressed in the teacher questionnaire.

### 5.2.4.1 Written comprehension practice

**Table 5.11: Grade 4 teachers - Provide opportunities for learners to answer reading comprehension questions**

	N	Percent	Mean	SE
Every day or almost every day	272	15.24	411.38	55.35
Once or twice a week	863	66.49	319.18	37.99
Once or twice a month	372	18.27	392.43	38.61

**Table 5.12: Grade 5 teachers - Provide opportunities for learners to answer reading comprehension questions**

	N	Percent	Mean	SE
Every day or almost every day	162	10.66	434.41	46.78
Once or twice a week	900	55.51	434.08	20.63
Once or twice a month	494	33.83	429.59	24.36

As many as 66% of teachers to Grade 4 learners and 55% of teachers to Grade 5 learners reported that their learners answer reading comprehension questions in a workbook or a worksheet ‘once or twice a week’ on what they had read. However, these learners did not achieve the highest scores. Grade 4 learners achieved a score of only 319 (SE=38) and Grade 5 learners 434 (SE=47). The teachers who reported that their learners answer comprehension questions in a workbook or a worksheet ‘every day or almost every day’ obtained the highest scores. The Grade 4 learners’ scores reflected a non-significant 19.0 point difference between these two activities, with the Grade 5 learners’ scores reflecting a minor point 0.33 difference. From these scores it was evident that answering comprehension questions in written form is a reading comprehension strategy used by teachers either every day or once a week. None of the teachers reported that they ‘never or almost never’ answer reading comprehension questions in written form, therefore it might be deduced that answering comprehension questions in written form is essential for comprehension strategy practices (Tables 5.11 and 5.12) and has an effect on reading literacy achievement.

### 5.2.7.2 Oral comprehension and summarising practices

Teachers to Afrikaans Grade 4 and Grade 5 learners reported that they asked learners only ‘once or twice a week’ to answer questions orally, or orally summarise what they had read.

**Table 5.13: Grade 4 teachers - Provide opportunities for learners to answer reading comprehension questions orally or orally summarise what they have read**

	N	Percent	Mean	SE
Every day or almost every day	415	28.60	355.81	36.31
Once or twice a week	749	51.86	318.09	49.82
Once or twice a month	343	19.54	408.85	29.71

**Table 5.14: Grade 5 teachers - Provide opportunities for learners to answer reading comprehension questions orally or orally summarise what they have read**

	N	Percent	Mean	SE
Every day or almost every day	384	27.10	422.89	24.59
Once or twice a week	588	36.62	409.10	18.45
Once or twice a month	554	36.28	467.10	29.03

Tables 5.13 and 5.14 however, indicate that the learners who were exposed to oral practices only ‘once or twice a month’ achieved higher scores. In the case of Grade 4 learners, the scores increase from 318.09 (SE=50) (exposure ‘once or twice a week’) to 409 (SE=30) (exposure ‘once or twice a month’). This increase shows a 90.76-point difference. From these results, it seems as if oral practices are vital, engaging in these activities ‘once or twice a week’, ‘once or twice a month’ would suffice. The fact that neither the Grade 4 nor Grade 5 teachers indicated ‘never’ or ‘almost never’ for this oral practice, augments the argument that oral practices played a role in learners’ reading literacy achievement in the PIRLS 2006 study (Tables 5.11 and 5.12 ). Answering comprehension questions therefore need to be conducted frequently in written and oral form.

### **5.3 PART 2: COMPREHENSION STRATEGIES OBSERVED IN HIGH LITERACY ENVIRONMENTS**

The classroom observations focused on identifying reading comprehension strategies and assessment activities teachers used in a high performing reading literacy environment. The qualitative results in this section pertain to the two participating teachers from School 91 that was selected for purposes of this study and not the overall sample of teachers to Afrikaans learners in Grade 4 and 5 in the PIRLS 2006 sample.

#### **5.3.1 Classroom Observations**

The function of the non-participant observations was to discover the kinds of classroom practice the teacher used during reading comprehension activities. The aim of the non-participant observations was to gain an idea of teaching (specifically) comprehension strategies in the classroom under ‘normal’ circumstances.

Classroom observations took place daily for one week in the first week of March 2009. The classroom observations were intended to answer the main research question and two of the

three sub-questions of the study. During the observation sessions, the class reading comprehension texts were analysed to give evidence of the role of comprehension strategy practice in Grade 4 and Grade 5 learners' reading literacy achievement.

Only two lesson components were analysed for the purpose of this study and focused on teacher practice of reading comprehension to provide evidence of learner-teacher interactions and reading comprehension tests to provide evidence of the learners answering reading comprehension questions independently.

### **5.3.1.1 Description of teacher practice during reading comprehension**

Both Grade 4 and 5 teachers followed a consistent format of reading comprehension practice, which consisted of marking the previous day's homework, asking learners to read the passage and questions silently on their own, reading the passage and questions aloud to learners, revising comprehension 'tips' with learners, asking learners to answer the questions in writing, and giving the following day's homework.

Research has shown that direct explanation and consistent practice is an effective technique to teach reading comprehension (Duffy, 2002) but that the teacher needs to find the practice that best suits her, which means that the best practice is one found most appropriate for the context.

### **5.3.1.2 Analysis of class reading comprehension tests**

The reading comprehension tests provided evidence of the learners answering reading comprehension questions independently.

Grade 4 Teacher A administered the reading passage 'Melanie moved' and five questions were posed (Appendix J and K).

The analysis showed that all five questions were fact-finding questions. The Grade 5 teacher focused on only one reading comprehension strategy, i.e. finding the main idea and did not focus on any other reading comprehension strategies.

Grade 5 Teacher B administered the reading passage 'Scared stiff', and constructed eight questions (Appendix J and K). One question focused on making connections with previous knowledge (12, 5%), two questions focused on vocabulary with dictionaries for explanations

(25%) four questions focused on fact-finding questions (50%) and one question focused on the learners' ability to make inferences (12,5%).

The analysis showed the majority of questions (50%) were fact-finding questions, the minority of questions (12,5%) covered inference and connection making questions, the Grade 5 teacher focused more on one reading comprehension strategy (finding the main idea), and focused less on inference and connection making strategies.

The poem 'The Ghost', was also administered as an assessment and 11 questions were constructed. (Appendixes J and K).

One question required learners to demonstrate their summarising skills, two questions were on grammar (18%), three questions required learners to use previous knowledge (27%), five questions required learners to make inferences (45%).

This analysis showed the majority of questions (45%) focused on inference-making and Teacher B asked a few contextual questions.

Classroom observations took place daily in School 91 for one week in the first week of March 2009. For this task an observation schedule was designed, and completed during the lessons (Appendixes F and G). The daily observations were transferred to the summarised observation schedule. The observation schedules addressed both sub-questions of the study as they focused on comprehension strategies and comprehension assessment activities.

### **5.3.2 A Description of Teachers' Instructional Strategy Activities**

The following section of this chapter, focuses on a description of teachers' reading comprehension instructional strategy activities looking particularly at their reading comprehension strategy activities as well as their learner assessment activities. Grade 4 is discussed first with results being tabled in Table 5.15. Grade 5 is discussed next with results being tabled in Table 5.16.

**Table 5.15: Frequency of teaching and assessing specific reading comprehension strategies in Grade 4**

	1	2	3	4	5
<b>TEACHER COMPREHENSION STRATEGY ACTIVITIES</b>	Not at all	Once a week	More than once a week	Once a day	More than once a day
Teaching inference-making		X			
Teaching self-questioning	X				
Teaching connection making	X				
Teaching vocabulary			3 times a week		
Teaching visualisation	X				
Teaching any other comprehension strategy (e.g. identifying main ideas, fact finding)			4 times a week		
<b>LEARNER ASSESSMENT ACTIVITIES</b>					
Answering multiple-choice questions	X				
Formulating constructed responses			4 times a week		
Answering orally or summarising orally			2 times a week		
Reading aloud			3 times a week		
Reading silently			5 times a week		

### 5.3.2.1 A description of Grade 4 teachers' instructional strategy activities

#### 1. Identifying the main idea of reading comprehension passages/tests

Table 5.15 illustrates that the Grade 4 teacher emphasises fact-finding or identifying main ideas as an important comprehension strategy. In the reading comprehension test 'Melanie moves away', learners needed to extract only facts from the passage in all five given questions. This links with the first level of the PIRLS 2006 assessment framework, which states that one of the ways readers construct meaning is to focus on items and retrieve them

from the text. Table 5.15 shows that comprehension strategies such as inference-making, self-questioning, connection making and visualisation were not taught by the teacher.

## **2. Teaching new vocabulary**

The Grade 4 teacher seemed to focus on vocabulary three times per week. Examples of such vocabulary exercises included new poetic terminology and difficult words in reading comprehension exercises. In each of the lessons, learners were given the opportunity to look up the words in dictionaries. One of the Grade 4 lessons focused on poetic terminology, where learners encountered words such as the title, verse, line and rhyme in a poem. Learners looked up the meanings of these words and then the teacher explained them to learners. The teacher then read the poem, 'Voëlverskrikker' (Scarecrow) to the learners. The teacher asked questions based on the new terminology. Then another poem 'Kietsie Kat' (Kitty Cat) was given. Learners had to apply the new vocabulary knowledge by answering questions based on the new poem. In this exercise the teacher read aloud to learners..

### **5.3.2.2 A description of Grade 4 learners' reading and comprehension assessment activities**

#### **1. Reading independently**

Silent (independent) reading took place every day, as learners were asked to read the comprehension passages on their own before attempting to answer the questions. After completing their work at the end of each day and there was still time left, the learners were allowed to read their Afrikaans books they had brought to school. In this way classroom silent reading was established and promoted.

#### **2. Answering reading comprehension questions in written form**

Learners had the task of formulating constructed responses every day. For example, they answered the questions on the poems 'Scarecrow' and 'Kitty Cat' and the reading comprehension test 'Melanie moved'. Learners answered contextual type of questions; however, the items or questions merely required the strategy of focussing on and retrieving explicitly stated information..

#### **3. Answering reading comprehension questions orally**

The learners' oral skills were practised only twice a week. One of these oral response

opportunities was when learners had to answer questions on the terminology of new (poetry) vocabulary, such as title, verse, line and rhyme.

The following table, Table 5.16, tables the results of reading comprehension strategy activities observed in Grade 5.

**Table 5.16: Frequency of teaching and assessing specific reading comprehension strategies in Grade 5**

	1	2	3	4	5
<b>TEACHER COMPREHENSION STRATEGY ACTIVITIES</b>	Not at all	Once a week	More than once a week	Once a day	More than once a day
Teaching inference-making		X			
Teaching self-questioning	X				
Teaching connection making		X			
Teaching vocabulary			3 times a week		
Teaching visualisation	X				
Teaching any other comprehension strategy (e.g. identifying main ideas, fact finding)			X		
<b>LEARNER ASSESSMENT ACTIVITIES</b>					
Answering multiple-choice questions	X				
Formulating constructed responses			5 times a week		
Answering orally or summarise orally			2 times a week		
Reading aloud			5 times a week		
Reading silently			3 times a week		

### 5.3.2.3 A description of Grade 5 teachers' instructional strategy activities

#### 1. Identifying main ideas, making inferences and connections

Table 5.16 indicates that the Grade 5 teacher focused on using a combination of reading comprehension strategies, such as identifying main ideas, making inferences, and making connections with previous knowledge to answer reading comprehension questions. This wider use of reading comprehension strategies was evident in the questions structured in the

reading comprehension passages, like ‘Boeglam Geskrik’ (Scared stiff) and ‘Die Spook’ (The Ghost). Teaching and assessing of both these passages were observed during classroom observation.

## **2. Self-questioning and visualisation**

Only some comprehension strategies, such as self-questioning and visualisation, were not taught by the Grade 5 teacher. A tallied score on the Observation Schedules (Table 5.15 and Table 5.16) provides evidence of a range reading comprehension strategies being taught and applied in the classroom context.

## **3. Teaching new vocabulary**

Teaching vocabulary was a prerequisite for reading comprehension, as illustrated in the poem, ‘The Ghost’. Words like haarsliert (hair strand) and kalant (vagabond) were looked up in the dictionary.

### **5.3.2.4 A description of Grade 5 learners’ reading and comprehension assessment activities**

#### **1. Reading aloud**

The Grade 5 Teacher read passages aloud every day and constantly questioned her learners, before they did their own silent reading.

#### **2. Answering reading comprehension questions in written form**

The Grade 5 Teacher relied heavily upon written responses from learners, as they constructed answers daily in written form, for example, the poem, ‘The Ghost’ and the reading comprehension test, ‘Scared stiff’.

#### **3. Answering reading comprehension questions orally**

The learners formulated oral reading comprehension responses only twice a week.

