Explicitly teaching the paraphrasing strategy, in a whole class setting to Year 3/4 students with an emphasis on increasing student's vocabulary knowledge through suggesting synonyms for key words will improve reading comprehension.

ABSTRACT

Many students, who have been meeting system benchmark targets in reading in their early years of schooling (Prep-Year 2), begin to experience reading difficulties in Year 3/4 when the literacy demands of the texts increases. In the early years of schooling students are required to reach targeted text levels. Students may reach these targeted text benchmark levels through accurate decoding. Their understanding (comprehension) of the text may not be at the same standard. The current research investigates the effectiveness of explicitly teaching comprehending actions as part of regular whole class teaching sessions to improve students reading comprehension. The comprehending action of paraphrasing was targeted with an emphasis on increasing student's vocabulary knowledge through suggesting synonyms for key words. Most students improved in their use of the comprehending action of paraphrasing and their ability to generate synonyms. Whilst students in the teaching groups rate of gain in their use of the comprehending action of paraphrasing was greater than their overall rate of gain in their text comprehension it is still important to note that this improved knowledge of how to apply a comprehending action on text is a marker for predicting that explicitly teaching students a comprehending action such as paraphrasing will improve gains in Year 3/4 student's comprehension abilities in a whole class setting.

INTRODUCTION

Reading is a complex and challenging process. Fluent readers process text at multiple levels. The Multiple Levels of Text Processing model (MLOTP) as described by Munro (2009) describes what fluent readers do when they read. The MLOTP is a framework that integrates the strategic activities readers engage in and the knowledge they require to be successful in the reading process. MLOTP is not hierarchical but is based on the understanding that we read by working on information in text at a number of levels. The MLOTP framework consists of four components – Literacy Knowledge, Metacognitive Knowledge, Existing Knowledge and Sensory knowledge. Effective readers integrate text information with the knowledge they have about reading. They determine what the text is about so they can use what they know. They take their existing visual imagery knowledge and transfer it into oral language knowledge. At the word level, they work out how to say the words and what unfamiliar words might mean. At a sentence level they can say the sentence using grammar

and punctuation or visualize it to gain meaning. The effective reader is able to link ideas and concepts in the text whilst determining the author's purpose. At the same time the effective reader is managing and directing their reading before, during and after the reading process

through planning how they will read, deciding on questions the text might answer and taking corrective action (i.e. deciding when to re-read or self correct). Effective readers are able to draw on their sensory input knowledge such as auditory processing/hearing sounds in words; visual input/orthographic knowledge; touch/feeling and motion supporting the motor aspects of their expressive language. The effective reader does all these things well and is able to value and articulate why it is useful to employ a variety of reading strategies in an integrated way.

Students who have difficulty processing text at these multiple levels in an integrated way are disadvantaged in the classroom. These students may experience failure in the reading process as they have difficulty understanding key words or sentences and they have difficulty identifying how sentences link together or how the information in a text fits together in a meaningful way (Parker, Hasbrouck & Denton 2002). Luke & Freebody (1999) support this notion in that they believe that students need to be taught explicitly four strategic roles in order for them to be able to be successful readers. They believe students need to develop knowledge of how to be a code breaker (decoding the codes and conventions of written, spoken and visual text); text user (understanding the purposes of different written, spoken and visual texts for different cultural and social functions); text participant (comprehending written, spoken and visual texts) and text analyst (understanding how texts position readers, viewers and listeners). Whatever developmental point students are at, Luke & Freebody (1999) emphasise that all four roles need to be taught systematically and explicitly based on a teacher's knowledge of their students.

Many primary school teachers state that as students make the transition from the junior school to the middle school, they are limited in their knowledge of the actions to use when comprehending a text. Many argue that the emphasis in the junior school has been too heavily weighted on developing student's decoding abilities at the expense of providing quality teaching and learning opportunities for students in developing their use of comprehending actions. Westwood (2001) notes that students decoding abilities and comprehending abilities of what has been read are not always equal. He believes that reading with understanding is the most important aspect of the reading process and for this to occur the reader needs to be able to coordinate the higher order cognitive processes of thinking, reasoning, analysing, connecting and reflecting with the lower order processes of word recognition and decoding.

Whilst Westwood (2001) describes word recognition and decoding as lower order processes it is important to acknowledge the impact under developed decoding abilities have on a student's ability to comprehend what they are reading. If students have not automatised their knowledge of how to decode effectively their working memory is taken up with the act of decoding therefore limiting their opportunities for reading for meaning. Moser et al (2007) believes that the nature of the relationship between decoding difficulties and the impact this has on students comprehending abilities needs further investigation.

The present research describes a project in which Year 3/4 students were taught the explicit comprehending action of paraphrasing with an emphasis on increasing student's vocabulary knowledge through suggesting synonyms for key words. The students were taught in a whole class setting as part of their regular literacy program. The explicit teaching of this comprehending action was designed to enhance students' literacy knowledge therefore improving their comprehension (what they know and understand about a text having read it). The research was based on the belief that the key to better learning for students is better teaching (Darling-Hammond 2000).

Throughout the teaching sessions the students were scaffolded in their learning with an emphasis on extending the students understanding of the use of the paraphrasing strategy and the value of using this strategy to become more effective text participants. There was a continual building on the known with the unknown. Fisk & Hurst (2003) believe that students will be more strategic readers if they know why paraphrasing is helpful and when to use it as a strategy. They state that paraphrasing is a technique that will strengthen student's abilities to comprehend both fiction and non fiction texts.

Pikulski & Chard (2005) found that paraphrasing as a comprehending tool supported many reading skills such as identifying the main idea, finding the supporting details and identifying the author's voice. To compliment the paraphrasing strategy Harvey & Goudvis (2000) maintain that student's social interaction also aids comprehension. They believe that it is essential that students are provided with opportunities for peer discussion and that these discourse opportunities will further enhance their text understanding.

The present study examined the influence of teaching the paraphrasing strategy explicitly in a whole class setting to Year 3/4 students with an emphasis on increasing student's vocabulary knowledge through suggesting synonyms for key words on improving reading comprehension.

METHOD

Design

The research used a case study OXO design and compared two classes of Year 3/4 students, a control group and a teaching group. The teaching group were explicitly taught the comprehending action of paraphrasing as part of their regular literacy lessons. The control group continued with their regular literacy program with no explicit teaching of the paraphrasing strategy.

Prior to and at the conclusion of the ten teaching sessions, the students' reading comprehension was assessed using a PAT R (4^{th} edition) reading comprehension test (Stephanou, Anderson & Urbach, 2008). In addition, their ability to generate synonyms for words in isolation and to paraphrase at a sentence and discourse level was assessed (John Munro, 2009). The student's knowledge of word meanings was also assessed using PAT R Vocabulary Test 1 (Stephanou, Anderson & Urbach, 2008). The data was used to examine changes in students' reading comprehension and reading strategy use.

