Explicit teaching of the visualisation strategy R.I.D.E.R to Year 2 students will improve reading comprehension of narrative texts.

(Prediction to be investigated)

<u>ABSTRACT</u>

Many students in the early years of schooling who experience reading difficulties often improve reading accuracy but find they encounter comprehension problems. Current research findings state that explicit teaching of a visualisation strategy can improve reading comprehension.

This study selected seven students in Year 2 who experienced reading and comprehension difficulties. The study examined the hypothesis that explicit teaching of the visualisation strategy R.I.D.E.R to Year 2 students would improve reading comprehension of narrative texts. The research established students' initial ability to visualise, then comprehend and retell texts. Participants then received ten lessons over four weeks explicitly teaching visualisation using narrative texts, through the R.I.D.E.R method. Students were withdrawn from the classroom for these lessons and teacher scaffolding was gradually decreased over the lessons. The students were reassessed and results were compared to establish any improvement in visualisation and reading comprehension.

The study found improvement in visualisation and gains in reading comprehension and oral retell. The gains in comprehension were quite significant and were experienced by all students.

The implications from this study indicate that children improve in reading comprehension when given explicit strategy teaching that could be taught at any level within the school.

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INTRODUCTION

Reading is a complex, cognitive, active task. It can be simply described as comprising two main components; decoding the printed word and understanding the meaning or intended message (Chen and Vellutino, 1997, cited in Center, 1999). In order to be a successful reader an individual needs to be proficient both at the decoding of print at a word level, and at abstracting meaning from print (Center et al 1999) – comprehending. Comprehension can be defined as an active thinking process through which a reader intentionally constructs meaning to form a deeper understanding presented in a text (Blanton et al, 2007 cited in Westwood 2008).

As students move from the early to middle primary years, having improved their ability to decode texts and read with greater fluency, a significant proportion discover that their ability to understand increasingly more complex texts has not progressed at the same rate or appears very poor. They begin to experience difficulties with grasping ideas, developing deeper understandings of texts and making meaningful links and connections. A significant minority of students who experience no problems with word recognition skills may have problems in the specific domain of comprehension (Cain ,1996 cited in Center, 1999). Children with poor comprehension, despite decoding texts as accurately as successful readers, are poor at making inferences and integrating text information. (Nation et al., 2004 cited in Woolley, 2006) They tend to read quite superficially and are less likely to engage in constructive processes (Cain & Oakhill, 1999). Oakhill's research found that these students "do not make inferences from a passage, nor do they integrate ideas from different sections of a text to form a coherent representation in the same way as do skilled comprehenders"(Oakhill and Patel, 1991). This supports the idea that poor readers may be merely "barking at print".

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Why do comprehension issues begin to emerge with some students as they make the transition of moving into the middle years. According to the Munro (2000) reading model, comprehension problems may arise for readers as a result of only processing text at a word level. Poor readers are not processing text at a sentence, concept or topic level or utilising meta-cognitive strategies to develop meaning from print. The difficulties faced by most poor readers, is that they do not possess effective strategies to assist themselves to interpret & interact cognitively with texts. Westwood (2008) supports this belief that students need to know how to actively and effectively integrate layers of text processing. He believes 'readers must use information they already possess to filter, interpret, organise and reflect incoming information from the page."

Competent readers have been found to co-ordinate complex skills and use a variety of meta-cognitive strategies in reading (Graham and Bellart , 2005).The strategies employed may include visualising, paraphrasing, summarising or questioning. They are strategic readers and are able to implement strategies prior, during and after reading. They interact with the text and are active learners. Children who display reading difficulties tend not to be interactive with reading and can often be described as inactive learners (Gee, 2000).

Research has shown the cognitive strategy of visualisation enables students to improve reading comprehension through active interaction with texts. Many students often view reading as a word recognition task. This behaviour can be seen when students read through and ignore punctuation, thereby not reading in meaningful phrases. They may fail to recognise meaning breakdowns, make senseless miscues or don't reread text to clarify understandings. They are simply identifying words not developing a meaningful visual representation in their mind that changes when each piece of new information is added to it. The meta-cognitive strategy of visualisation allows the reader to integrate words into meaningful representations. It involves

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constructing mental images as they read and it works towards promoting active processing. In short, it is an active process for readers that connects readers with the text, expands and enhances their understandings of the presented ideas and enables constructed meaning to occur.