## 5.4 PART 3: ANALYSIS OF THE INTERVIEWS

### 5.4.1 The Coding Process

In this study, the interviews with the Grade 4 teacher (Teacher A) and the Grade 5 teacher (Teacher B) were transcribed. The transcribed texts were divided into many segments of information which were labelled with 52 codes. Overlapping and redundant information was rejected and allowing the codes to be reduced to 14. These codes were then grouped into four themes (Creswell, 2005, p.238). A detailed explanation of the coding procedures is provided in Chapter 4 Section 4.7.1.

The four themes emerging from the coding process are:

- reading comprehension practice
- learner achievement
- reading comprehension strategies
- reading comprehension assessment.

These four themes were divided into sub-themes (Table 5.17). The function of the sub-themes is to elaborate on the main themes as they were revealed during the interview sessions. During the selective coding process, a narrative version of the four themes was presented, and this narration served to answer the research questions that were stipulated in Chapter 1.

### 5.4.2 Summary of the Research Questions and Themes

The main research question is addressed by Theme 1: reading comprehension practice and Theme 2, learner achievement. The second sub-question is addressed by Theme 3: reading comprehension strategies, and the third sub-question is addressed by the final theme, Theme 4: reading comprehension assessment. All themes and sub-themes are tabled in Table 5.17 below

Table 5.17: Themes and sub-themes

MAIN THEMES	SUB-THEMES
<p><b>Theme 1: Reading Comprehension Practice</b></p>	<p><b>1.1 Type of Practice</b></p> <p>Reading skills and reading comprehension strategies need to be taught simultaneously.</p> <p>No universal teaching method. Need to cater for different teaching methods.</p> <p>Teaching practice in other language areas, for example, grammar and literature, took place.</p> <p>Teaching in other learning areas, such as Life Orientation took place. This was observed in the Grade 5 teacher's class.</p> <p>The Grade 4 teacher's practice was not theme driven.</p> <p>The Grade 5 teacher's practice was theme-based during class time and during the exams.</p> <p><b>1.2 Practice Time</b></p> <p>In Grade 4, 10% of time was devoted to reading comprehension practice and 90% to reading skills.</p> <p>In Grade 4, reading comprehension practice was allocated to a double period (70 minutes) per week.</p> <p>In Grade 5, reading comprehension practice was given one and a half hour per week (90 minutes).</p> <p><b>1.3 Curriculum Requirements</b></p> <p>The curriculum requires a balance between informational passages and narrative passages.</p> <p>In Grade 4, more narrative passages were used.</p> <p>In Grade 5, the genre of fables was used to stimulate the learners' imagination</p>

MAIN THEMES	SUB-THEMES
<b>Theme 2: Learner Achievement</b>	<b>School Reading Programme</b> <p>There was an effective reading programme in place.</p> <p>Both the teacher and parents had a role to fulfil in reading comprehension practices.</p> <p>The teachers and the parents were required to foster a love for reading.</p> <p>The parents had to see that learners apply comprehension strategies taught in class, at home.</p>
<b>Theme 3: Reading Comprehension Strategies</b>	<b>3.1 Reading Comprehension Guidelines</b> <p>The teacher read the passage and questioned the learners orally.</p> <p>Learners read the passage twice on their own.</p> <p>Learners underlined main ideas.</p> <p>Learners had to use dictionaries.</p> <p>Word meanings were highlighted.</p> <b>3.2 Teaching Methods</b> <p>Differ annually.</p> <p>Adapted to learners' needs.</p> <p>Teachers used one comprehension strategy with different texts or genres, e.g. fiction, poems and informational texts.</p> <b>3.3 Preference of Importance</b> <p>Teachers first taught learners vocabulary, then how to identify key words, and think 'further'.</p>
<b>Theme 4: Reading Comprehension Assessment</b>	<b>4.1 Progression</b> <p>Definite progression from Grade 4 to Grade 5, for example, more difficult readers with more difficult words and more difficult texts were given in the higher grade.</p>

MAIN THEMES	SUB-THEMES
	<p><b>4.2 Classroom Assessment</b></p> <p>Reading comprehension passages were completed in class, for example, ‘Scared stiff’, ‘The Ghost’ and ‘Melanie moved’</p> <p><b>4.3 Tests and exam assessment</b></p> <p>Types of assessment questions.</p> <p>The Grade 4 teacher formulated more fact-finding answers while the Grade 5 teacher developed answers that needed insight drawing on inferences.</p> <p>The Grade 4 teacher did not ask multiple choice questions, learners had to write out answers, write what they feel and think.</p>

## 5.5 DESCRIPTION OF THE MAIN THEME AND SUB-THEMES

In this section, each theme and sub-theme and its related characteristics are discussed in detail.

### 5.5.1 Theme 1: Reading Comprehension Practice

Theme 1 is divided into sub-themes discussing type of reading comprehension practice, practice time, and curriculum requirements and are discussed in the following sections.

#### 5.5.1.1 Sub-theme 1.1: Type of reading comprehension practice

In the sampled school, reading comprehension took place in all the language areas, such as literature and grammar. The teachers agreed that reading and reading comprehension strategies need to be taught at the same time. Teacher B said they ‘go hand in hand’. Teacher A felt the moment you teach a learner to read, you need to teach him to comprehend what he was reading. The teachers also agreed that there is no universal panacea to teach reading comprehension strategies. They felt that each class and each learner determined the need for a specific teaching method. Teacher A said: ‘One must cater for different needs’.

The Grade 5 teacher also taught Life Orientation and during one of those lessons, she taught

reading comprehension as part of the lesson. When teaching reading comprehension, the Grade 5 teacher used themes during class periods and during tests and examinations. For example, she made sure that the exam reading passage was related to a theme previously used during the term. She said: ‘If we worked with a friendly letter during the term, I give them a friendly letter in the exams.’ During my classroom observations, the Grade 5 teacher used the theme of ‘Fear’. Her reading comprehension passages linked to this theme with the use of the narrative passage ‘Scared stiff’, and the poem ‘The Ghost’.

The Grade 4 teacher’s reading comprehension practice, however, was not theme based.

#### **5.5.1.2 Sub-theme 1.2: Practice time**

In Grade 4, 10% of time was devoted to reading comprehension practice and 90% was devoted to reading practice. In Grade 4, reading comprehension practice took place during one double period per week, which was 70 minutes.

In Grade 5 reading comprehension practice took place almost every day of the week with an allocated time of at least one-and-a-half-hours, which gave a total of 90 minutes.

The Revised National Curriculum Statement (RNCS) outlines a specific time allocation of six hours per week for home language teaching and suggests a percentage of that time be dedicated to the teaching of reading comprehension (DoE, 2002). Research over the years has shown that time spent in formal reading and reading comprehension instruction is likely to have an effect on reading achievement (Guthrie, Martuza & Seifert, 1989); however, the more time learners spend actively involved in reading, such as daily reading, is more critical than the amount of time allocated by the curriculum (Resnick & Weaver, 1989).

#### **5.5.1.3 Sub-theme 1.3: Curriculum requirements**

The curriculum states that a balance is required between informational and narrative passages when teaching reading comprehension. Teacher A used more narrative than informational passages. Teacher B used the genre of fables more frequently as she felt it was important for learners in Grade 5 to expand their imagination, and fables were an excellent means to reach this end. She said: ‘... at this age, it is important for children to read more fables to enhance their imagination’. The RNCS stipulates that a wide variety of genre is used in the teaching of reading comprehension and could include poems, stories, reports, narratives, procedure,

comics, diaries, letters and so on (DoE, 2002).

## **5.5.2 Theme 2: Learner Achievement**

Theme 2, learner achievement, is divided in two sub-themes consisting of the school reading programme and the roles played by teachers and parents.

### **5.5.2.1 Sub-theme 2.1: School Reading Programme**

The school has an effective reading programme. According to Teacher B, learners visited the media centre after school to work on computers that have a reading programme installed which focused on high frequency words and eye span. Teacher B did not have detailed information about the reading programme, as an outsider was responsible for the programme and the teachers were not involved.

PIRLS 2006 investigated whether schools had a school reading policy in place. Results have shown that schools should have a school-based programme in place with guidelines for teachers on the teaching of reading. Results from PIRLS 2006 have shown that such schools tends to have learners who achieve better reading literacy scores (Howie et al., 2008).

### **5.5.2.2 Sub-theme 2.2: Roles played by teachers and parents**

Teacher B claimed that the class teacher and parents had a role to fulfill regarding reading comprehension practice. She considered the class teacher and parents as a partnership. Teacher B said the teacher has ‘a vast responsibility to teach reading comprehension strategies’. She claimed it was the parent’s role to see that learners apply these strategies at home, as it was not always possible for a teacher with thirty plus learners in a class to do daily reading comprehension strategies effectively if parents did not give their support. PIRLS 2006 has highlighted the vital role that parental involvement plays in developing a child’s literacy. The research has shown that parents from an early age should engage their children in home literacy activities, should ensure that books are in the home and motivate their children to read through a positive attitude and a high regard for reading (Howie et al., 2008).

Teacher A regarded the role of a teacher in developing reading comprehension differently: ‘First of all, a teacher needs to foster a love for reading among her learners. In order to fulfil

the teacher's role of promoting literacy, it was vital that teachers guide learners with what they had to read, how they had to read a book, how they had to find the meanings and how to use full stops and punctuation marks'.

Both teachers's point of view are acceptable as motivation and encouragement to read. Developing an acceptable level of reading literacy is not just rooted in one context but needs to be addressed in many contexts and by a variety of role-players as identified in the PIRLS model of Contexts for the Development of Reading Literacy (Mullis et al., 2004, p. 25).

### **5.5.3 Theme 3: Reading Comprehension Strategies**

The theme on reading comprehension strategies addresses issues such as guidelines in answering comprehensions, teaching methods and preference of importance of reading comprehension strategies.

#### **5.5.3.1 Sub-theme 3.1: Reading comprehension guidelines**

Both teachers taught reading comprehension strategies and gave their learners guidelines. Teaching reading comprehension strategies, as discussed in the literature review, can take the form of reciprocal teaching (Brown & Palinscar, 1984), explicit teaching (Duffy et al., 1986) and scaffolding (Spörer, Brunsteing & Keischke, 2009). Some of these guidelines entail the following: Teacher B read the reading passage and questions aloud to the learners. Teacher A preferred not to read the passages aloud to the learners. They read the passage and the questions at least twice on their own.

Learners underlined or highlighted key words. Both teachers encouraged learners to use dictionaries to grasp the meaning of the words. Learners were also informed that sometimes the meaning of words might be found in the passage, but sometimes they had to search. Teacher A put it this way: 'Sometimes the meaning of words is found within the reading passage, but sometimes the learners have to think about the meaning.'

#### **5.5.3.2 Sub-theme 3.2: Teaching methods**

Teacher B was of the opinion that: 'The teaching of reading comprehension strategies is determined by the teacher. Every year, new learners to the grade are different and their needs have to be addressed'. Both teachers agreed on this point, saying that learners differ every

year and had different reading needs that teachers constantly have to adapt to. These responses align with Duffy (2002) whose research has shown that the teacher needs to find and apply the practice most appropriate for the context.

Teacher B felt that it was essential ‘to adapt annually to learners’ reading needs’. She elaborated (in the interview), saying that during that year she found learners were not reading with understanding. She also found that they were too lazy to read all the words. This meant they were only scanning for information. Even though she had taught them to skim, she did teach different types of reading skills. Learners were encouraged to ask questions while they were reading, to reassure themselves that their answers correlated with their teacher’s questions.

Both teachers taught reading comprehension strategies through different genres by using different texts such as fables, poems (The Ghost), narrative passages (‘Melanie moved’; Scared stiff) and informational texts (The Dolphins) (Appendixes J and K), a practice in line with the RNCS (DoE, 2002) which states that learners should read a variety of South African and international fiction and non-fiction for different purposes.

#### **5.5.3.3 Sub-theme 3.3: Teaching strategies: Preference of importance**

During strategy practice, some reading comprehension strategies received preference. Both teachers believed that it was essential to focus on ‘vocabulary and the identification of main ideas’ when focusing on comprehension strategies. Teacher A regarded two more strategies, contextual questions that could be answered from information given in the passage and inference-making questions when ‘learners had to think a little further to answer them’, as important. This supports the idea that even young learners should be encouraged to not only read the words in a text, but should also understand the passage well enough to make inferences about the text (Cramer & Rosenfield, 2008).

It seems that both teachers are being guided by the Revised National Curriculum Statement (RNCS) which states that a learner should learn to read independently using a variety of reading and comprehension strategies which are appropriate for different purposes at the Grade 4 and 5 levels. These reading and comprehension strategies include skimming for general ideas and scanning for specific details, makes predictions about content or endings, uses contextual clues to determine meaning, makes inferences and identifies main and

supporting ideas (DoE, 2002).

#### **5.5.4 Theme 4: Reading Comprehension Assessment**

Theme 4 is also divided into sub-themes addressing issues of progression from Grade 4 to Grade 5, classroom assessment, tests and exam assessments and finally, types of assessment questions.