Participants

Students chosen to participate in this study were from a Year 3/4 class. Both the control group and the teaching group represent the typical range of abilities that would be expected in a regular Year 3/4 class. Both the teaching group and the control group had students from ESL background, students with LNSLN funding and students that had received prior intervention (see Appendix 1). Four students in the teaching group on LNSLN funding are funded for severe language disorders whilst the control group has only two students who are funded; one for an intellectual disability and the other under the social and emotional category. The teaching groups pre test data indicated that their overall range of literacy abilities were lower than that of the other grade which was subsequently chosen to be the control group. The variance in this pre test data determined which group would be the teaching group and which group would be the control group.

The number of participants in the teaching group and control group, age in months, gender, years of schooling, LNSLN funding, earlier intervention, of participants and their EMA status is shown in Appendix 1.

Materials

The materials used included:

1) Written text materials typical of the texts students needed to read in Year 3/4. In terms of readability indices (Fry), the texts were at the year level of the group. As this was presented to the whole class the text was adapted for individual students so that the readability was appropriate for all students. This was done by changing some sentences to single event sentences for students who were having difficulty accessing texts with two or more event sentences.

2) Pat 4 -R Reading Comprehension 4th Edition (Stephanou, Anderson & Urbach, 2008) to assess reading comprehension.

3) Synonym Test (Munro, 2009) to assess ability to generate synonyms.

4) Paraphrasing Test (Munro 2009) to assess ability to paraphrase.

5) PAT R Vocabulary Test 1: 4th Edition (Stephanou, Anderson & Urbach, 2008) to measure student's knowledge of terminology.

These tasks required students to recognise or record the correct option(s):

- For comprehension they needed to choose the best answer that showed they understood what they read.
- The synonyms task required them to listen to a target word and then write as many words as they could think of that mean the same thing (see Appendix 2 for scoring system).
- The paraphrasing task required them to read a sentence and then write it another way whilst maintaining meaning and correct grammatical form (see Appendix 3 for scoring system); and
- For the vocabulary test students needed to choose one word from five choices that had the same or nearly the same meaning as the underlined word.

Procedure

The tasks of this research were administered to students in the following order.

All students (both in the Teaching Intervention Group and Control Group) were administered the following tests during pre testing and then readministered the same tests in the post testing phase (readministered after the 10 explicit teaching sessions for the teaching

intervention group & after the same two week period of regular literacy instruction for the control group).

Pre & Post Test Order of administration

(One test was administered per day over a four day period the week preceding explicit teaching sessions)

Pat 4 -R Reading Comprehension 4th Edition (Stephanou, Anderson & Urbach, 2008)

Synonym Test (Munro, 2009)

Paraphrasing Test (Munro 2009)

PAT R Vocabulary Test 1: 4th Edition (Stephanou, Anderson & Urbach, 2008)

The teaching Intervention group of students were explicitly taught the comprehending action of paraphrasing in a whole class setting over a two week period. Ten lessons were conducted daily for 45minutes. The researcher conducted these lessons with an observer present who was instructed by the researcher to record observations of student responses to track changes in their knowledge of the paraphrasing strategy over the ten sessions. The 10 daily teaching sessions were based on John Munro's (2009) Comprehension-Paraphrasing teaching strategy with an emphasis on teaching students to identify synonyms for key content words (Appendix 4). Each teaching session was designed to scaffold students learning for them to achieve the following literacy capabilities.

- Students were asked to get their knowledge ready for literacy learning by saying out loud what they knew about paraphrasing and how this strategy helps them as a reader.
- Students were asked to read aloud with the teacher relevant portions of the text.
- Students were asked to generate, say and write synonyms for key words in the text.
- Students were asked to paraphrase sentences (both orally and in written form) in the text read by changing as many words as possible whilst maintaining meaning and correct grammatical form.

The level of scaffolding diminished over the 10 lessons with the students becoming more independent in their use of the paraphrasing strategy (see Appendix 4 for the shift in teacher scaffolding over the teaching sequence).

Data Analysis

The data was analysed by representing students raw scores in bar graph (pre testing phase) and line graph (post testing phase) format. These scores were analysed by calculating overall group mean scores and standard deviation scores. The mean scores and standard deviation scores were compared across the teaching intervention group and the control group. They

were represented in table format. Stanine scores were compared in the PAT R Comprehension Test and Vocabulary Test. The raw scores and stanine scores were used to compare the impact of the teaching intervention on particular cohorts of students (i.e. students from ESL background, on LNSLN funding or students who had received previous literacy intervention).

RESULTS

The student's performance on a synonym, paraphrasing, comprehension and vocabulary task were measured prior to the teaching intervention and post the teaching intervention phase. The changes in raw scores between these two testing phases on each of the tasks are represented in Figures 1- 8 for both the control group and the teaching intervention group.

Figure 1

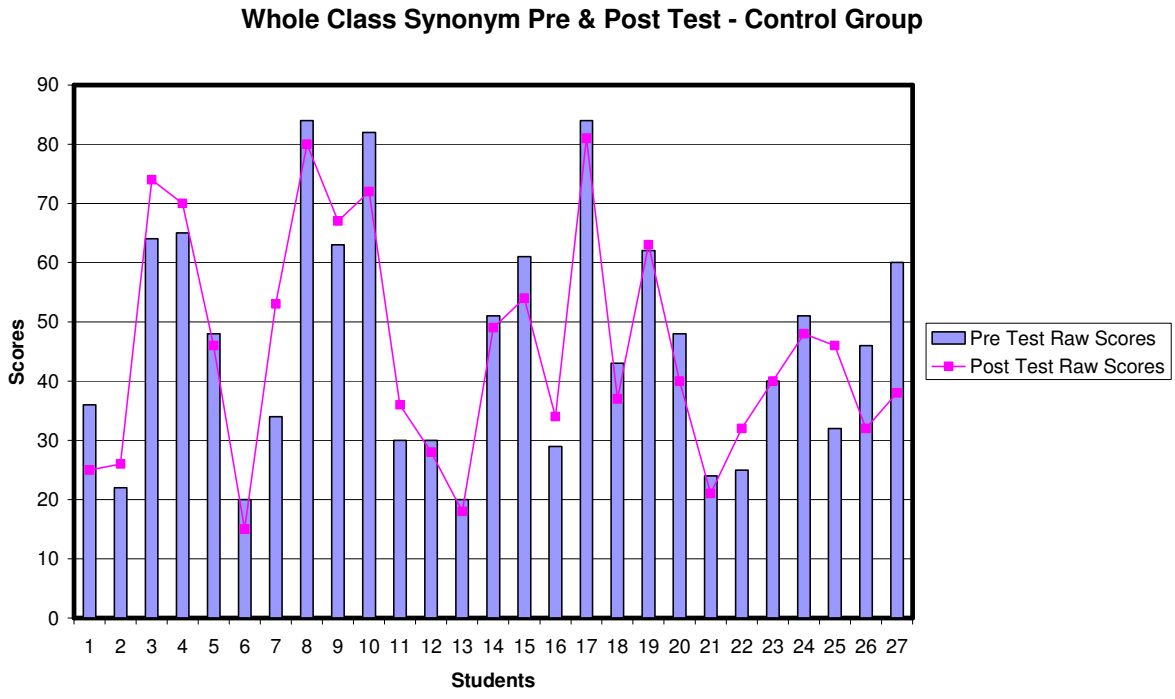
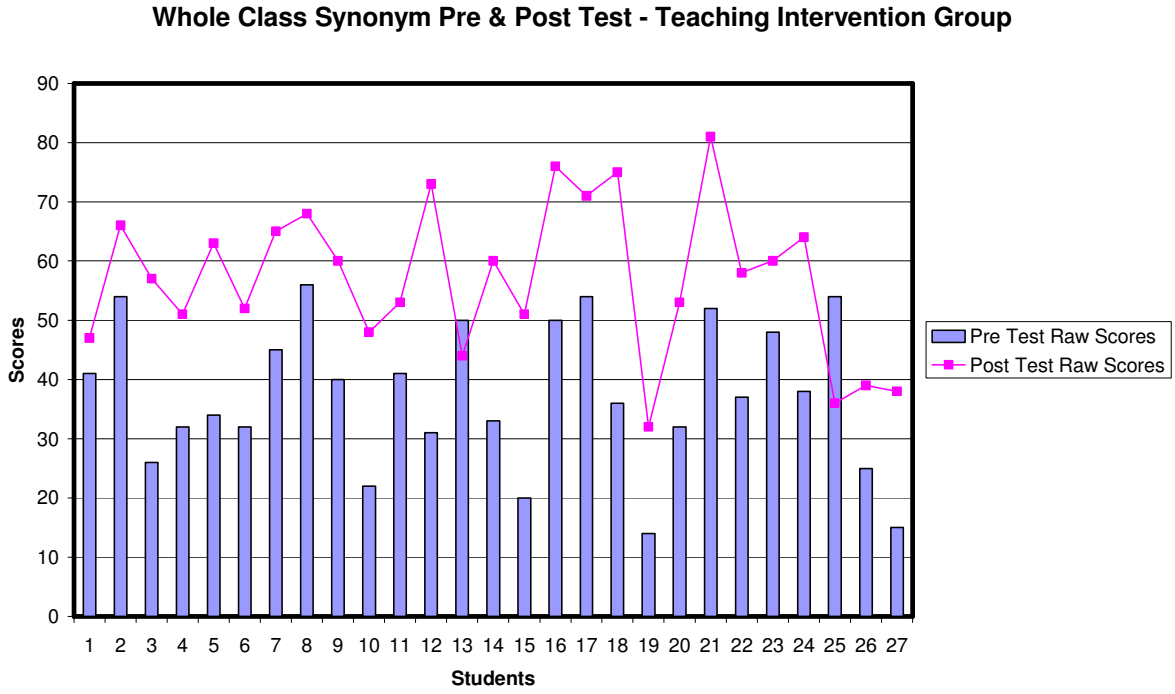