According to research (Pressley, 1976; Oakhill and Patel, 1991; Oakhill and Yuill, 1995, 1996; cited in Center, 1999), visual imagery is a successful strategy for improving children's reading comprehension as it forces readers to integrate information contained in a text in a way they would not normally do. Visual imagery plays a great role in enabling the reader to transform words into meaningful representations in an active way. Visualising strategies allow memory processing to be more efficient by freeing up more cognitive space for integrating information presented across the text (Gambrell, Kapinus, & Wilson, 1987; cited in Woolley, 2006). It enables us to construct mental images as we read which enhances our ability to generate inferences, make predictions and remember what has been said (Gambrell, 1981; cited in Center, 1999). Whitehead (2002) states in his research, "The instructional role of visual imagery in reading comprehension has great intuitive appeal, because most of us see "pictures in our head" as we read." He further goes on to add that visual images are central to meaning making. In using this cognitive strategy, the struggling reader is constantly interacting with the text, monitoring and deepening understandings. Visualisation enables the reader to understand, organise and integrate large sections of text into working memory thus benefitting comprehension. (Duke and Pearson, 2002; cited in Woolley, 2006).

Clark's research (Clark et al.,1984) with learning disabled students showed the use of visual imagery and self questioning increased interaction with content and facilitated comprehension whilst Sadoski and Quast (1990; cited in Whitehead, 2002) reported that spontaneous visual imagery supported deeper levels of comprehension. This was supported by further research

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(Sadoski and Paivio, 2001; cited in Whitehead, 2002) that showed visual imagery enhanced reader's recall and comprehension.

This strategy is one that may need explicit instruction in. It will not occur naturally or easily for some students. As Menner (2007) acknowledges, some children visualise with ease and others need to be trained to develop this strategy through explicit instruction. This view reflects Pressley's idea that text visualisation enhances student's comprehension when taught using a structured framework. (Pressley, 2002)

The R.I.D.E.R strategy is one way to teach visualisation. R.I.D.E.R is an acronym for 'Read', 'Imagine', 'Describe', 'Evaluate' and 'Read On' and is a 'while reading' strategy. It involves students reading a text, pausing whilst reading to make a mental image, describing their image, evaluating their image by comparing with text then reading on and repeating the steps. It requires active participation and the strategy stages are facilitated by the use of cue cards. It allows the reader to build, add to, alter and transform images as they read thereby assisting comprehension.

The present investigation aims to extend earlier research in examining the influence of visualisation on students reading comprehension. The study will involve explicit teaching of the R.I.D.E.R strategy to a group of Year 2 students who are experiencing comprehension difficulties.

PREDICTION

Explicit teaching of the visualisation strategy R.I.D.E.R to Year 2 students will improve reading comprehension of narrative texts.

METHOD

DESIGN

This study used a case study OXO design- Assess/Teach/Assess and was a naturalistic study as I am an intervention teacher.

Improvements in reading comprehension of narrative texts following the explicit teaching in the use of the RIDER visualisation strategy were monitored for Year 2 students who have reading difficulties. The study compared the students' pre baseline results with their post intervention data results.

PARTICIPANTS

The seven participants in this study are in a single sex Year 2 class setting. These students were selected due to their history of reading difficulties and ongoing comprehension difficulties. Six of the seven students are ex -Reading Recovery students who completed the program last year. They were all successfully discontinued from the program at reading level 21-22, although two of the six required extended programs. End of year CLaSS reading assessment data indicated ongoing improvement in reading levels. The seventh student is new to the school this year and demonstrates significant reading disabilities. Beginning of year school data testing for this student showed reading and decoding levels well below the benchmark expectations for a grade two student. Although this student exhibits reading skills significantly lower than the rest of the participants and needed some modifications in assessment collection, it was decided he would greatly benefit from inclusion in the teaching group. Beginning year testing for the other six participants showed they were able to read and decode L27/28 Benchmark texts. Burt Word Recognition assessment showed age appropriate word recognition and decoding skills. Whilst the participants performed well in the task of decoding text, the students were seen to display discernible comprehension difficulties and possessed low levels of comprehension in subsequent questioning. Instances of reading comprehension difficulties were further provided by the classroom teacher's anecdotal reports.