##### **5.5.4.1 Sub-theme 4.1: Progression of Grade 4 to Grade 5**

Teacher A and B agreed that a definite progression was evident each year, as readers and textbooks were more difficult with each year progression. This meant when learners moved from Grade 4 to Grade 5, they had more difficult words to read and to understand. The context in which these words appeared was also different as confirmed by Teacher A: ‘Yes, the readers become more difficult, and yes, the context is different as it is a new reader.’

The RNCS shows a clear developmental progression from year to year both with recommended reading as well as with the reading and reading comprehension skills to be taught, as outlined in the assessment standards (DoE, 2002).

##### **5.5.4.2 Sub-theme 4.2: Classroom assessment**

Both teachers gave their learners reading comprehension passages with questions that were answered in class. Examples of the passages are ‘Melanie moved’ for Grade 4 and ‘Scared stiff’ and ‘The Ghost’ for Grade 5 (Appendixes J and K). The passages ‘Melanie moved’ for Grade 4 and ‘Scared stiff’ for Grade 5, were given as class tests that were written under class test circumstances. The teachers did not give any guidance or assistance as these were used to assess the learners. These answers of the learners were then assessed by the respective teachers. The passage ‘The Ghost’ was given as a class exercise and learners marked their own answers.

In this sampled school in Grades 4 and 5, continuous assessment is practised in the classrooms. Continuous assessment comprises both informal and formal assessments and occurs with the planning of assessment tasks that consist of daily teaching and learning activities. These teaching and learning activities use a variety of assessment forms and tools to gather evidence of learner progress on an ongoing basis. Of importance is formative

assessment which is developmental and informs the day-to-day teaching and learning process and assists the teacher in developing learning activities to suit diverse learner needs (DoE, 2002).

#### **5.5.4.3 Sub-theme 4.3: Tests and exam assessments**

When teaching reading comprehension, the Grade 5 teacher used themes during class periods and for tests and exams. Teacher B gave an example to illustrate her point. She made sure that a theme previously used during the term was carried through in tests and examinations. For example, if a friendly letter was discussed and worked with during the term, she used the same format (a friendly letter) for the exams. Formal assessment, such as the writing of class tests, is a systematic way of evaluating learner progress throughout the year allowing for a summative assessment at the end of the grade (DoE, 2002).

#### **5.5.4.4 Sub-theme 4.4: Types of assessment questions**

The Grade 4 teacher did not ask multiple choice questions because she believed that learners had to write out questions; they had to write how they feel and how they think. The Grade 4 teacher tended to focus more on contextual types of questions and fact-finding questions where answers were found in the passage. As illustration, she gave the reading passage ‘Melanie moved’ to learners to read (Appendixes J and K). Five questions were formulated and all the questions were contextual and required mere fact-finding. This showed that Teacher A did not ask any inference questions, only drawing on focus and retrieve explicitly stated information.

The Grade 5 teacher asked a combination of contextual questions and inference-making questions. An analysis of the reading passages ‘Scared stiff’ and ‘The Ghost’ substantiates this claim (Appendixes J and K).

The framework used in PIRLS 2006 to assess reading literacy suggests that both multiple choice and constructed response items be used in assessing reading literacy. The framework also suggests that four processes of comprehension with relevant percentage allocations for each assessment text are used in the setting of reading literacy assessments. These processes include focus on and retrieve explicitly stated information (20%), making straightforward inferences (30%), interpret and integrate ideas and information (30%) and finally, examine

and evaluate content, language and textual elements (20%) (Mullis et al., 2004).

## 5.6 CONCLUSION

The analysis of the quantitative and qualitative data presented in this chapter attempted to answer the research questions found at the beginning of this chapter. The results of the study firstly identified that learners in the Afrikaans language group performed the best in PIRLS 2006. The current study has revealed that these learners had teachers who took into account what was expected of them in the teaching of reading and reading comprehension as identified in the curriculum (DoE, 2002) and revealed in this study's review of literature.

These learners were engaged with reading text on a daily basis through reading text activities such as silent reading and on a regular basis with comprehension texts. In addition, reading aloud to learners enabled them to gain new vocabulary and develop a feel for the text which could lead to the development of higher order comprehension. It was felt that this strategy contributed to the learners' oral and written language development. The teachers of these learners exposed them to a variety of reading comprehension strategy practices such as identifying the main idea, the ability to compare what was read with own experiences, describing the style or structure of a text and finally, making inferences and generalisations. This study has show that formal reading and reading comprehension instruction does have an an effect on the reading achievement and that these learners were actively involved in reading and reading comprehension on a regular basis.

Although the school had a computerised reading programme, research from PIRLS 2006 has revealed that schools should formalise a school reading policy. Schools with a school-based programme in place guides teachers on the teaching of reading and this is evidenced in the results from PIRLS 2006 which have shown that such schools tends to have learners who achieve better reading literacy scores (Howie et al., 2008).

The final chapter, Chapter 6, concludes the study giving a summary of the findings and offering recommendations to teacher practice.

## CHAPTER 6 - CONCLUSION

*All children must achieve a good grasp of literacy and basic skills early on as the foundation for learning throughout life.*

- The National Literacy Trust. Learning to Succeed 1993

### 6.1 INTRODUCTION

In this final chapter, conclusions are drawn to show the role of comprehension strategy practices in learners' reading literacy achievement. The chapter serves to draw together the main research question, the research findings (6.2) the process of the research (6.3), reflections on the conceptual framework (6.4), limitations of the study (6.5) and conclusions (6.6) that emerged from the study. The chapter closes with practice recommendations (6.7) and possible further research questions (6.8).

The study sought answers for the main research question, namely:

*What role did the comprehension strategy practices play in the Grades 4 and 5 learners' reading literacy achievement in the PIRLS 2006 study?*

Research has shown that effective teachers of reading comprehension perform practices that mirror the "orchestration" of knowledge about readers, texts, purposive activities and contexts. It appears that effective teachers of reading comprehension guide learners during the reading comprehension process into a constant reader-text-activity dynamic, which enables readers to bring vocabulary and strategy knowledge to the act of reading (Snow, 2002, p.11).

### 6.2 SUMMARY OF THE FINDINGS

The results of South Africa's participation in literacy studies such as PIRLS 2006, revealed the poor reading literacy performance of South African primary school learners and emphasised the achievement of literacy studies within the South African education context. For purposes of this study, the researcher was looking for exemplary cases of good literacy classroom practices in South African primary schools to determine the role of effective reading comprehension strategies for those Grade 4 and Grade 5 learners whose performance

in the PIRLS 2006 study was the highest.

The research was conducted at a high performing Afrikaans primary school in Gauteng as in an analysis of the 11 South African official languages, the learners from the Afrikaans language group achieved the highest scores in the PIRLS 2006 study. A profile of Afrikaans Grade 4 and 5 teachers was compiled that was based on the analysed data of the Afrikaans teacher questionnaire from the PIRLS 2006 study. The researcher investigated the practice of reading comprehension strategies of one Grade 4 and one Grade 5 Afrikaans teacher. The case study data from drawn from the teacher interviews and classroom observations and provided an in-depth understanding as well as insights of classroom experience of comprehension strategy practices and literacy achievement.

The findings of the study show that it is imperative to teach reading comprehension strategies, as they play a significant role in learners' reading literacy achievement.

### 6.2.1 Sub-Question 1

*What are the characteristics of teachers in a high performing classroom environment?*

According to the PIRLS 2006 questionnaire data, the profile of the Afrikaans Grade 4 and Grade 5 teachers who took part and submitted the teacher questionnaire, revealed that the average Afrikaans Grade 4 and Grade 5 teachers were middle-aged women between 40 and 49 years who had a three-year college diploma. However, the two teachers who took part in this research study were young Afrikaans female teachers in the under 25-age group. The Grade 4 teacher held a 4-year teachers' degree and the Grade 5 teacher was working on a Masters' degree in education.

### 6.2.2 Sub-Question 2

*What comprehension strategies do teachers in a high performing reading literacy environment use?*

In terms of reading activities in the classroom, the teacher questionnaire data illustrated that Grade 4 and 5 teachers spent time in reading aloud to the class. During the classroom observations, the Grade 4 teacher read aloud to the class on a daily basis. Unlike the teacher questionnaire, that reported only a small percentage of Grade 4 (36%) and Grade 5 (34%)

teachers providing opportunities for learners to read independently, the classroom observations and teacher interviews reported silent reading practice as a daily activity. In the PIRLS 2006 assessment, the top performing countries reported high frequencies of silent reading activities: 84% of teachers from the Russian Federation and 85% of teachers from Canada provided their learners with opportunities for frequent independent reading (Howie et al., 2007, p.28).

The teacher questionnaire data and classroom observations attempted to answer sub-question 2 and revealed that teacher instructional practices to engage learners in some higher order strategies (inference-making and generalisations) but still lack adequate teaching time. The teacher reports also provided proof that the Afrikaans Grade 4 and Grade 5 learners, who were given opportunities to make inferences and generalisations daily, achieved the highest scores. However, only a minority of Grade 4 (14%, SE=6.5) and Grade 5 (8.3%, SE=5.2) Afrikaans teachers engaged learners on a daily basis to make inferences and generalisations. The literature mirrors this problem and suggests that if teachers use the three levels of reading comprehension (the literal, interpretive and applied levels), they can help learners with answering questions (Vacca & Vacca, 2009, p.27). Questions are then used to guide reading comprehension at different levels: to help learners to recall information, to make inferences, to express opinions, and to form new ideas (Duke & Pearson, 2002).

Of concern, though, is that only a small percentage of Grade 4 Afrikaans teachers (14%, SE=6.5) provided these opportunities for their learners to use higher order comprehension strategies. This concern is augmented by the observation schedules, as the Grade 4 learners were more frequently assessed using fact-finding questions than inference making questions. The PIRLS 2006 assessment required learners to access the text beyond the superficial, factual level drawing on all four processes of comprehension (Mullis et al., 2004). A better picture was painted in the Grade 5 Afrikaans classroom as the learners were exposed to a greater variety of reading comprehension strategies, like finding the main idea or facts in a passage, and making inferences and connections as recommended in the RNCS (DoE, 2002). However, from the results, it was evident that neither of the observed teachers in this study taught their learners certain reading comprehension strategies, like self-questioning and visualisation.

The teacher data from the PIRLS 2006 questionnaire highlighted the need for teachers to

provide learners with opportunities to describe the style or structure of the texts they read. Only a small percentage (4.4% SE=3.9) of Grade 4 teachers and 3.8% (SE=3.9) of Grade 5 teachers engaged learners in developing this comprehension skill. Grade 4 and Grade 5 learners who were provided with these instructions met the international average score of 500 points. The classroom observation and teacher interviews provided evidence that Grade 4 and Grade 5 learners were exposed to a variety of text styles and structures. Reading comprehension texts included narrative styles and poetic styles and structures as suggested by the RNCS (DoE, 2002). Even though learners did not work with a variety of text styles and structures on a daily basis, they did so at least once a week.

The analyses of the quantitative and qualitative data, highlighted the invaluable role of teachers in developing comprehension practices in Grade 4 and Grade 5 learners' reading lessons. Placing a quality teacher in every classroom is the key to addressing the challenges of reading achievement in schools reinforcing the fact that knowledgeable, strategic, adaptive, and reflective teachers make a difference in student learning (IRA, 2007, p. 1).

### 6.2.3 Sub-Question 3

*What assessment activities do teachers in a high performing reading literacy environment use to measure the effectiveness of the strategies?*

The answers to this sub-question were derived from the investigation on the style and structure of texts, the variety of texts, the reading activities of texts, the teaching of new vocabulary within texts and the written and oral responses to texts.

#### 6.2.3.1 Style and structure of texts

The teacher data highlighted the importance of providing learners with daily opportunities to describe the style or structure of the text they read. In the PIRLS 2006 assessment, the teachers who provided this opportunity, had learners who achieved scores that were higher than the international average score of 500. The Grade 4 Afrikaans learners achieved 521.3 points (SE=22.6) and the Grade 5 Afrikaans learners a score of 571.2 (SE=5.8).

#### 6.2.3.2 Using a variety of texts and genres

Observation of classroom practice revealed that both teachers who participated in this study

incorporated a variety of texts in their strategy practice programme. Different genres, such as literature (poems) and creative texts (letters) were incorporated in their classroom-based strategy practices as recommended in the curriculum (DoE, 2002). Although both teachers included a variety of styles, they mostly concentrated on narrative text and no informational texts were included during the classroom observations. This exclusion of informational texts from classroom practice could provide the reasons why learners in general struggled to access the informational texts posed by the PIRLS 2006 assessment.

### **6.2.3.3 Reading independently on a daily basis**

During the classroom observations and interviews in this study, the Grade 4 and Grade 5 teachers reported that they gave learners the opportunity to read independently on a daily basis. During the PIRLS 2006 assessment, one of the top performing countries (Canada) also reported high frequencies (85%,) of silent reading activities. However, the South African teacher questionnaire data revealed a different picture.