Figure 2



The pre testing data in figures 1 & 2 indicates that the control group started with a higher overall ability for generating synonyms than the teaching intervention group. In the post testing phase the raw scores indicate a higher rate of gain for generating synonyms in the teaching intervention group than the control group.

Figure 3

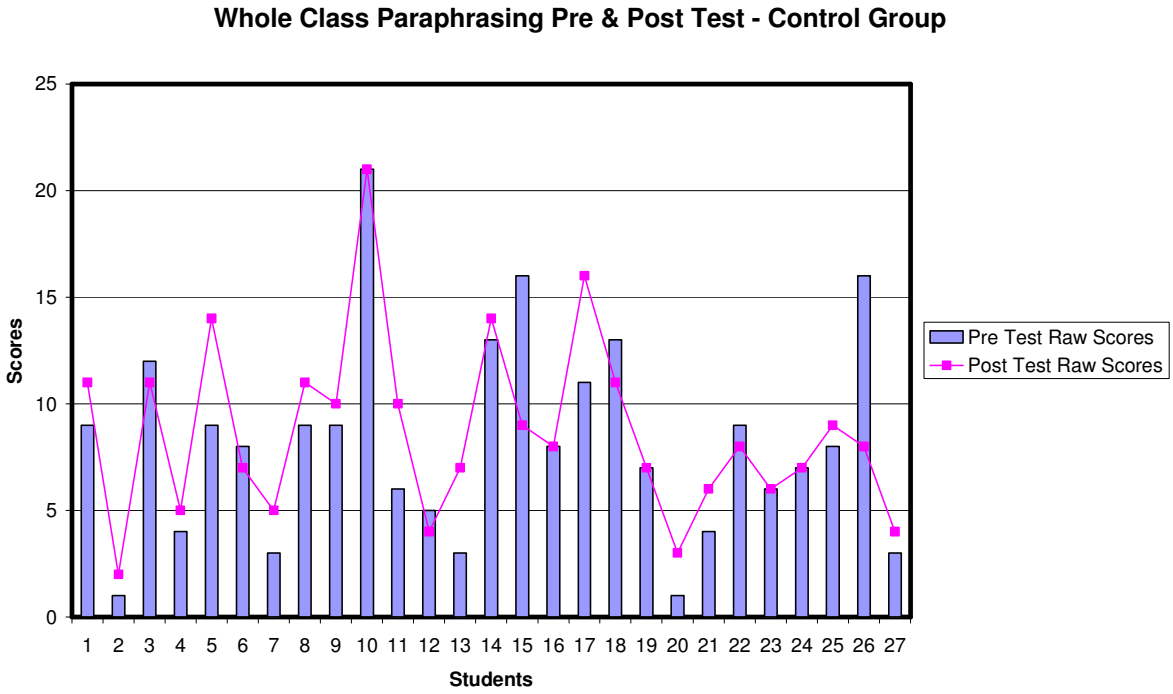
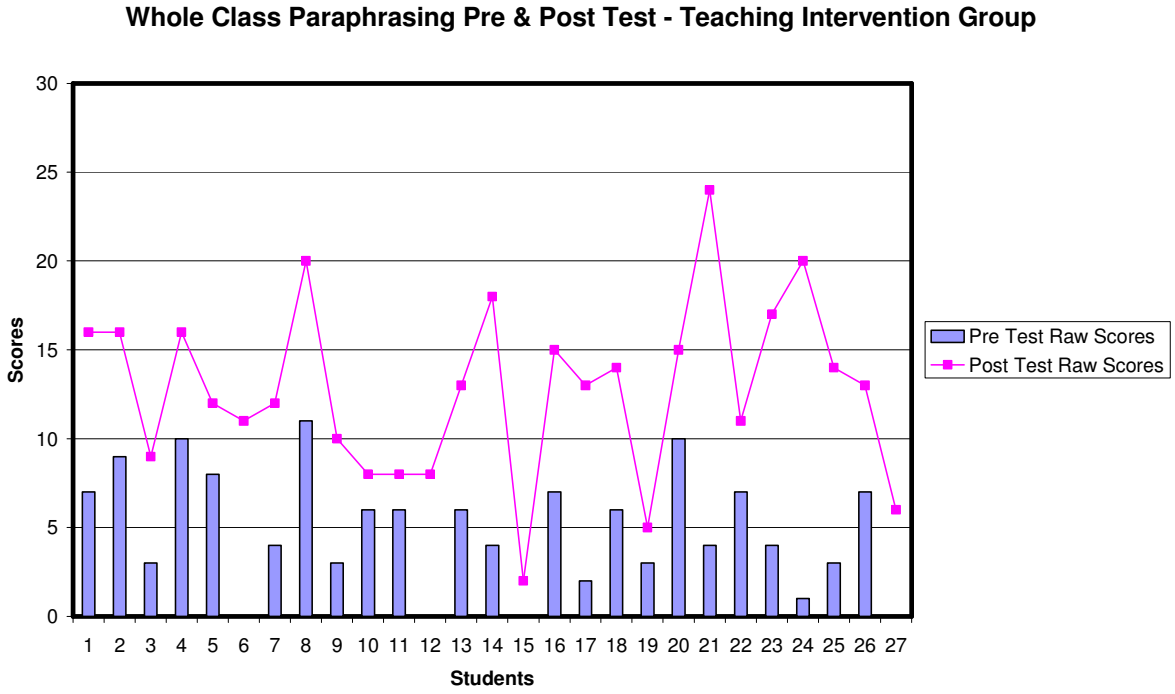


Figure 4



The pre testing data in figures 3 & 4 indicates a wider spread of the raw score range in the control group (scores ranged from 1-21) than the teaching intervention group (scores ranged from 0-11). The post testing data indicates that the raw score range in the control group changed minimally (scores ranged from 2-21) in comparison to the teaching intervention group (scores ranged from 2-24). The rate of growth based on the raw data would indicate a much higher rate of gain for the teaching intervention group than the control group.

Figure 5

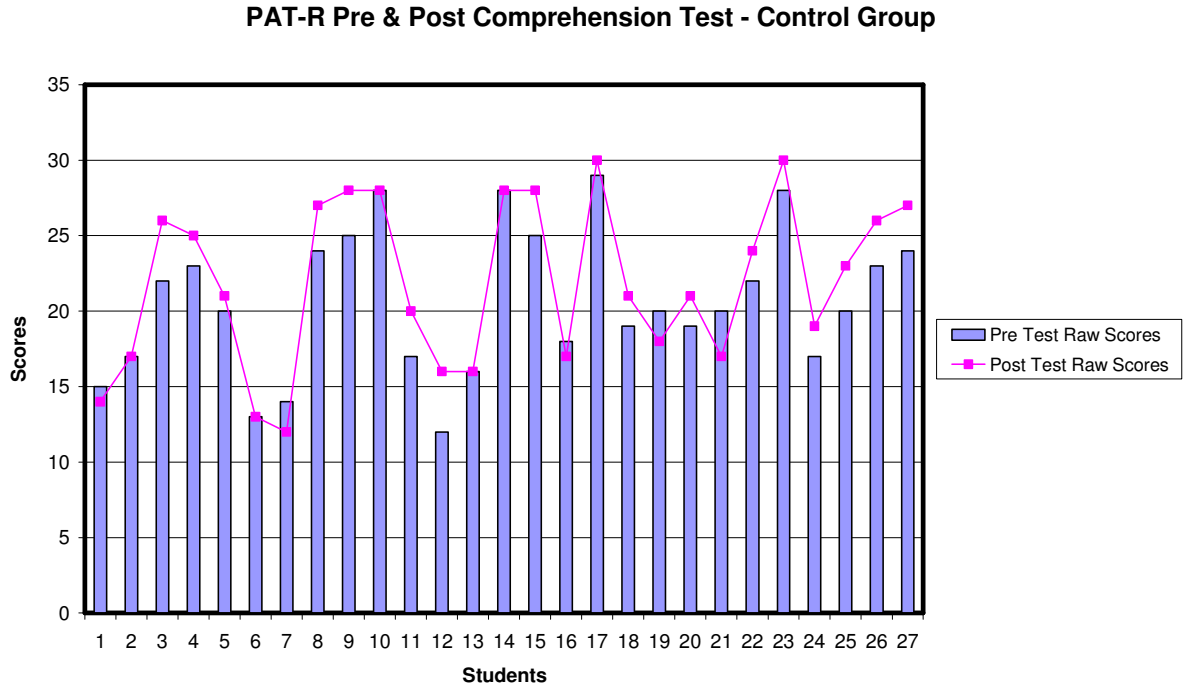
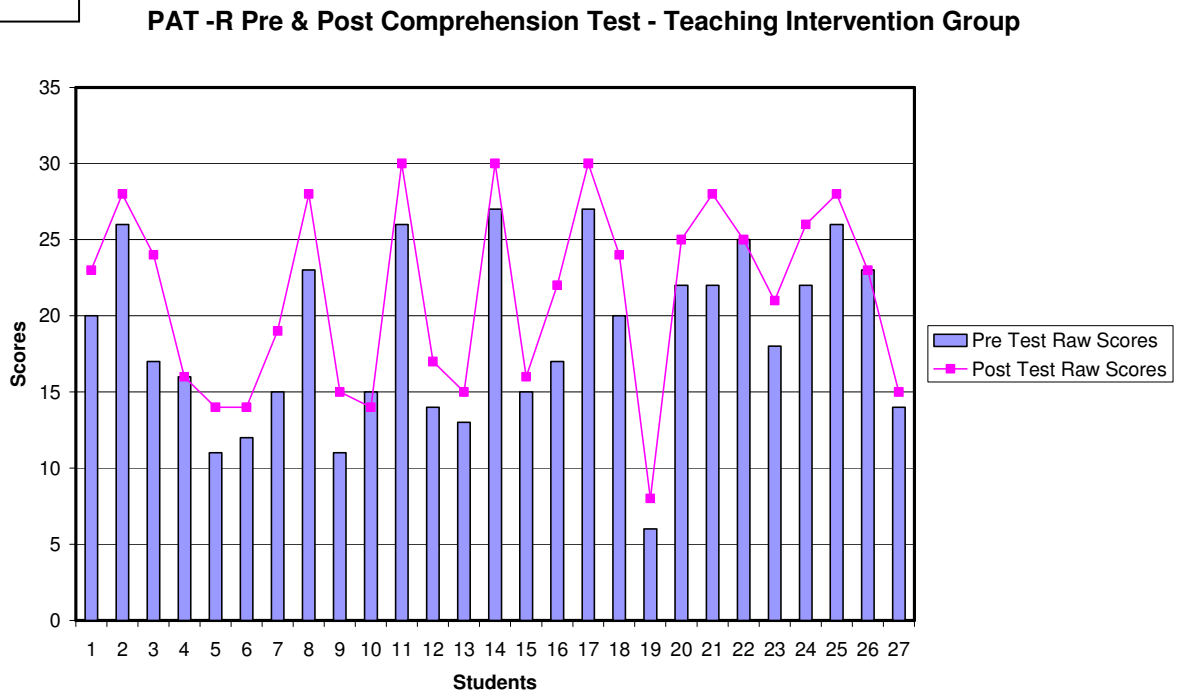


Figure 6



The data in figure 5 indicates that the control group had 89% of students achieving a raw score of 15 or above in both the pre and post testing phase. Figure 6 highlights that the teaching intervention group had 74% of students achieving a raw score of 15 or above in the pre testing phase and 85% of students achieving a raw score of 15 or above in the post testing phase. These figures highlight that there is a slight increase in the teaching intervention group's raw data in comparison to the control group's raw data.