Only a small number of Afrikaans teachers, who reported that their learners read independently on a daily basis, obtained high scores. In fact, the teachers who reported that they ‘never or almost never’ give learners the opportunity to read independently achieved the highest scores. This finding is difficult to comprehend and interpret. It might be that these learners already read independently and do not need additional instruction from a teacher to do so in order to achieve high scores. However, the literature (Snow, 2002; Hirsch, 2003; Wolfe & Nevills, 2004; Cromley & Azevedo, 2007; Vacca & Vacca, 2009) seems to suggest that if there is constant “reader-text-activity dynamic during the reading comprehension process” (Snow, 2002, p.11), reading comprehension will develop to include cognitive capacities, motivation, vocabulary and knowledge of specific comprehension strategies (Snow, 2002).

### **6.2.3.4 Teaching new vocabulary systematically**

The teacher questionnaire data revealed that the Grade 4 learners, who were taught new vocabulary on a daily basis, achieved the highest scores. The classroom practice of both teachers incorporated vocabulary teaching, and although not on a daily basis, this practice did occur not less than three days a week.

During the classroom observations, the Grade 4 and Grade 5 teachers taught new vocabulary, varied the assistance and calibrated it to the learners' level. The teachers' practice advocates the role of the teacher in terms of the kind and level of help provided as suggested by Rogers (2004, p.506) where scaffolding even temporary, can assist the learner reach a higher level of reading literacy. Sometimes the teachers' practice entailed explaining the new vocabulary to the class while at other times, teachers involved the learners in looking up the meaning in dictionaries searching for the answer independently. In this study, it was evident that learners asked for assistance mostly with vocabulary, and specifically with dictionary use. Whichever activity was undertaken, a positive partnership between teacher and learner was forged in this way.

#### **6.2.3.5 Written and oral responses**

From the analysis of the teacher questionnaire data, it is evident that learners who provided written responses on comprehension assessments every day or once a week obtained the highest scores. Written responses can be analysed to determine the source of errors, and this could provide insights into the process of learners constructing meaning (Dewitz & Dewitz, 2003, p.3).

Written and oral comprehension practices require different time allocations. Both assessment activities are extremely important, but oral practices may be conducted only once or twice a month and not as frequently as written practices. The PIRLS 2006 teacher questionnaire data revealed that learners who responded to oral comprehensions only once or twice a month were still amongst those learners who achieved the best scores.

It is evident from the study that the Grade 4 and Grade 5 teachers emphasised written responses. Learners wrote every day, formulating written responses to their reading comprehensions answers. Classroom observations provided evidence that both teachers paid more attention to assessing their learners' comprehension than specifically teaching them the skills of how to comprehend and thus develop their reading comprehension. Research has shown (Fielding & Pearson, 2001) that it is imperative to teach learners how to comprehend, and not only to test understanding.

### 6.3 REFLECTIONS ON THE METHODOLOGY

The quantitative data (teacher questionnaires and learners' overall achievement scores) and qualitative data (interviews and classroom observations) were triangulated and converged in a single study. The design used in this study is in line with the mixed-methods approach. The qualitative observations of behaviour and interviews augmented the quantitative data, and this provided confidence in the results (Creswell, 2005, p.511). The quantitative teacher data was followed up with the qualitative classroom observations and interview data to build on the initial results (Creswell, 2005, p.511).

### 6.4 REFLECTIONS ON THE CONCEPTUAL FRAMEWORK

This study was supported by the PIRLS model of Contexts for the Development of Reading Literacy (Mullis et al., 2004, p.25). This model illustrates an interrelationship and interaction between the influences of the school and classroom on the reading literacy of learners. It also demonstrates how learners' achievements is a product of teacher instruction and practice gained in a variety of contexts. The findings therefore confirm that effective reading literacy practices includes the construction of meaning from a variety of texts. The reader has to bring to the act of reading cognitive capabilities (like inference-making) and knowledge of comprehension strategies and vocabulary. The conceptual framework also suggests that readers construct meaning in a number of ways, like focusing on specific ideas and retrieving them, making inferences, interpreting and integrating ideas, and examining and/or evaluating text features (Mullis et al., 2006, p.12). Classroom practice unveiled all these ways of constructing meaning. In reflecting on the use of the PIRLS model, the researcher would not have altered or focused on any other conceptual framework, as the PIRLS model of Contexts for the Development of Reading Literacy successfully drove and steered the research.

### 6.5 RESEARCH LIMITATIONS

The research limitations include the ones related to the methods, the data sources and the potential sources of bias.

#### 6.5.1 Limitations Related to Methods

While the quantitative result from the PIRLS 2006 survey study can be generalised, the qualitative case study method used for purposes of this study does not result in generalisable

findings. The findings of this research cannot be generalised to the larger population but in some measure, they could be applicable to similar samples. This outcome could be seen as a limitation. However, being able to generalise the findings of this study was not the author's aim; rather, it was to pursue and examine exemplary cases of good classroom practice.

In undertaking data collection activities for the purposes of this study, the time of the classroom observations (early or late morning) could have been problematic (Cohen et al., 2007, p.412). The study focused on young learners and their attention span might have affected the findings, especially if the observations were conducted late in the day and the learners were too tired to perform at their best. This could have influenced the research observations and findings. However, where possible, the observations took place early in the day and the researcher witnessed nothing that could have had an effect on the study.

The researcher's presence could have influenced the learners' attention. This was probably overcome by the classroom teacher who informed the learners about the researcher and the purpose of her visits prior to the observations.

### **6.5.2 Limitations Related to Data Sources**

The author acknowledges that the teachers in the study were not those who took part in the PIRLS 2006 study. Nevertheless, they provided sufficient evidence for the patterns that occurred in classrooms with a similar profile. Initially it might have been difficult to gain the trust of the teachers, and difficult to adjust to their individual communication styles while recording data (McMillan & Schumacher, 2006). This problem was solved by visiting the teachers prior to the commencement of the data collection, developing rapport with them and by adapting to their different communication styles.

Prior meetings were scheduled with the principal to arrange for the observation sessions and to discuss other research issues. The three parties involved, that is, the principal and the two teachers, were fully informed about the nature of the research project, the class observations and the interviews. The principal and the appointed teachers were very friendly and an atmosphere of co-operation and enthusiasm prevailed. They were positive, cooperative and friendly in their attitude towards the project and the researcher.

While working with the data, the researcher had to keep in mind that the teachers sample for

the study were not the same teachers who responded to the teacher questionnaire in the PIRLS 2006 study, as they had left the school. This lapse of continuity could be thought of as a limitation, as using the same teachers would have been ideal, specifically in the light of their responses. However, despite this situation, the researcher could still use the PIRLS 2006 teacher questionnaire data to provide an indication of patterns from a larger sample of Afrikaans teachers from where further discussions with the two available teachers could be constructed.

### **6.5.3 Limitations Related to Potential Sources of Bias**

Reflections on the observations had to be done during, or immediately after, the observations, as memory neglects and selects data, and might not record the crux of the observations (Cohen et al., 2007, p.410; Maree, 2007, p.86). Reflexivity might not have been addressed properly and observer bias might have been a limitation. After each observation session, the researcher's reflections were immediately noted on the observation templates to prevent memory neglect.

The researcher's observations could have been selective by emphasising personal interests and experiences. The researcher might also have been distracted, (Cohen, et al., 2007, p.410) thus the notice of small details could have been missed. Through the conceptual framework as well as the structured observation templates and schedules, it was attempted to counteract these limitations by keeping the researcher focused on the research. Before commencing with the research project, the researcher acquainted herself with these limitations and this knowledge alerted her which meant she could guard against them.

## **6.6 MAIN CONCLUSIONS**

This section introduces the three conclusions that were drawn from the study.

### **6.6.1 There is no Universal Panacea for Teaching Reading Comprehension Strategies**

There is no universal panacea for teaching reading comprehension strategies. The teaching environments differ, just as classes and learners differ, with the result that learners require exposure to a variety reading comprehension methods in order to develop their reading comprehension literacy. To quote Teacher B: 'I have to adapt annually to the level and needs of the learners'.

The literature review (Section 3.6) highlights three models to develop comprehension strategies:

- The classic method of reciprocal teaching (Brown & Palincsar, 1985).
- Explicit teaching (Duffy, Roehler, Meloth & Vavrus, 1986),
- Scaffolding teaching (Vygotsky, 1978; Rodgers, 2004, & Vacca & Vacca, 2009).

The three models reviewed in the literature linked with the Grade 4 and 5 teachers' classroom practices. The researcher observed that the acquisition of vocabulary was taught through the classic method with reciprocal teaching. The explicit teaching method was evident when the learners were taught through explanation and application, and questions were varied and at different levels. Scaffolding was an important aspect which supported the learners in the development of their reading comprehension.

Teaching comprehension strategies using a variety of genres, such as cartoons, newspaper headlines, poems, informational texts and literary texts were performed through scaffolding teaching.

One of the common elements of effective teaching of comprehension strategies was that learners in both classrooms were exposed to written practices on a daily basis. In both classrooms, teachers focused more on written practices than oral responses, as with written responses, learners were forced to give individual responses, whereas with oral responses, it might happen that only a few learners contribute. In the observations of the two teachers, the used of a variety of texts and this exposure facilitated the regular writing of comprehensions.

Including new vocabulary in their lessons each day was another common characteristic of the effective teachers' classroom practice. So, for example, the Grade 4 teacher applied what was practised in the language class to other learning areas that she taught, such as Life Orientation.

### **6.6.2 Written Responses are Essential**

Children who are required to provide written responses are more likely to be in higher performing classes. Teachers included new vocabulary each day as a common characteristic of their classroom practice. The teacher data and classroom practices emphasise the need for learners' exposure to written practice. Judging by the PIRLS 2006 teacher questionnaire data,

it seems that learners who practise writing answers on a daily or weekly basis earned the highest scores.

During the classroom observations, the Grade 4 and Grade 5 teachers relied heavily upon written responses from learners. The teachers provided daily opportunities for learners to construct comprehension answers in written form. In both case study classes, the learners wrote a reading comprehension test at the end of the week to assess what had been taught during the week.

### **6.6.3 High Order Skills should be Taught Earlier and More Frequently**

The PIRLS 2006 teacher questionnaire data and classroom observations revealed that teacher instructional practices concerning high order strategies (for example, inference-making and generalisations) still lack adequate teaching time. The teacher reports provided evidence that Afrikaans Grade 4 and Grade 5 learners who made inferences and generalisations every day, obtained higher achievement scores. However, only a small percentage of Grade 4 Afrikaans teachers (14%) provided these opportunities for their learners. The principal questionnaire revealed that in the majority of cases, complex strategies like making generalisations and inferences were not taught at Grade 4 level (Long & Zimmerman, 2007, p.45). Consequently, learners were confronted with inference-making in Grade 5, and not in the earlier grades as stipulated in the RNCS (DoE, 2002).

The concern of the late introduction of more complex reading skills was confirmed by the observation schedules, as the Grade 4 learners were more frequently asked to respond to fact-finding questions than inference-making questions. However, observations revealed that the Grade 5 learners were exposed to a greater variety of reading comprehension strategies, like finding the main idea or facts in a passage, and making inferences and connections as outlined in the RNCS (DoE).

Reviews of the literature and policy documents (DoE, 2002) indicate that the link between comprehension and making inferences needs to be introduced and practised from an early reading age. Young learners should not only read the words in a text, but should also understand the passage well enough to make inferences about the text (Cramer & Rosenfield, 2008, p.126).

## 6.7 RECOMMENDATIONS

Recommendations are provided in light of developing reading comprehension practice.

### 6.7.1 Teaching Practice Recommendations

Recommendations with regards to teaching practice are:

- Teachers need to take into account what is prescribed in the curriculum and in addition, take note of the recent developments and innovations about the teaching of reading and reading comprehension.
- Teachers need to focus on vocabulary development to enhance learners reading literacy.
- Teachers should not teach to the test, but know the international expectations of reading literacy achievement and how the assessment results can inform their teaching.
- Learners need to be exposed to a variety of genres and encouraged to read informally and develop their reading literacy.
- Learners need to be exposed to international practices of assessments, such as PIRLS or SAQMEC, to understand what is expected of them in terms of reading literacy achievement.

### 6.7.2 Possible Future Research Questions

These questions could arise from this study in the future.

- To what extent does visualisation play a role in reading comprehension practice? Throughout the literature, the role of imagery and visualisation was emphasised.
- How does teaching reading comprehension differ from teaching listening comprehension?
- To what extent can the intervention of a reading comprehension programme consisting of reading comprehension assessment activities for each comprehension strategy, improve learner achievement?

## 6.8 A FINAL WORD

This study suggests that reading comprehension strategies can be taught, and can play a role in learner literacy achievement. This idea is in line with Dowhower's view (1999, p.672), which suggests that teachers need a supporting strategy in the reading comprehension classroom. Teachers who initially provide adequate reading comprehension strategy assistance, and later gradually withdraw the assistance, will help their learners to become autonomous readers and be in control of the reading comprehension process.