Figure 7

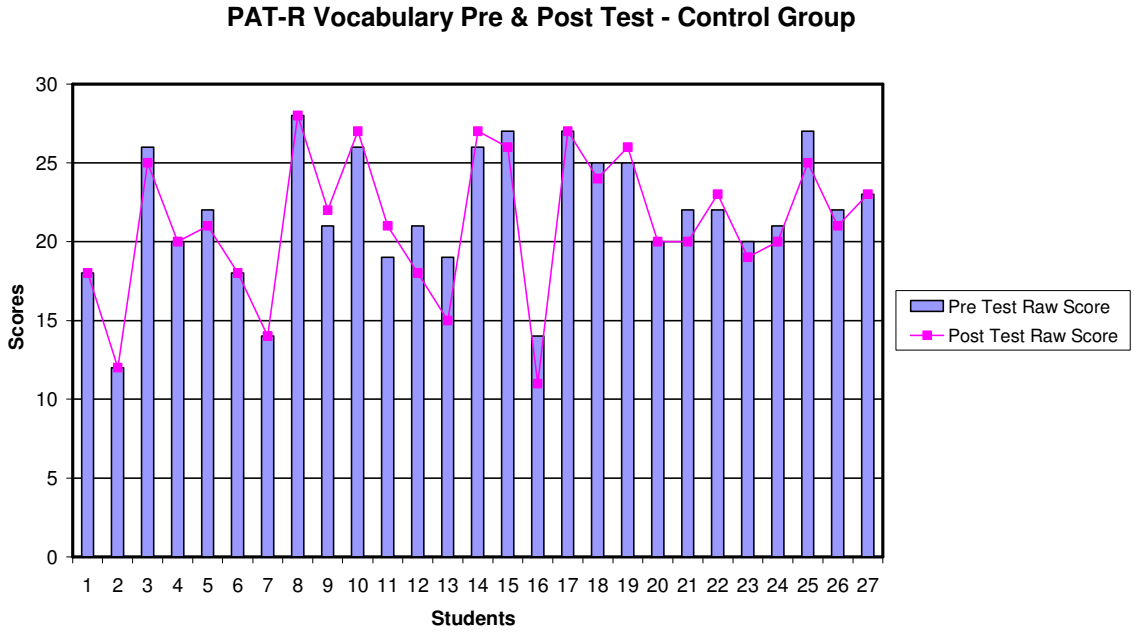

PAT-R Vocabulary Pre & Post Test - Control Group
Scores
30
25
20
15
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Students
Pre Test Raw Score
Post Test Raw Score

Figure 8

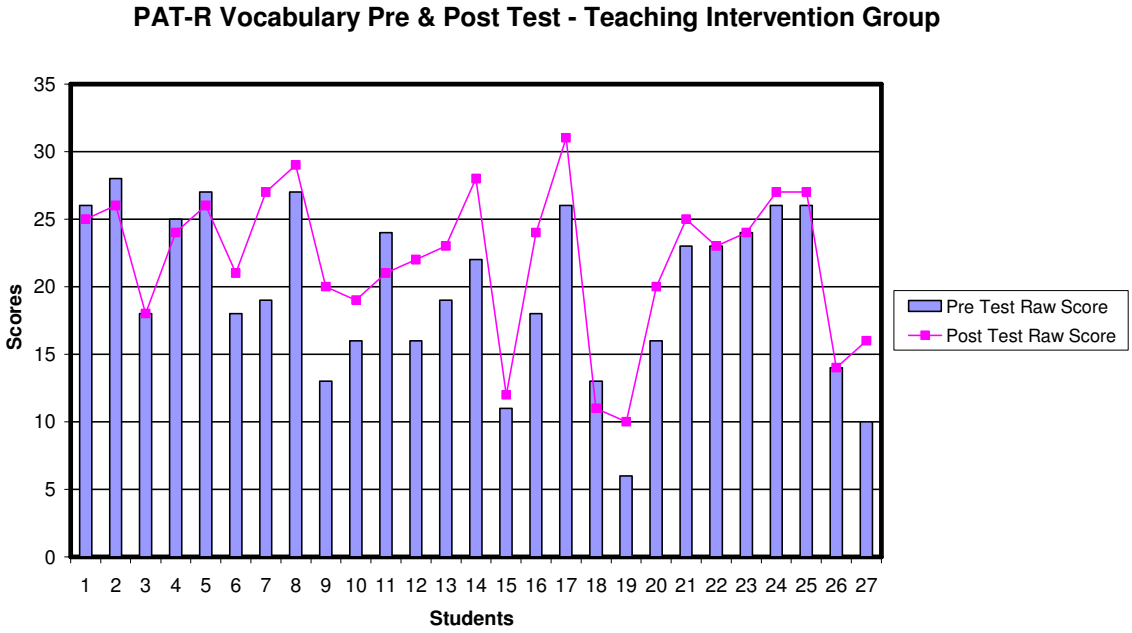


Figure 7 & 8 indicates there has been minimal shift in the raw score data for the control group from the pre testing phase to the post testing phase. The teaching intervention group has made some gains from the pre testing phase to the post testing phase. The raw data scores in the pre testing phase indicate that the control group had higher entry knowledge of word meanings than the teaching intervention group based on the vocabulary tested.

Raw scores for the control group and the teaching intervention group were converted to an overall mean and standard deviation score for the student cohort. These scores are shown in Table 1.

Table 1: Distribution of Mean Scores and Standard Deviation Scores (SD) for Control and Teaching Intervention Group in Pre & Post Testing.

Test	Pre Test				Post Test			
	Control		Teaching		Control		Teaching	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Synonyms	46.44	19.64	37.48	12.31	45.37	19.27	57.07	12.89
Paraphrasing	8.19	4.8	4.85	3.25	8.67	4.2	12.81	4.96
Comprehension	20.67	4.77	18.63	5.77	21.93	5.5	21.41	6.24
Vocabulary	21.67	4.24	19.78	6.07	21.15	4.65	21.96	5.56

The control groups overall average and standard deviation distribution of scores slightly decreased in the synonym test from the pre to the post testing phase. The teaching intervention groups overall average score increased by 19.59 from the pre testing phase to the post test phase. This increase placed the teaching intervention groups mean score higher than the control groups mean score even though their starting mean score was much lower. There was a standard deviation increase in the spread of scores of 0.58. In the paraphrasing test the control group had a minimal growth of 0.48 in their mean score with a standard deviation shift of 0.6. The teaching groups mean score showed a difference of 7.96. This overall average score increased by nearly 3 times the average score post the explicit teaching phase. There was an increase in the standard deviation spread of 1.71. There was a growth in both the control group and the teaching intervention groups mean score and standard deviation score across the two testing phases. The control group's average increased by 1.26 with a standard deviation spread of 0.73. The teaching intervention group's increases were higher than the control groups gains with an average score increase of 2.78 and a standard deviation upward spread of 0.47. The control groups mean score decreased by 0.52 in their vocabulary test in comparison to the teaching intervention group mean score which increased by 2.18. The control group's standard deviation score indicates a slight shift in the spread of students with a standard deviation score of 0.39. The teaching intervention groups spread of students decreased with a standard deviation score of 0.51.