Snow (2002, p. xii) also affirms that learners will not automatically become proficient comprehenders. Teachers need to teach comprehension explicitly, beginning in the primary grades and continuing through high school. Van Staden (2006, p.8) warns that if reading comprehension does not improve and poor reading outcomes are not prevented, young learners not only leave primary school illiterate, but their illiteracy tends to continue after entering secondary school.

The more that you read, the more things you will know. The more that you learn, the more places you'll go.

- Dr Seuss

## REFERENCES

- Afflerbach, P., Pearson, P.D. & Paris, S.G. (2008). Clarifying differences between reading skills and reading strategies. *The reading teacher*, 61 (5), 364–373.
- Bales, R.J. & Gambrell, L.B. (1985). Imagery: a strategy for enhancing comprehension. In C.C. Block & M. Pressley (Eds.). *Comprehension instruction research-based best practices* (pp.305–318). New York: The Guilford Press.
- Blachowicz, C. & Ogle, D. (2001). *Reading comprehension: strategies for independent learners*. New York: The Guilford Press.
- Block, C.C. & Pressley, M. (2002). *Comprehension instruction research-based best practices*. New York: The Guilford Press.
- Booth, D. & Swartz, L. (2004). *Literacy techniques for building successful readers and writers*. Ontario: Pembroke.
- Brown, A. & Palinscar, A. (1984). *Reciprocal teaching of comprehension strategies: A natural program for Enhancing learning*. University of Illinois, Urbana-Campaign.
- Cain, K. & Oakhill, J. (2006). Assessment matters: Issues in the measurement of reading comprehension. *British Journal of Educational Psychology*, 76 (4), 697–708.
- Cain, K., Oakhill, J. & Byrant, P. (2000). Investigating the causes of reading comprehension failure: The comprehension-age match design. *Reading and writing: An Interdisciplinary Journal*, 12 (1-2), 31–40.
- Campbell, J.R., Kelly, D.L., Mullis, I.V.S., Martin, M.O. & Sainsbury, M. (2001). *Framework and specifications for PIRLS Assessment 2001*. Chestnut Hill, Mass.: Boston College.
- Chinapah, V. (2000). *With Africa for Africa. Towards quality education for all*. Pretoria: Human Sciences Research Council.
- Chisholm, L. (2003). The state of curriculum reform in South Africa: the issue of Curriculum 2005. In J.H. Daniel, *State of the Nation South Africa 2003-2004*, (pp. 268-289). Pretoria: HSRC Press.
- Clinton, President Bill. (1994). Speech on International Literacy Day.
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research methods in education*. New York: Routledge.
- Cramer, K. & Rosenfield, S. (2008). Effect of degree of challenge on reading performance. *Reading & Writing Quarterly*, 24 (1), 119–137.
- Creswell, J.W. (2005). *Educational research.: Planning, conducting, and evaluating quantitative and qualitative research*. New Jersey, N.J.: Pearson Prentice Hall.

- Cromley, J. G. & Azevedo, R. (2007). Testing and refining the direct and inferential mediation model of reading comprehension. *Journal of Educational Psychology*, 99 (2), 311–325.
- Cunningham, A. & Shagoury, R. (2005). *Starting with comprehension: reading strategies for the youngest learners*. Portland, Maine: Stenhouse.
- Denzin, N.K. & Lincoln, Y.S. (2000). *Handbook of qualitative research*. Thousand Oaks, Calif.: Sage Publications.
- Department of Education. (1997). *Language in education policy*. Pretoria: Government Printing Works.
- Department of Education. (2002). *Revised National Curriculum Statement Grades R-9 Languages: Afrikaans – Home Language*. Pretoria: Government Printing Works.
- Department of Education. (2002). *Government Gazette: Revised National Curriculum Statement Grades R-9*. No.: 23406, Vol. 443. Pretoria: Government Printing Works.
- Department of Education. (2003). *Systemic evaluation Foundation Phase Mainstream National Report*. Pretoria: DoE, Chief Directorate, Quality Assurance.
- Department of Education. (2005). *Curriculum 2005*. Pretoria: Government Printing Works.
- Department of Education. (2008). *Teaching reading in the early grades: A teacher's handbook*. Pretoria: Sol Plaatje House.
- Dewitz, P. & Dewitz, P.K. (2003). They can read the words, but they can't understand: Refining comprehension assessment. *The Reading Teacher*, 56 (5), 1–14.
- Dougherty Stahl, K.A. (2004). Proof, Practice, and Promise: Comprehension Strategy Instruction in the Primary Grades. *The Reading Teacher*, 57 (7), 598-609.
- Dowhower, S.L. (1999). Supporting a strategic stance in the classroom: A comprehension framework for helping teachers help students to be strategic. *The Reading Teacher*, 52 (7), 672–688.
- Dubin, F. & Kuhlman, N.A. (1992). The dimensions of cross-cultural literacy. In F. Dubin & N.A. Kuhlman (Eds.). *Cross-cultural literacy: Global perspectives on reading and writing*, (pp.v–x). Englewood Cliffs, N.J.: Regents/Prentice Hall.
- Duffy, G.G. (2002). The case for direct explanation of strategies. In C. Block & M Pressley, *Comprehension instruction research-based best practices*, (pp.28–41). New York: The Guilford Press.
- Duffy, G., Roehler, L., Meloth, M., & Vavrus, L. (1986). Conceptualizing instructional explanation. *Teaching and teacher education*, 2 (3), 197–214.
- Duke, N.K. & Pearson, P.D. (2002). Effective practices for developing reading comprehension. In A.E. Farstrup & S.J. Samuels (Eds.). *What research has to say about reading instruction* (3<sup>rd</sup>ed.), 205–242. Newark, Del.: International Reading Association.

- Durkin, D. (1993). *Teaching them to read* (6<sup>th</sup> ed.). Boston, Mass.: Allyn & Bacon.
- Fielding, L.G. & Pearson, P.D. (2001). Reading Comprehension: what works. *The Reading Teacher*, 55 (1), 62–67.
- Fleisch, B. (2008). *Primary education in crisis: why South African schoolchildren underachieve in reading and mathematics*. Cape Town: Juta.
- Gambrell, L.B. & Koskinen, P.S. (2002). A strategy for enhancing comprehension. In C. Block & M. Pressley, *Comprehension Instruction Research-Based Best Practices* (305–318). New York: The Guilford Press.
- Gorard, G. (2004). *Combining methods in educational and social research*. Berkshire: Open University Press.
- Groban, J. The song "You raise me up". Album: "You raise me up". Released on 7 October, 2003.
- Guthrie, J.T., Martuza, V. & Seifert, M. (1979). Impacts of instructional time in reading in L.B. Resnick & P.A. Weaver (eds.) *Theory and practice of early reading (Vol 3)*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Harvey, S. & Goudvis, A. (2000). *Strategies that work: teaching comprehension to enhance understanding*. Portland, Maine: Stenhouse.
- Herber, H.L. (1978). *Teaching reading in content areas (2<sup>nd</sup> ed.)*. Upper Saddle River, N.J.: Prentice Hall.
- Hirsch, E. (2003). Reading Comprehension requires knowledge of words and the world. *American Educator*, 27 (1), 10–45.
- Hodges, R.E. (1999). What is literacy? Selected definitions and essays. *The literacy dictionary: The vocabulary of reading and writing*. International Reading Association, 1–33.
- Howie, S.J, Venter, E., van Staden, S. & van Gelder, M. (2007). The Effects of multilingual policies on performance and progress in reading literacy in South African primary schools. *Educational Research and Evaluation*, 14 (6), 551-560.
- Howie, S.J., Venter, E., van Staden, S., Zimmerman, L., Long, C., Scherman, V. & Archer, E. (2007). *PIRLS 2006 Summary report on South African children's reading achievement*. Pretoria: University of Pretoria: Centre for Evaluation & Assessment.
- Howie, S.J. (2007). South Africa. In A.M. Kennedy, I.V.S. Mullis, M.O. Martin & K.L. Trong (Eds.). *PIRLS 2006 Encyclopedia: A guide to reading education in the forty PIRLS 2006 countries*, 381–390). Boston College: TIMSS & PIRLS International Study Centre.
- Howie, S.J. & van Staden, S. (2009). Teacher Education Research and Development Programme (TEP) Conference 2008. South African teacher profiles and emerging teacher factors: The picture painted by the Progress in International Reading Literacy

- Study 2006, 20-30. Braamfontein, Johannesburg: Centre for Education Policy Development.
- International Association for the Evaluation of Educational Achievement. *International Database Analyzer*. Retrieved on 23 January 2009 from: [http://www.iea.nl/fileadmin/user\\_upload/IEA\\_Software/IDBAnalyzer\\_Setup.exe](http://www.iea.nl/fileadmin/user_upload/IEA_Software/IDBAnalyzer_Setup.exe)
- International Reading Association (2007). Teaching reading well: A synthesis of the international reading associations' research on teacher preparation for reading instruction. Newark, Del.: IRA. Retrieved on 30 March 2009 from <http://www.reading.org>
- Johnston, P. H. & Rogers, R. (2002). The early literacy development: the case for 'Informed assessment'. In S. Neuman et al., *Handbook of early literacy research*, (377–389). New York: The Guilford Press.
- Johnson, S., Monk, M. & Hodges, M. (2000). Teacher Development and Change in South Africa: A critique of the appropriateness of transfer of North Western practice. *Compare: A journal of comparative education*, 30 (2), 179–192.
- Joubert, I., Bester, M. & Meyer, E. (2006). *Geletterheid in die Grondslagfase*. Pretoria: Van Schaik Publishers.
- Keene, E. & Zimmerman, S. (1997). *Mosaic of thought: teaching comprehension in the primary grades*. Portsmouth, N.H.: Heinemann.
- Mackenzie, N. & Knipe, S. (2006). Research dilemmas: paradigms, methods and methodology. *Educational Research*, (16), 1–11.
- Manzo, A.V. & Manzo, U.C. (1995). *Teaching children to be literate: a reflective approach*. New York: Harcourt Brace College.
- Maree, K. (2007). *First steps in research*. Pretoria: Van Schaik.
- Martin, M.O., Mullis, I.V.S. & Kennedy, A.M. (2007). *PIRLS 2006 Technical report*. Chestnut Hill: Boston College.
- McMillan, J.H. & Schumacher, S. (2006). *Research in education evidence-based inquiry*. Boston, Mass.: Pearson Education.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Miller, D. (2002). *Reading with meaning: teaching comprehension in the primary grades*. Portland, Maine: Stenhouse.
- Moats, L. C.(1999). American Federation of Teachers *Teaching reading IS rocket science. What expert teachers of reading should know and be able to do*. Retrieved on 10 October 2007 from: <http://www.ade.az.gov/azreads/reading1st/Resources/006.pdf>
- Moloi, M. & Strauss, J. (2005). *The SACMEQ 11 project in South Africa: a study of the*

*conditions of schooling and the quality of education.* Harare, Zimbabwe, & Pretoria: Southern and Eastern African Consortium for monitoring education quality, & Ministry of Education.

Mullis, I.V.S., Kennedy, A.M., Martin, M.O., & Sainsbury, M. (2004). *PIRLS 2006 Assessment framework and specifications.* Boston College: TIMSS & PIRLS International Study Centre.

Mullis, I.V.S., Kennedy, A.M., Martin, M.O., & Sainsbury, M. (2006). *PIRLS 2006 Assessment framework and specifications.* Boston College: TIMSS & PIRLS International Study Centre.

Mullis, I.V.S., Martin, M.O., Kennedy, A.M. & Foy, P. (2007). *PIRLS 2006 International report.* Chestnut Hill: Boston College.

National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. *National Institutes of Health Pub. No. 00–4769.* Washington, Wash.: National institute of child health and human development.

Neuman, S.B. & Dickinson, D.K. (2002). *Handbook of Early Literacy Research.* New York: The Guilford Press.

Ogle, L.T., Sen, A. & Pahlke, E. (2003). International comparisons in fourth-grade reading literacy: findings from the progress in international reading literacy study (PIRLS) of 2001. Washington: National centre for education statistics institute of education sciences.

Opitz, M.F., & Ford, M.P. (2006). Assessment can be friendly! *The Reading Teacher*, 59 (8), 814–816.

Papanastasiou, C. (1999). *Factors that distinguish the most from the least effective schools in reading: a residual approach.* Retrieved on 22 May 2008 from: [http://www.iea.nl/fileadmin/user\\_upload/IRC\\_2006/IEA\\_Program/PIRLS](http://www.iea.nl/fileadmin/user_upload/IRC_2006/IEA_Program/PIRLS).

Pearson, P.D., Dole, J.A., Duffy, G.G. & Roehler, L.R. (1992). Developing Expertise in Reading Comprehension: What should be taught and how should it be taught ? In *What research has to say to the teacher of reading.* International reading association.

(PISA) Programme for International Student Assessment. (2003). The PISA 2003 Assessment framework: mathematics, reading, science and problem solving knowledge and skills. Hamburg: OECD Publishing.

Pressley, M., Wharton-McDonald, R., Allington, R., Block, C.C., Morrow, L., Tracey, D. & Baker, K. (2001). A Study of Effective First-Grade Literacy Instruction. *Scientific Studies of Reading*, 5 (1), 35–58.

Primary framework for literacy and mathematics: Developing reading comprehension. (2008). Retrieved on 23 April 2008 from: <http://www.standards.dfes.gov.uk/primaryframework/literacy/>

- Primary framework for literacy and mathematics: *Core position papers underpinning the renewal of guidance for teaching literacy and mathematics*. (2006). Department for Education and skills. Norwich: The Information policy division, St Clements House.
- Rademeyer, A. 'SA vaar swakste in toets'. (2007, 30 November). *Beeld*, 1.
- Rathvon, N. (2004). *Early reading assessment: a practitioner's handbook*. New York: Guilford Publications.
- Report of the National Reading Panel: Teaching children to read subgroups. (2000). *National institute of health pub*. No. 00-4754. Washington: National Institute of Child Health and Human Development.
- Resnick, L.B. & Weaver P.A. (eds.) (1979). *Theory and practice of early reading (Vol 3)*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rodgers, A. & Rodgers, E. (2004). The Role of Scaffolding in Teaching. In A. Rodgers & E. Rodgers (Eds.). *Scaffolding literacy instruction strategies for K-4 classrooms*, (pp.1–10). Portsmouth: Heinemann.
- Rodgers, E. (2004). Interactions That Scaffold Reading Performance. *Journal of literacy research*, 36 (4), 501–532.
- Sarroub, L. & Pearson, P.D. (1998). *Two steps forward, three steps back: The stormy history of reading comprehension assessment*. Washington: The Clearing House, 72 (2), 1–13.
- Sherman, L. (2002). Why can't I read? Current research offers new hope to disabled learners. *Northwest Education Magazine*, 8 (3), 1–10.
- Sherman, S.P. *A Site for Serious Readers*. Retrieved on 5 September 2008 at: <http://uncommonreadings.com/quotations.html#s>
- Shuy, T.R. & McCardle, P. & Albro, E. (2006). Reading comprehension assessment. *Scientific studies of reading*, 10 (3), 221–224.
- Smith, F. (1988). *Understanding reading* (4<sup>th</sup> ed.). Hillsdale, N.J.: Erlbaum.
- Snow, C. (2002). *Reading for understanding toward a research and development program in reading comprehension*. Pittsburgh: RAND Education.
- Spörer, N., Brunstein, J.C. & Kieschke, U. (2009). Improving students' reading comprehension skills: Effects of strategy instruction and reciprocal teaching. *Learning and Instruction*, 19 (3), 272-286.
- Stake, R. (1995). *The art of case study research*. Thousand Oaks, Calif.: Sage.
- Stelman, J.D., Pierce, P.L. & Koppenhaver, D.A. (1994). The role of computers in promoting literacy in children with severe speech and physical impairments. In K.G. Butler (Ed.). *Severe communication disorders: intervention strategies* (200–212). Gaithersburg, Md: Aspen.

- Stoffels, N.T. (2005). 'Sir, On What Page Is The Answer?' Exploring Teacher Decision-making During Complex Curriculum Change, With Specific Reference To The Use Of Learner Support Material. *International journal of educational development*, 25 (5), 531–546.
- Strauss, J. & Berger, M. (2000). *Monitoring learning achievement project MLP South Africa*. University of the Orange Free State: Research institute for education planning.
- Strickland, S., Galda, L. & Cullinan B.E. (2004). *Language arts*. Canada: Thomson Wadsworth.
- The National Literacy Trust. (2009) Learning To Succeed (1993). Retrieved on 4 September 2009 from <http://novel.nifl.gov/nifl/faqs.html>.
- The Star. (2007). 'If you're reading this, you're one of the few'. 1 December, 2007 (9).
- Trabasso, T. & Bouchard, E. (2002). In Block, C.C. & Pressley, M. (2002). *Comprehension instruction research-based best practices*. New York: Guilford Press.
- US National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, Wash.: National institute of child health and human development.
- Vacca, R.T. & Vacca, J.L. (2009.). *Content area reading: Literacy and learning across the curriculum* (9<sup>th</sup> ed.). Boston: Pearson Education.
- Vacca, R.T. & Vacca, J.L., Mraz, M. (2010). *Content area reading: Literacy and learning across the curriculum* (10<sup>th</sup> ed.). Boston: Pearson Education.
- Van Staden, S. (2006). *PIRLS of wisdom: the what, where, when and how of the international reading literacy study in South Africa*. Retrieved on April 22, 2008, from: <http://www.jet.org.za>.
- Van Staden, S. & Howie, S.J. (2009). *South African teacher profiles and emerging teacher factors: The picture painted by the Progress in International Reading Literacy Study 2006*. Paper presented at the Teacher education research and development programme (TEP) Conference 2008. Proceedings of the TEP Concluding Conference, (pp.20–30). Braamfontein: Centre for Education Policy Development (CEPD).
- Vithal, R. & Jansen, J. (2004). *Designing your first research proposal*. Landsdowne: Juta.
- Voss, C.T., Tsikriktsis, N. & Frohlich, M. (2002). Case research in operations management. *International Journal of Operations & Production Management*, 22 (2), 195–219.
- Vygotsky, L.S. (1935). *The mental development of the child in the process of instruction*. Moscow-Leningrad: Uchpedgiz.
- Vygotsky, L.S. (1978). *Mind in society*. London: Harvard University Press.
- Wolfe, P. & Nevills, P. (2004). *Building the reading brain, PreK-3*. California: Corwin Press.

Yin, R. (2003). *Case study research design and methods*. Thousand Oaks, Calif.: Sage Publications.

## BIBLIOGRAPHY

- Brown, A. & Dowling, P. (1998). *Doing research/reading research a mode of interrogation for education*. London: Falmer Press.
- Creswell, J.W. (2003). *Research design: qualitative, quantitative and mixed methods approaches (2<sup>nd</sup> ed.)*. Thousand Oaks, Calif.: Sage.
- Donald, D.R., Lolwana, P. & Lazarus, S. (2002). *Educational psychology in social context*. Cape Town: South Africa: Oxford University Press.
- Elbers, E. (1996). Cooperation and Social Context in Adult-Child Interaction. *Learning and instruction*, (6), 281–286.
- Elley, W. B . (1992). *How in the world do students read? IEA Study of reading literacy*. Germany: Grindeldruck GMBH, Hamburg.
- Foy, P. & Joncas, M. (2003). Progress in international reading literacy study. *2006 School sampling manual*. Canada: Statistics Canada.
- Henning, E., Van Rensburg, W. & Smit, B. (2008). *Finding your way in qualitative research*. Pretoria: Van Schaik Publishers.
- Krathwohl, D.R. (1993). *Methods of educational and social science research: an integrated approach*. New York: Longman.
- Lee, V.E., Zuze, T.L. & Ross, K.N. (2005). School Effectiveness in 14 Sub-Saharan African Countries: Links with 6<sup>th</sup> Graders' Reading Achievement. *Studies in educational evaluation*, 31, 207–246.
- Lincoln, Y.S. & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hillls Calif.: Sage.
- Rieber, R.W. & Carton, A.S. (Eds.). (1999). *The collected works of L.S. Vygotsky, Volume 1, Problems of general psychology*. New York: Plenum Press.
- Rieber, R. (1999). *The collected Works of L.S. Vygotsky, Volume 4, The history of the development of higher mental functions*. New York: Plenum Press.
- Rieber, R. (1999). *The collected works of L.S. Vygotsky, Volume 6, Scientific legacy*. New York: Kluwer Academic/Plenum Publishers.
- Shepard, L. (2000). The Role of Assessment in a Learning Culture. *Educational researcher*, 29 (7), 4–14.
- Stothard, S.E. & Hulme, C. (1992). Reading Comprehension Difficulties in Children: The Role of Language Comprehension and Working Memory Skills. *Reading and writing*, 4 (3), 245–256.
- Thomas, R.M. (2003). *Blending qualitative and quantitative research methods in theses and*

*dissertations*. Thousand Oaks, Calif.: Corwin Press.

Vygotsky L.S. Problems of general psychology. In R.W. Rieber, & A.S. Carton, (Eds.). (1999). *The collected works of L.S Vygotsky*. Vol. 1. New York: Plenum.

## APPENDICES



### Appendix A : Letter of consent to participants

#### **Grade 4 and Grade 5 learners: the relationship between reading comprehension practice and reading comprehension achievement**

Dear Participant

You are invited to participate in a research undertaking that aims to explore the ideas and thoughts of Grade 4 and 5 teachers regarding classroom practice that influences reading comprehension achievement.

You are requested to participate in a one-on-one interview with the researcher during which your ideas and thoughts about reading comprehension practices will be explored. All interviews are to be recorded on audiotape to ensure an accurate recording of participants' views and to ensure that no information is lost. Observation sessions will take place during school hours for one week.

The purpose of this study is to conduct research on the relationship between reading comprehension classroom practice and the achievement of learners' reading comprehension of Grade 4 and 5 learners who took part in PIRLS 2006. The study will focus on schools with learners that were able to reach the High International Benchmark of 550.

Once these schools have been identified, participants will be selected according to the specific benchmark. Participants will consequently be selected from the Grade 4 and 5 teachers, whose learners achieved scores within this High International Benchmark in PIRLS 2006.

Data from the assessment instruments as utilised in the PIRLS 2006 study of South Africa will be consulted. The data will be used as a fulfilment of the requirements of a dissertation for the degree MEd Assessment and Quality Assurance.

The interview will take approximately 45 minutes. Data will be treated confidentially and anonymity will be guaranteed by the researcher. Your participation is voluntary. You may decide to withdraw from the research at any stage during the data collection process.

Feedback on the research findings will be communicated to you in an oral discussion.

The mini-dissertation will enter the public domain for the scrutiny of examiners and the academic community. Principals will have access to final report.

If you are willing to participate in this study, please sign this letter as a declaration of your consent, i.e. that you participate in this project willingly, that you have read the study's aim, and understand that you may withdraw from the research project at any time. Under no circumstances will your identity be made known to any staff members at your school or in the report (in any format) of the research results.

As the undersigned, I hereby consent to be part of this research project.

Participant Signature: ..... Date: 2009/03/04

Yours sincerely



Jeanette Stols (Researcher) Tel: 082 378 2159 Date: 2009/03/04



CEA (Centre for Evaluation & Assessment)  
AIS Centre, Faculty of Education

Tel: +27 (0) 12 420 4175  
Fax: +27 (0) 12 420 5723

Groenkloof Campus Pretoria 0002

Appendix B : Letter to the Grade 4 teacher for consent to use voice recording equipment



Dear Participant

**Consent from a Grade 4 teacher to record her interview**

You are kindly requested to participate with a researcher in a one-on-one interview during which your ideas and thoughts about reading comprehension practices will be explored. All the interviews are to be recorded on audiotape to ensure an accurate recording of participants' views and to ensure that no information is lost.

As the undersigned, I hereby give consent for the use of voice recording equipment such as audio taping.

Participant Signature: ..... Date: 2009/03/04

Yours sincerely

Jeanette Stols (Researcher) Tel: 082 378 2159 Date: 2009/03/04



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AIS Centre, Faculty of Education  
Groenkloof Campus Pretoria 0002

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Appendix C : Letter to Grade 5 teacher for consent to use voice recording equipment



Dear Participant

**Consent from a Grade 5 teacher to record her interview**

You are kindly requested to participate with a researcher in a one-on-one interview during which your ideas and thoughts about reading comprehension practices will be explored. All the interviews are to be recorded on audiotape to ensure an accurate recording of participants' views and to ensure that no information is lost.

As the undersigned, I hereby give consent for the use of voice recording equipment such as audio taping.

Participant Signature: ..... Date: 2009/03/04

Yours sincerely



Jeanette Stols (Researcher) Tel: 082 378 2159 Date: 2009/03/04



Appendix D : Letter of consent to the principal and school governing body



2009/03/04

The Principal and School Governing Body

**Application for permission to conduct research with Grade 4 and Grade 5 teachers**

I hereby seek permission to approach teachers with a view to inviting contributions to an interview-observation-based research undertaking. Two teachers will be sought and the interviews will take place after school hours.

The observation sessions will take place during school hours. The findings will contribute to a mini-dissertation of the degree MEd (Evaluation, Assessment and Quality Assurance) at the University of Pretoria. Principals will have access to final report.

The purpose of the study is to explore teachers' opinions on the influence of classroom practice to the performance of learners' reading comprehension of Grade 4 and 5 learners who took part in PIRLS 2006. The study will focus on schools with learners that were able to reach the High International Benchmark of 550.