Raw scores were converted to stanine scores for the PAT R Vocabulary Test and PAT R Comprehension Test. These scores are shown in Table 2 & 3.

Table 2: Stanine Distribution – PAT R Vocabulary Test

Stanine	Pre Test		Post Test	
	Control	Teaching	Control	Teaching
1	0 %	3 %	0 %	0 %
2	3 %	7 %	7 %	11 %
3	7 %	15 %	7 %	3 %
4	19 %	15 %	15 %	19 %
5	27 %	30 %	34 %	15 %
6	34 %	15 %	30 %	34 %
7	11 %	15 %	7 %	15 %
8	0 %	0 %	0 %	0 %
9	0 %	0 %	0 %	3 %

In the control group there has been minimal change in the overall distribution of stanines. There was a change in stanine 4 where there was a decrease of 4% from the pre test to the post test and in stanine 5 and 6 there was an increase of 7% and 4% respectively. In the teaching group more changes were evident in the distribution of stanines from 1-9. In the pre test phase there was 3% of students with a stanine 1 however in the post test phase there were no students in this range. In stanine 3 there were 15% of students in the pre test phase however in the post test phase there were only 3% of students. The decrease of students in stanine 5 of 15% has been matched by the increase of students in stanine 6 of 19% across the two testing phases. In stanine 9 there were no students in the pre test as opposed to 3% of students in the post test.

Table 3: Stanine Distribution – PAT R Comprehension Test

Stanine	Pre Test		Post Test	
	Control	Teaching	Control	Teaching
1	0 %	0 %	0 %	0 %
2	3 %	7 %	0 %	0 %
3	4 %	11 %	7 %	3 %
4	19 %	30 %	19 %	22 %
5	30 %	27 %	10 %	27 %
6	30 %	19 %	30 %	19 %
7	11 %	3 %	27 %	11 %
8	3 %	3 %	0 %	7 %
9	0 %	0 %	7 %	11 %

There has been very little shift in the control group from stanine 1-4. Stanine 5 shows a decrease of 20% from pre to post test which is matched by increases in stanine 7 by 17% and stanine 9 by 7%. In the teaching intervention group there has been a decrease in the % of students in stanine 1-4. This has been matched by an increase in the % of students in stanine 7, 8 & 9.

Student changes in literacy knowledge were measured for specific cohorts identified in Appendix 1. The cohort's data changes that were analysed were for students from ESL background, students on LNSLN funding and students who had had previous intervention (i.e. Reading Recovery and/or ERIK). These changes are shown in Table 4, 5 & 6.

Table 4: Data of Students on LNSLN Funding

LNSLN **SLD:1** **ID: 2** **ASP: 3** **STUDENT**	**Control 0** **Teaching 1**	**Vocabulary** **Stanine Scores**		**Comprehension** **Stanine Scores**		**Paraphrasing** **Raw Scores**		**Synonyms** **Raw Scores**	
		Pre	**Post**	**Pre**	**Post**	**Pre**	**Post**	**Pre**	**Post**
C (1)	**1**	**4**	**4**	**4**	**6**	**3**	**9**	**26**	**57**
F (1)	**1**	**4**	**4**	**2**	**4**	**0**	**11**	**32**	**52**
O (1)	**1**	**2**	**2**	**3**	**4**	**0**	**2**	**20**	**51**
Z (1)	**1**	**3**	**3**	**5**	**5**	**7**	**13**	**25**	**39**
CC (2)	**0**	**2**	**2**	**4**	**4**	**1**	**2**	**22**	**26**
VV (3)	**0**	**6**	**5**	**6**	**5**	**4**	**6**	**24**	**21**

In the teaching intervention group most students in the comprehension test increased 1 or 2 stanines. In the control group 1 student remained the same and 1 student decreased from stanine 6 to stanine 5. Increases were evident in the paraphrasing test for the teaching intervention group. Whilst the control group also increased, their changes were less than the changes that the teaching intervention group made. In the synonym test, the teaching intervention group made considerable increases whereas the control group made little or no change.

Table 5: Data of Students with previous Literacy intervention

Intervention Reading Recovery:1 ERIK: 2 STUDENT	Control 0 Teaching 1	Vocabulary Stanine Scores		Comprehension Stanine Scores		Paraphrasing Raw Scores		Synonyms Raw Scores	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
A (1)	1	6	6	4	5	7	16	41	46
C (1)	1	4	4	4	6	3	9	26	57
O (1 & 2)	1	2	2	3	4	0	2	20	51
S (1 & 2)	1	1	2	2	3	3	5	14	32
Z (1 & 2)	1	3	3	5	5	7	13	25	39
NN (1)	0	4	3	3	3	3	7	20	18
OO (1)	0	6	6	7	7	13	14	51	49
F (2)	1	4	4	2	4	0	11	32	52
M (2)	1	5	6	4	5	6	13	50	44
T (2)	1	3	4	5	6	10	15	32	53
U (2)	1	5	6	5	7	4	24	52	81
AA (2)	1	2	4	4	4	0	6	15	38
BB (2)	0	5	5	4	4	9	11	36	25
EE (2)	0	4	4	5	6	4	5	65	70
QQ (2)	0	3	2	5	5	8	8	29	30
UU (2)	0	5	5	5	6	1	3	48	40
VV (2)	0	6	5	6	5	4	6	24	21

In the teacher intervention group 6 students increased by 1 stanine in the PAT- R Vocabulary test and 7 students recorded no change to their results. In the control group 3 students decreased by 1 stanine whilst 4 students recorded no change to their results. In PAT-R Comprehension test 10 students in the teaching intervention group increased by 1 or 2 stanines and 3 students recorded no change to their results. In the control group 4 students recorded no change to their results, 2 students increased by 1 stanine and 1 student decreased

by 1 stanine. In the paraphrasing test the teaching intervention group made considerable changes to their results from the pre test to the post test. All students in this group showed an increase. In the control group only slight changes in student results were evident. In the synonym test the teaching group recorded considerable increases in their results from pre test to post test. In the control group 4 of the students decreased in their scores from the pre test to the post test. The 4 remaining students in this group made minimal increases in their scores.

Table 6: Data of Students from ESL Background

ESL Background STUDENT	Control 0 Teaching 1	Vocabulary Stanine Scores		Comprehension Stanine Scores		Paraphrasing Raw Scores		Synonyms Raw Scores	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
A	1	6	6	4	5	7	16	41	46
B	1	7	6	6	8	9	16	54	56
C	1	4	4	4	6	3	9	26	57
F	1	4	4	2	4	0	11	32	52
J	1	4	5	4	4	6	8	22	48
K	1	5	4	6	9	6	8	41	53
L	1	4	6	4	5	0	8	41	73
O	1	2	2	3	4	0	2	20	51
P	1	5	6	5	6	7	15	50	76
X	1	3	3	5	5	7	13	25	39
FF	0	6	5	6	6	9	14	48	46
NN	0	4	3	3	3	3	7	20	18
OO	0	6	6	7	7	13	14	51	49
PP	0	6	6	6	7	16	9	61	54
SS	0	7	6	5	6	13	11	43	37
UU	0	5	5	5	6	1	3	48	40
WW	0	6	6	6	7	9	8	25	32
BBB	0	5	5	6	7	3	4	60	38

In the vocabulary test there are similar results recorded for both the teaching intervention group and the control group from the pre testing phase to the post testing phase. Most students' data showed no change in their stanine score from pre to post test. In the PAT-R Comprehension test both the teaching intervention group and the control group made considerable changes to their results from pre test to post test. In the teaching group however many students increased by 2 stanines from pre to post test. In the control group many students recorded increases of 1 stanine from pre to post test. In the paraphrasing pre test the teaching intervention group included 3 students who scored 0 with the highest score for this group being 9. In the pre test for the control group 1 student scored 1 with the highest score for this group being 16. In the teaching intervention group the post test showed that all students increased considerably with 5 of the 10 students achieving a score of 10 and above. In the control group the post test scores showed slight increases for some students however 4 of the 8 students in this group decreased in their results. In the synonym test all students in the teaching group made considerable increases in their scores from the pre test to the post test. In the control group 7 of the 8 students decreased slightly in their scores across the testing period.