Once these schools have been identified, participants will be selected according to the specific benchmark. Participants will consequently be selected from those Grade 4 and 5 teachers, whose learners have achieved scores within this High International Benchmark at the time PIRLS 2006 took place.

A summary of my proposed study and a statement of personal ethical responsibility are attached. The ethical considerations for the research will be strictly adhered to during the research process.

Your consideration of my request for approval will be greatly appreciated.

Yours faithfully



Jeanette Stols (Researcher) Cell phone: 082 378 2159



Ms S van Staden (Supervisor)

Tel: 012 420 5159

E- mail: [surette.vanstaden@up.ac.za](mailto:surette.vanstaden@up.ac.za)



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Appendix E : Permission from the DoE to conduct the research



UMnyango WezeMfundo  
Department of Education

Lefapha la Thuto  
Departement van Onderwys

Enquiries : Shadrack Phele MIRMSA

Tel. no. : [+2711] 355 0285

Tuesday, 17 June 2008

Mrs Stols Jeanette  
15 Wattle Avenue  
Golfpark  
MEYERTON  
1961

Dear Mrs Stols Jeanette

**PERMISSION TO CONDUCT RESEARCH: PROJECT**

The Gauteng Department of Education hereby grants permission to conduct research in its institutions as per application.

Topic of research : "The influence of teacher practice regarding comprehension activities in class and performance of learners in the PIRLS 2006 study."

Nature of project : Masters in Education

Name of university : University of Pretoria

Upon completion of the research project the researcher is obliged to furnish the Department with copy of the research report (electronic or hard copy).

The Department wishes you success in your academic pursuit.

Yours in Tirisano,

p.p. Shadrack Phele [MIRMSA]

TOM WASPE  
CHIEF INFORMATION OFFICER  
Gauteng Department of Education



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## Appendix F : Observation Schedule 1



## Schedule 1: The one week observation (during class periods)

<b>TEACHER COMPREHENSION STRATEGY ACTIVITIES</b>																			
Teach inference-making																			
Teach self-questioning																			
Teach connection making																			
Teach vocabulary																			
Teach visualisation																			
Teach any other comprehension strategy (e.g. identifying main ideas, summarising)																			
<b>LEARNER ASSESSMENT ACTIVITIES</b>																			
Answer multiple-choice questions																			
Formulate constructed responses																			
Answer orally or summarise orally																			
Read aloud																			
Read silently																			

= Teacher classroom practice

\ Learners' practice



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## Appendix G : Schedule 2



Schedule 2: The one week summarised observation schedule.

	1	2	3	4	5
<b>TEACHER COMPREHENSION STRATEGY ACTIVITIES</b>	Not at all	Once a day	Once a week	More than once a day	More than once a week
Teach inference-making					
Teach self-questioning					
Teach connection making					
Teach vocabulary					
Teach visualisation					
Teach any comprehension strategy (e.g. identifying main ideas, or summarising)					
<b>LEARNER ASSESSMENT ACTIVITIES</b>					
Answering multiple-choice questions					
Formulate constructed responses					
Answer orally or summarise orally					
Reading aloud					
Silent reading					



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## Appendix H : The semi-structured interview



### **The Semi-Structured Interview Schedule: 45 Minute Schedule (After School)**

1. Do you read reading passages and comprehension questions aloud to the learners?  
What happens during exams?
2. Some researchers say that you have to teach reading skills simultaneously with comprehension skills. Do you agree or disagree with them?
3. Suppose you receive instructions from The Department of Education to start teaching reading comprehension strategies exactly, what would your strategy programme be like?
4. The Department stipulates in the Teachers' handbook of January 2008: Teaching reading in the early grades. These are ways of developing comprehension the Teachers' handbook suggests:
  - Activate the reader's prior knowledge
  - Read aloud to learners
  - Help learners to use clues and illustrations in and around the text
  - Develop the reader's decoding skills
  - Develop fluency
  - Increase vocabulary
  - Develop learners' ability to apply high-order thinking skills like analysing, evaluating and interpreting
  - How do you evaluate these ways
5. How do you teach reading comprehension strategies? (e.g. one at a time/ to a wide variety of text)
6. How often do you teach reading strategies?
7. Do you follow a specific technique to teach reading comprehension strategies – explicit direct teaching, reciprocal teaching?
8. If you have to compare the time allocated to reading comprehension strategy teaching and only reading teaching, what do you think would be the ratio?

9. Is there a specific ranking order when teaching reading comprehension strategies?  
(Word level skills, background knowledge, vocabulary teaching)
10. How do you feel about the teacher's role in reading comprehension teaching?
11. In a cycle how much time do you devote to reading comprehension, e.g. how many periods, how many reading passages?
12. Describe the process of your teaching practice regarding reading comprehension strategies.
13. Comprehension has to be developed from the very start. Do you agree or disagree with this statement?
14. How is the progress from Grade 4 to 5 reflected in the teaching practice of reading comprehension?
15. Literature advocates that there are many effective ways to teach comprehension. There are no universal panaceas (remedies) that are the best practices. How do you feel about this statement?
16. If you choose reading passages for classroom assessment or tests, do the passages reflect a theme or how do you choose reading passages?
17. If you have to choose narrative and informational passages, what would your ratio be?



Appendix I : Permission to use the South African data from the PIRLS 2006 assessment study



To whom it May Concern

**Application for permission to use the PIRLS 2006 South African data**

This letter confirms that Jeanette Stols (Student number: 84594952) has been granted permission to use data from the South African dataset for the Progress in International Reading Literacy Study (PIRLS) 2006.

PIRLS 2006 South Africa was administered by the Centre for Evaluation and Assessment, at Groenkloof Campus at the University of Pretoria.

Permission was granted for the following data to be accessed and used:

- Data from the PIRLS 2006 teacher questionnaires

Ethical procedures in the original PIRLS 2006 research project were employed in the following manner:

- Ethical clearance was obtained from the Ethical Committee at the Faculty of Education at the University of Pretoria.
- Permission was granted by the Minister of Education
- Permission was obtained by the Education Departments and Districts in South Africa to conduct the study.
- Informed consent was obtained from the relevant School Principals
- Informed consent was obtained from parents

Co-National Research Coordinator  
Prof. S. J. Howie

Co-National Research Coordinator  
Ms E. J. Venter



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Appendix J : Reading comprehension passages and questions

**Grade 4 passage:**

**Melanie verhuis**

Melanie Muis huil bitterlik. Vandag gaan die muis- familie die plaas verlaat. Hulle moet in die bos gaan woon. Melanie Muis moet al haar vriende groet. “Oink! Oink! Oink! “snik die otjies. “Tot siens! “ Melani Muis sal haar vriende mis. Sy snik nog ‘n keer. Mamma en Pappa sleep ‘n groot koolblaar. Op die koolblaar is hul potte en panne, tafels en stoele, komberse en boeke gepak. “Woef! Woef! “ blaf Pa hond. “Wuif vir haar totsiens,”se hy vir die klein hondjies. “Ons sal vir Melanie Muis gaan kuier.” Op pad na die bos ontmoet die muise die hasies en die eekhorings. Almal hou saam piekniek. “Sal jy ons maatjie wees, Melanie?” giggel die twee eekhorinkies. Hulle gee vir Melanie ‘n okkerneutdop – wa. Eindelik kom die muisgesin by hul nuwe huis aan. “Welkom ! Welkom! “piep die muise wat langsaan woon. “Ons is julle bure. “Ons sal julle help uitpak.“ Elke muis dra iets by die huisie in. Daar is ‘n groot kamer met ‘n kaggel, ‘n spesiale plek vir potte en panne en ‘n spesiale plek vir boeke. Maar dis nog nie al nie. Melanie Muis het haar eie oulike kamertjie. Sy wys vir haar nuwe maats al haar speelgoed. Nou huil Melanie Muis nie meer nie. (207 woorde)

Vrae:

1. Waarvandaan moet die Muis-familie wegtrek ? (1)
2. Waarheen moet die Muis-familie trek ? (1)
3. Wat sleep Mamma en Pappa alles op die koolblaar? (5)
4. Watter diere ontmoet die muise op pad na hul nuwe huis? (2)
5. Watse persent gee Melanie se nuwe maatjies vir haar? (1)

(Totaal:10)

**Grade 5**

**Passage 1: Boeglam geskrik**

Ons het in Junie by Oupa-hulle op Langvlei gekuier. Op hierdie plaas is nog een van daardie outydse bakoonde waarin Ouma haar brood bak en beskuit uitdroog.

Een môre het Ouma vir my gesê: “Kallie, sal jy nie gou vir Ouma ‘n vuurtjie in die bakoond gaan maak nie ? Julle is so lief vir beskuit en Ouma het ‘n hele baksel wat uitgedroog moet word”.

Ek was maar te bly dat ek van nut kon wees, en sommer gou-gou het my vuur begin brand. Net toe vlieg daar ‘n ding by die bek van die oond uit, vas teen my bors dat ek daar op die naat van my rug val, asvaal geskrik. “Voertsek ! “ skree ek, maar dit was te laat.

Dit was een van Ouma se wegle-hoenders wat haar nes in die bakoond gaan maak het.

My harde gil het Ouma gou daar laat opdaag. Sy het die vuurtjie uitgekrap en agter in die oond het sy ses eiers gekry.

Na ‘n bietjie suikerwater het ek gou van my skrik herstel. Ek het dadelik vir Ouma gevra om tog asseblief die ou, groot , rooi en gevaarlike hen vir middagete te slag ‘want”, sê ek ewemanhaftig, “eendag sal sy nog iemand wat bang is, sommer baie groot laat skrik.

(203 woorde)

Vrae:

1. Hoe weet ons dat Kallie-hulle in die winter by hul oupa en oma gekuier het? (2)
2. Kallie se oma het die bakoond vir meer as een doel gebruik. Waarvoor was dit? (2)
3. Wat word bedoel met: ‘n baksel, ‘n sleepselsel, ‘n broeisel, ‘n pluksel, ‘n kooksel en ‘n skeersel? Gebruik ‘n woordeboek. (6)
4. Hoe het Kallie gelyk toe hy daar op die grond lê? (2)
5. Wat is weglê-hoenders ? En weglê-horings? (2)
6. Hoe het dit gebeur dat Kallie se oma so gou daar opgedaag het? (2)
7. Wat het Kallie gedrink nadat hy so groot geskrik het? (1)
8. Skryf DRIE WOORDE neer wat vir ons sê hoe die hoender gelyk het. (3)

(Totaal: 20)

**Passage 2:**

**Die gedig: Die Spook**

- 1 Een aand, net na ete,  
begin oom Fanie met sy streke.  
Alhoewel Mammie dit verbied  
weet hy
- 5 dat ons spookstories die meeste geniet  
“Daar onder by die watersloot  
is ou Mos mos een nag dood.  
Hy was ryk en vet en groot;  
die mense sê: hy’s in die water gestoot!
- 10 Daarom spook dit daar ...  
Mos soek na sy moordenaar.”  
Later loop ek allenig deur die gang.  
Skielik vat iets my aan die wang.  
‘n Rilling trek deur my lyf
- 15 en my ledemate skrik stok-,stokstyf.  
Nou krul dit stadig om my keel  
en begin oor my wang te streel en streel ...  
Ek klap en skree en gryp en gil ...  
Toe bly ek ewe skielik stil ...
- 20 Verslae staan ek met ‘n haarsliert in my hand.  
Dit was die spokerige kalant!

Uit: ‘Oe-la-la’ deur Bernie Visser

Vrae:

1. Wie, dink jy, is die person wat in die gedig praat: Is dit 'n seun, 'n meisie of 'n grootmens?
2. Vertel in een sin wat in versreëls 1-5 gebeur.
3. Beskryf hoe iemand is as hy vol streke is.
4. Waarom wil Mammie nie hê oom Fanie moet spookstories vertel nie?
5. In watter reëls word die spookstorie vertel? Watter leestekens sê dit vir ons?
6. Sê in jou eie woorde hoe die person voel nadat sy die storie gehoor het (reëls 12 – 18).
7. Waarom word stok in reël 15 herhaal?
8. Stokstyf is 'n intensiewe vorm – dit sê dat die meisie se ledemate baie styf was. Wat is die intensiewe vorme van oud en groen?
9. Was dit toe rerig 'n spook? Verduidelik.
10. Wanneer sal ons sê iets of iemand is 'n kalant? (Gebruik 'n woordeboek)
11. Die drie kolletjies wat dikwels in die gedig gebruik word, noem ons 'n ellips. Hoekom, dink jy, word dit gebruik? Watter gevoel wek dit by jou?