SUMMARY

The findings of the study support the claim that reading comprehension for Year 3/4 students can be improved by explicitly teaching the comprehending action of paraphrasing as part of regular whole class Literacy sessions with an emphasis on increasing student's vocabulary knowledge through suggesting synonyms for key words. By comparing pre and post test results it is evident that the teaching intervention group outperformed the control group consistently across all tasks. The teaching intervention group started from a lower overall mean score in all tasks however their rate of gain in the synonym, paraphrasing and vocabulary test in particular saw their post testing results reflecting a higher mean score than the control group (Table 1). 100% of students in the teaching intervention group improved in their ability to paraphrase and 97% of students improved in their ability to generate synonyms. These results suggest that the teaching intervention strategy was effective for a cross section of students regardless of ESL background, LNSLN funding or previous literacy intervention (Table 4). The students who had previously received intervention in a small group context made gains in a whole class setting. These results suggest that whole class intervention can be highly effective for even our at risk literacy learners.

The explicit teaching therefore has been more of an influencing variable than the group size. Mothus & Lapadat (2006) tracked students over a year and found that the reading comprehension gains of students who were taught the paraphrasing strategy were higher than those of students from conventional learning assisted groups. The extent to which the explicit teaching of the paraphrasing strategy predicted the gains in reading comprehension across most students in the teaching intervention group highlights the need for targeted teaching of comprehending actions. Gee ((1998) highlighted that not all readers develop reading strategies automatically but rather they need systematic and targeted teaching.

A confounding variable in this study was that the students in the control group were explicitly taught some of the items on the vocabulary test prior to the post testing phase by their classroom teacher. This would have influenced their overall post testing results.

The design of the teaching sessions scaffolded the students learning in the teaching intervention group. In each of the sessions the researcher modelled the new strategy in the context of its use. Whilst doing this the researcher verbalised what the strategy was, when the strategy should be used, how to go about using the strategy and the effectiveness of the strategy on supporting understanding of what is read. The researcher engaged the students in the task with the students helping out and gradually shifted this emphasis to the students taking over the task with the researcher helping out and intervening as needed. The very nature of this scaffolded teaching and learning was part of a long term intention of the researcher that the literacy strategy of paraphrasing becomes part of the student's repertoire of comprehending actions.

Implications of this study for further teaching would be that students need to develop further comprehending actions such as visualising and predicting so they can be flexible in their strategic activity on text.

A further study would be to track the rate of student gains in the long term and the ability of students to apply the comprehending action of paraphrasing to different learning contexts. It would be important to observe students ability to independently manage and direct their use.

BIBLIOGRAPHY

Darling Hammond, L. Teacher Quality & Student Achievement. Education policy analysis archives, North America, 8,Jan.2000. http://epaa.asu.edu/ois/article/view/392.Date accessed:01 April, 2010.

Fisk, C. & Hurst, B. (2003). Paraphrasing for Comprehension. ***The Reading Teacher, 57, 2, 182-185.***

Harvey, S. & Goudvis, A. (2000). Strategies that work. Teaching Comprehension to enhance understanding. York, ME: Stenhouse.

Lee, S.W. & Von Colln, T. (2003). The Effect of Instruction in the Paraphrasing Strategy on Reading Fluency & Comprehension. University of Kansas. 18p.

Luke, A. & Freebody, P. (1999). A Map of Possible Practices: further notes on the four resources model. Practically Primary, 4(2), 5-8. http://www.alea.edu.au/freebody.htm.

Moser, Dana. C., Fridriksson, Julian. & Healy, Eric.W. (2007) Sentence Comprehension and General Working Memory. ***Clinical Linguistics & Phonetics:21:2, 147-156.***

Mothus, Trudy. G. & Lapadat, Judith. C. (2006) Online submission; 49 pp.

Munro, J. K. (2009). Literacy Intervention Strategies, 472697. Lecture notes. 2009.

Parker, R., Hasbrouk, J.E. & Denton, C.(2002) How to tutor students with reading comprehension problems. ***Preventing School Failure, 47, 1, 45-47.***

Pikulski, John J & Chard, David J (2005) ***The Reading Teacher, 58 (6,) 510-519.***

Stephanou, A. (2008). ***PAT-R Progressive Achievement Test in Reading: Comprehension 4th Edition*****, ACER Press.**

Stephanou, A. (2008). ***PAT-R Progressive Achievement Test in Reading: Vocabulary 4th Edition*****, ACER Press.**

Westwood, P. (2001). Reading and Learning Difficulties: *Approaches to teaching and assessment*, ACER Press, P9-11, P20-23.

APPENDICES

Appendix 1

Name	Control = 0 Teaching=1	Age in MONTHS	Gender 0=Male 1= Female	Years of Schooling	ESL No=0 Yes=1	LNSLN Funding No=0 1=SLD 2=ID 3=ASP	Earlier Intervention No=0 RR=1 ERIK=2	EMA No=0 Yes=1
A	1	114	**0**	4.1	1	0	1	0
B	1	113	**1**	4.1	1	0	0	0
C	1	113	**0**	4.1	1	1	1	0
D	1	105	**0**	3.1	0	0	0	0
E	1	106	**0**	3.1	0	0	0	0
F	1	119	**0**	4.1	1	1	2	0
G	1	107	**0**	3.1	0	0	0	0
H	1	114	**0**	4.1	0	0	0	0
I	1	103	**1**	3.1	0	0	0	0
K	1	119	**0**	4.1	1	0	0	0
L	1	99	**0**	3.1	1	0	0	0
M	1	100	**1**	3.1	0	0	2	0
N	1	113	**1**	4.1	0	0	0	0
O	1	111	**1**	4.1	1	1	1 & 2	0
P	1	99	**0**	3.1	1	0	0	0
Q	1	104	**0**	3.1	0	0	0	0
R	1	102	**0**	3.1	0	0	0	0
S	1	99	**1**	3.1	0	0	1 & 2	0
T	1	107	**0**	4.1	0	0	2	0
U	1	109	**0**	4.1	0	0	2	0
V	1	112	**1**	4.1	0	0	0	0
W	1	115	**1**	4.1	0	0	0	0
X	1	107	**1**	4.1	1	0	0	0
Y	1	116	**1**	4.1	0	0	0	0
Z	1	110	**0**	4.1	0	1	1 & 2	0
AA	1	97	**1**	3.1	0	0	2	0
BB	0	104	**0**	3.1	0	0	2	0
CC	0	122	0	4.1	0	2	0	0
DD	0	113	0	4.1	0	0	0	0
EE	0	115	0	4.1	0	0	2	0
FF	0	105	0	3.1	1	0	0	0
GG	0	97	0	3.1	0	0	0	0
HH	0	100	1	3.1	0	0	0	0
II	0	111	1	4.1	0	0	0	0
JJ	0	122	0	4.1	0	0	0	0
KK	0	118	1	4.1	0	0	0	0
LL	0	100	1	3.1	0	0	0	0
MM	0	111	0	4.1	0	0	0	0
NN	0	119	0	4.1	1	0	1	0
OO	0	115	0	4.1	1	0	1	0
PP	0	116	1	4.1	1	0	0	0
QQ	0	117	0	3.1	0	0	2	0
RR	0	114	1	4.1	0	0	0	0
SS	0	100	0	3.1	1	0	0	0
TT	0	115	1	4.1	0	0	0	0

UU	0	95	1	3.1	1	0	2	0
VV	0	105	0	3.1	0	3	2	0
WW	0	95	0	3.1	1	0	0	0
XX	0	119	0	4.1	0	0	0	0
YY	0	102	1	3.1	0	0	0	0
ZZ	0	98	0	3.1	0	0	0	0
AAA	0	116	1	4.1	0	0	0	0
BBB	0	112	0	4.1	1	0	0	0

Appendix 2

Paraphrasing Task Scoring Criteria

Scoring System 1

At the completion of reading (or listening to) each sentence, ask the student to paraphrase the sentence in his/her own words.

Give 2 points for a sentence that has been reworded, and the student has substituted more than 50% of the words in the sentence (using synonyms).

Give 2 points for a sentence in which the order of the words within the sentence has been changed and meaning has been maintained. (Some synonyms may also be used.)

Give 1 point for a sentence that has had less than 50% of the words in the sentence have been substituted with synonyms.

Give 0 points if a sentence is complete, or does not maintain meaning.

Note: Students can only gain points if the meaning of the sentence is maintained.

Appendix 3

Synonym Task Scoring Criteria

2 points: Same meaning as the target word both semantically and grammatically e.g. walk - stroll

1 point: Has the same meaning as the target word semantically (not grammatically) e.g. walk - strolled

0 points: others e.g. walk - run

Additional Rules for Scoring
1. Only include the first five words that the child wrote for each item
2. If a child provides varied word forms as his or her response, e.g. leave: go / going / gone, only accept the root form "go"
3. Accept plural if the response is distinctly different from the target word e.g. child: children / little people accept "little people" but not "children".

(Munro 2005)

Appendix 4

First session: Introducing paraphrasing

Introduce the strategy: I am going to teach you something that you can do that will help you to remember what you read. It is called paraphrasing. This is what you do. After you have read each sentence, you say it in your own words. We will begin doing this with sentences, pairs of sentences and then with paragraphs. Let's practise by changing words first. I am going to read a word and then think of other words that mean the same thing. These are called synonyms.

Teacher Models saying a word and thinking of synonyms

- **beautiful** (lovely; gorgeous; stunning)

Teacher verbalises … other words that mean the same as beautiful are lovely, gorgeous, stunning. (students repeat with the teacher)

- **sad** (unhappy, miserable, downcast) (teacher continues to verbalise and students repeat)
- **run** (sprint, race, jog, sped) (teacher continues to verbalise and students repeat)
- **said** (exclaimed, spat, cried, yelled, cackled)

Now we will read sentences and tell ourselves what we read by putting the sentence into our own words.

Teacher models paraphrasing and cues student activity: Look at the first sentence.

I will read it and I want you to read it to yourself with me. Then I will try saying it another way.

Then I will ask you to try.

Read some sentences that have accompanying pictures with the students. After each sentence, teacher models paraphrasing it and then has the students practise it. You may need to begin with changing individual words in sentences first (that is, the students suggest synonyms).

Sentence read	**Teacher**	**Students suggest synonyms**	**Students paraphrase**
A Monster came to live in a city. He wanted to find a place to live.	Read sentence twice Model paraphrasing: This creature moved to a new town. He needed to get a house to stay in. Now you try saying it in your words.	Identify possible synonyms	
He needs to get to know the city. After he bought a map he looked for a bus.	Read sentence twice. Model paraphrasing: He wants to find what is in the town. First he got a map. Then he searched around for a bus stop.		

Teacher reviews the action: Let us look at what we did here. We read each sentence and then said it in other ways. See how it helped you to understand what the text said.

Do you have any questions?

Teacher models and students practise: Let's do this together with another paragraph.

Read this text.

Come up with synonyms together as a group.

Model paraphrasing the sentence for the students.

Invite students to say the sentence in their own words.

Teacher reviews the action: What do you tell yourself to do when you paraphrase.

Record student responses.

Students record the statements about what they do when they paraphrase.

When students have finished recording what they do when they paraphrase read these actions out as a whole class.

Paraphrasing

Review the strategy*: Yesterday we talked about paraphrasing. Who can tell me what they know about paraphrasing. Ask students to recall from yesterday. After students have said what they remember read the poster together 'What do I do when I paraphrase.'*

Session	Student activity
2	• Teacher/students read aloud a paragraph. (modeling) • Teacher/students generate with synonyms. • Teacher/students paraphrase sentence by sentence in whole group activity. • In small groups students write their own paraphrase of each sentence. • Share sentences with the whole group. • Review today's learning.
3	• Teacher/students read aloud each paragraph. (modeling) • Students generate synonyms. • Students paraphrase sentence by sentence in whole group activity. • In pairs write a paraphrase of each sentence. • Share sentences with the whole group. • Review today's learning.
4	• Teacher/students read aloud each paragraph. (modeling) • Teacher/students paraphrase pairs of sentences in whole group activity. • In small groups write a paraphrase of sentences. • Share sentences with the whole group. • Review today's learning.
5	• Students read aloud each paragraph. • Students paraphrase pairs of sentences in whole group.

	• In pairs write a paraphrase for pairs of sentences. • Share sentences with the whole group. • Review today's learning.
6	• Students read aloud each paragraph. • Teacher/students paraphrase paragraph by paragraph in whole group activity. • In small groups / pairs write a paraphrase of each paragraph. • Review today's learning.
7	• Students read aloud each paragraph. • Students paraphrase sentence by sentence in whole group activity. • Each student individually writes a paraphrase of each sentence. • Review today's learning.
8	• Students read silently each paragraph. • Students paraphrase paragraph by paragraph in whole group activity. • In small groups / pairs they write a paraphrase of each paragraph. • Review today's learning.
9	• Students read silently each paragraph. • Students paraphrase paragraph by paragraph in whole group activity. • Each student individually writes a paraphrase of each paragraph. • Review today's learning.
10	• Students read silently each paragraph. • Each student paraphrases each paragraph silently. • Each student individually writes their paraphrase of each paragraph. • Review today's learning.

(Munro, 2006)