Appendix K : Translated reading comprehension passages and questions for Grades 4 and 5  
**Grade 4**

**Passage 1: Melanie moved**

Melanie the Mouse is crying bitterly. Today is the day that the mouse family will leave the farm. They have to live in the woods. Melanie the mouse needs to greet all her friends farewell. “ Oink! Oink! Oink ! “ sob the piglets. “Bye, Bye!” Melanie the mouse will miss her friends. She sobs again. Mother and father Mouse drag a huge cabbage leaf. On this cabbage leaf there are pots and pans, tables and chairs, blankets and books. “Woef! Woef! “ barks father dog.

“Wave goodbye to her” says father dog to the small puppies. “ We will visit Melanie the mouse.”

On their way to the woods, the mice meet young hares and squirrels. All of them are having a picnic. “Will you be our friend, Melanie?” giggle the two squirrels.

They gave Melanie a walnut wagon. Eventually the mouse family arrive at their new home. “Welcome! Welcome! “ squeak the mice that live next door. “ We are your neighbours:

“We will help you to unpack”. Each and every mouse carries something into the new house. There is a big room with a fireplace, a special spot for pots and pans and a special spot for books. But this is not enough. Melanie the mouse has her own cute little room. She shows all her toys to her new friends. Melanie the mouse does not cry any longer. (207 words)

Questions:

1. From which place must the mouse family move? (1)
2. Where to must the mouse family move? (1)
3. Mention everything Mother and father mouse drag on the cabbage leaf. (5)
4. Which animals do the mice meet on their way to their new home? (2)
5. What present does Melanie receive from her new friends? (1)

(Total: 10)

## Grade 5

### Passage 2: Scared Stiff

We visited Grandfather on Langvlei during June. On this farm there is still one of those old fashioned oven, in which Grandmother bakes bread and dries her rusks.

One morning Grandmother told me: “Kallie, would you make a fire in the oven? You like rusks and grandmother has a batch of rusks that need to be dried.”

I was glad that I could be of some use, and very soon my fire started to burn. Suddenly something flies out of the oven, onto my chest, causing me to fall on my back. “Get away!” I screamed, but it was too late.

It was one of Granny’s chickens that hatched in the oven.

My loud screaming causes Granny to come very quickly. She found six eggs at the back of the oven.

She gave me sugar water, which allows me to forget about my big fright. I asked Granny immediately to slaughter the old, big, red and dangerous hen for lunch, as I say boldly: “one day she will give someone who is very scared, a big fright.

(203 words)

Questions:

1. How do you know that Kallie has visited his grandparents in the winter? (2)
2. Kallie’s granny used the oven for more than one purpose. Mention that? (2)
3. What is the meaning of a batch, a trail, a hatch and clutch and a clip? Use a dictionary. (6)
4. How did Kallie look when he was lying on the ground? (2)
5. What is “weglê hoenders” and “weglê horings”? (2)
6. How did it happen that Kallie’s granny arrived so soon? (2)
7. 7. What did Kallie drink after he had such a big fright? (1)
8. 8. Write down THREE WORDS to describe the chicken. (3)

(Total: 20)

## Grade 5

### Passage 3: The poem: The Ghost

1 One evening, just after supper,  
Start uncle Fanie with his jokes.  
Although mother prohibits that  
he knows  
5 that we enjoy ghost stories  
“There at the ditch  
is old Mos one evening dead.  
He was rich and fat and big;  
the people say: he was pushed into the water!  
10 That’s why there’s a ghost...  
Mos is looking for his murderer.”  
Later I walk on my own in the corridor.  
Suddenly something touches my cheek.  
A shiver goes down my spine  
15 and my limbs were stiff.  
Now it curls slowly round my throat  
and starts to stroke my cheek...  
I hit and scream and grab a...  
Then I keep quiet...  
20 Amazed I stood with a strand of hair in my hand.  
This was a ghostly vagabond.

From: Oe-la-la written by Bernie Visser

#### Questions:

1. Who is the narrator in the poem: Is it a boy, a girl or a grown up?
2. What is happening in lines 1-5? Give only one sentence.
3. Describe a person who is full of “streke”
4. Why does mother not want uncle Fanie to tell ghost stories?

5. Which lines reveal the ghost story? Which punctuation marks reveal it?
6. Rewrite in your own words, how the person felt after she heard the story (lines 12-18).
7. Why is the word “stok” in line 15 repeated?
8. “Stokstyf” is an example of degree of comparison. What is the degree of comparison for “old” and “green”?
9. Was it really a ghost? Explain.
10. When will we say someone is a vagabond? (Use a dictionary)
11. The three dots that are used in the poem are called an ellipse. What is the function of the ellipse? What emotion is evoked by the ellipse?

## Appendix L : 52 Codes

Onderwyser hardop lees	1[OHL]
Leerder hardop lees	2[LHL]
Leesvaardighede en begripstrategieë apart onderrig	3[LBA]
Leesvaardighede en begripstrategieë saam onderrig	4[LBS]
Effektiewe Leesprogram by skool	5[ELS]
Leesstuk 2 keer deurlees	6[L2D]
Belangrike punte onderstreep	7[BPO]
Woordbetekenis begryp	8[WBB]
Leesbegripontwikkeling	9[LBO]
Vlak van kind	10[VV <sub>k</sub> ]
Begripstrategieë verskil jaarliks	11[BSV]
Progressie van Gr 1-7	12[P17]
1 strategie met verskillende tekste	13[1SVT]
Verskillende leerling Leesbehoefte	14[VLLB]
Fiksie, gedigte	15[FG]
Verskillende Genres	16[VG]
Begripstrategieë Onderrigtyd	17[BOT]
3 keer 'n week	18[3KW]
3 keer 'n maand	19[3KM]
Begripstrategieë Onderrig in taalleer en letterkunde	20[BOTL]
Leesbegrip in ander leerareas strek	21[BAL]
Meer begrip onderrig as lees onderrig	22[MBSO]
10% begrip onderrig	23[10B]
90% gewone lees onderrig	24[90L]
Lees en begrip hand aan hand	25[LBHAH]
Orde, Kernwoorde, Woordeskat	26[OKW]
Orde, konteks vrae, woordeskat en verder dink	27[OKWV]
Onderwyser en ouerrol ten opsigte van leesbegrip onderrig	28[OOLBO]

Onderwyser kweek liefde vir lees	29[OKLL]
Dubbelperiode per week	30[DPPW]
Uur en 'n half per week	31[UHPW]
Strategie-onderrig: onderwyser	32[SOO]
Lees stukkie en vrae hardop	33[OLSH]
Leerders lees dan self deur	34[LLSH]
Maak gebruik van woordeboeke	35[MVW]
Begriplees en leesvaardighede moet saam ontwikkel	36[BLLVSO]
Progressie van gr 4 na gr 5	37[P45]
Leesboeke word moeiliker	38[LBWM]
Moeiliker woorde	39[MW]
Tekste moeiliker	40[TM]
Gr 4 meer feitevrae	41[G4FV]
Gr 5 meer insigvrae	42[G5IV]
Nie universele "remedy" vir begripleesonderrig nie	43[NURBLN]
Ruimte gelaat vir verskillende metodes	44[RGVVM]
Gr 4 nie teme gerig nie	45[G4NTN]
Gr 5 tema gerig, in klas en in die eksamen	46[G5TIKE]
Kurrikulum stel balans tussen inligting en vertellende stukkies voor	47[KBTIVS]
Gr 4 bietjie meer fiksie teenoor inligting stukkies	48[G4BMFIS]
Gr 5 lees meer fabels en sprokies vir verbeeldingdoeleindes	49[G5MSVV]
G 4 vrae nooit keusevrae in klas of eksamen	50[G4NKVV]
Moet in sinnetjies beantwoord	51[LSB]
Uitskryf wat leerling voel en dink	52[ULVED]

## Appendix M : 52 Codes reduced to 14

Onderwyser hardop lees	1[OHL]	}	A practice
Onderwyser kweek liefde vir lees	29[OKLL]		
Strategie-onderrig: onderwyser	32[SOO]		
Leerder hardop lees	2[LHL]	}	B Assessment
Leesstuk 2 keer deurlees	6[L2D]		
Belangrike punte onderstreep	7[BPO]		
Lees stukkie en vrae hardop	33[OLSH]		
Leerders lees dan self deur	34[LLSH]		
Maak gebruik van woordeboeke	35[MVW]		
Moet in sinnetjies beantwoord	51[LSB]		
Uitskryf wat leerling voel en dink	52[ULVED]		
Effektiewe Leesprogram by skool	5[ELS]	}	C Learner achievement
Leesbegripontwikkeling	9[LBO]	}	D Strategy
Leesvaardighede en begripstrategieë saam onderrig	4[LBS]		
Woordbetekenis begryp	8[WBB]		
Lees en begrip hand aan hand	25[LBHAH]		
Begriplees en leesvaardighede moet saam ontwikkel	36[BLLVSO]		
Begripstrategieë verskil jaarliks	11[BSV]	}	E Practice
Verskillende leerling Leesbehoefte	14[VLLB]		

Vlak van kind	10[VVk]	}	F Assessment
Progressie van Gr 1-7	12[P17]		
Progressie van gr 4 na gr 5	37[P45]		
Leesboeke word moeiliker	38[LBWM]		
Moeiliker woorde	39[MW]		
Tekste moeiliker	40[TM]		
Gr 4 meer feitevrae	41[G4FV]		
Gr 5 meer insigvrae	42[G5IV]		
G 4 vrae nooit keusevrae in klas of eksamen	50[G4NKVV]		
1 strategie met verskillende tekste	13[1SVT]	}	G Strategy
Fiksie, gedigte	15[FG]		
Verskillende Genres	16[VG]		
Begripstrategieë Onderrig in taalleer en letterkunde	20[BOTL]		
Leesbegrip in ander leerareas strek	21[BAL]		
Gr 4 nie teme gerig nie	45[G4NTN]	}	H Practice
Gr 5 tema gerig, in klas en in die eksamen	46[G5TIKE]		
Begripstrategieë Onderrigtyd	17[BOT]	}	I Strategy practice time
3 keer 'n week	18[3KW]		
3 keer 'n maand	19[3KM]		
10% begrip onderrig	23[10B]		
90% gewone leesonderrig	24[90L]		
Dubbelperiode per week	30[DPPW]		
Uur en 'n half per week	31[UHPW]		
Leesvaardighede en begripstrategieë apart onderrig	3[LBA]	}	J Strategy practice
Meer begrip onderrig as leesonderrig	22[MBSO]		

Orde, Kernwoorde, Woordeskat	26[OKW]	}	K Strategy
Orde, konteksrae, woordeskat en verder dink	27[OKWV]		
Onderwyser en ouerrol ten opsigte van leesbegrip onderrig	28[OOLBO]	}	L Learner achievement
Nie universele "remedy" vir begriplesonderrig nie	43[NURBLN]	}	M Strategy
Ruimte gelaat vir verskillende metodes	44[RGVVM]		
Kurrikulum stel balans tussen inligting en vertellende stukkies voor	47[KBTIVS]	}	N Assessment
Gr 4 bietjie meer fiksie teenoor inligting stukkies	48[G4BMFIS]		
Gr 5 lees meer fabels en sprokies vir verbeeldingdoeleindes	49[G5MSVV]		

## Appendix N : 14 Codes reduced to 4 Themes

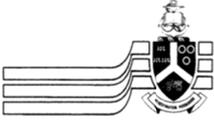
Theme 1: Reading comprehension practice

Theme 2: Learner achievement

Theme 3: Reading comprehension strategies

Theme 4: Reading comprehension assessment

Appendix O : Clearance certificate from the Ethics Committee

 UNIVERSITY OF PRETORIA FACULTY OF EDUCATION RESEARCH ETHICS COMMITTEE	
<b>CLEARANCE CERTIFICATE</b>	<b>CLEARANCE NUMBER :</b> <span style="border: 1px solid black; padding: 2px;">CS08/08/04</span>
<b><u>DEGREE AND PROJECT</u></b>	MEd: Curriculum Studies The role of comprehension strategy practices in reading literacy achievement in Grade 4 and 5 learners.
<b><u>INVESTIGATOR(S)</u></b>	Jeanette Stols
<b><u>DEPARTMENT</u></b>	Curriculum Studies
<b><u>DATE CONSIDERED</u></b>	12 January 2010
<b><u>DECISION OF THE COMMITTEE</u></b>	APPROVED
<p>Please note: <i>For Masters applications, ethical clearance is valid for 2 years</i> <i>For PhD applications, ethical clearance is valid for 3 years.</i></p>	
<b>CHAIRPERSON OF ETHICS COMMITTEE</b>	Prof L Ebersohn 
<b>DATE</b>	<u>12 January 2010</u>
<b>CC</b>	Ms S van Staden Ms Jeannie Beukes
<p>This ethical clearance certificate is issued subject to the following conditions:</p> <ol style="list-style-type: none"><li>1. A signed personal declaration of responsibility</li><li>2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted</li><li>3. It remains the students' responsibility to ensure that all the necessary forms for informed consent are kept for future queries.</li></ol>	
<p>Please quote the clearance number in all enquiries.</p>	