Two participants have ESL backgrounds each with one parent having limited English language knowledge. These two students are not fluent in their family's mother tongue. Two students are in their fourth year of schooling due to repeating a year. They had both completed Prep

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and Year one elsewhere before repeating Year one at this current school. The ages of the students range from 91-102 months. One student has undergone speech therapy for a period of time commencing soon after beginning Prep. This same student had a language assessment for receptive & expressive language last year. This assessment indicated minor problems in receptive language and significant problems in expressive language.

A profile of the participants in this study is shown in Table 1.

STUDENTS PARTICIPATING IN THE STUDY

Name	Age in MONTHS	Years of Schooling	Gender Female=0 Male=1	ESL No=0 Yes=1	Lang. Assess No=0 Yes=1	Reading Recovery No =0 Yes=1	Text Level	BURT Word Recog (Feb)	Neale Accur % Pre	Neale Comp Percentile	Munro Spont Retell Pre %
Student A	99	3	1	1	0	1	27	39	66	40	15
Student B	93	2	1	0	1	1	28	49	82	67	55
Student C	91	2	1	1	0	1	27	38	44	34	25
Student D	102	3	1	0	0	1	28	45	68	79	70
Student E	85	2	1	0	0	1	27	36	57	52	20
Student F	94	2	1	0	0	0	8	26	25	9	25
Student G	91	2	1	0	0	1	28	28	77	59	55

Table 1

The data show 85% of students demonstrated higher levels in reading accuracy and decoding knowledge in comparison with text comprehension and oral retell. The students' text levels, Burt Word Recognition results and their Neale Accuracy percentages, in other words, word reading accuracy, all indicate greater proficiency when compared with their ability to understand what they read as demonstrated by their Neale Comprehension percentiles and Munro Spontaneous retell knowledge. The data show 85% of students retold less than 60% of story detail. Student A, Student B, Student F and Student G demonstrate a considerable disparity between word identification and understanding.

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MATERIALS

The following materials were used for *data collection:*

*<u>Expressive Oral Language</u> task

- Record of Oral Language - M. Clay, M. Gill, T. Glynn, T. McNaughton, K. Salmon (2007)

*<u>Word Reading</u> task   (CLaSS pre-testing Early February)

- Burt Word Recognition Test

*<u>Reading Level</u> Task

- Alpha Assess Benchmarking Kit (CLaSS pre-testing Early February)
- PM Benchmark L20 text "Leo the Lion Cub"
  > This text was considered at an age appropriate level after completing a Fry's Readability
  assessment.
- Running record

*<u>Reading Comprehension</u> tasks

- The Neale Analysis of Reading Ability -3rd Edition –for reading accuracy & comprehension
- John Munro Spontaneous and Cued Retelling
- John Munro (2005) Visualisation task
- Tape recorder for Retell Assessment
- Stopwatch

*<u>Self Efficacy</u> task

- The Self-efficacy scales (Adapted from J. Chapman & W. Tunmer designs, NZ, 2002)

(See Appendix 1)

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The following materials were used *during the sessions:*

- 3 Narrative PM Texts at L21, 22 selected due to their readability/age appropriateness according to the Fry Readability Procedure (specific titles in resources listing)
- R.I.D.E.R cue card
- R.I.D.E.R bookmarks
- Grey lead pencils and paper

(See Appendix 2)

PROCEDURE

The pre-testing tasks will be administered to all students in the following order;

1. Instructional Reading level and BURT Word Recognition (assessed in February)
2. Self Efficacy Task
3. Record of Oral Language
4. Comprehension- Spontaneous & Cued Retell on a L20 text.
5. Neale Analysis of Reading Ability
6. Visualisation task

The self efficacy task will be administered first so a profile of how the participants see themselves as a reader can be established before formal testing procedures begins. The Record of Oral Language will be administered to ascertain the student's knowledge and grasp of grammatical structures in oral language before they begin to read. It is important to establish if the student has control over simple and more complex sentence structures and the effect this may subsequently have on reading. The Neale Analysis and Munro Spontaneous & Cued Comprehension Retell will assess the student's reading accuracy in conjunction with their ability to understand, prior to and after intervention. This will be administered before and after teaching intervention to determine whether comprehension has improved as a result of improving visualising techniques. The visualising assessment will monitor student improvement in this strategy. These assessments, in conjunction with beginning year data will build a complete picture of each student. (Appendix 3)

The teaching sessions were conducted over a four week period with students participating in ten sessions of 40 minutes in duration. Lessons occurred 2-3 times a week in the

afternoons due to school timetabling. The students were withdrawn as a small pull out group and sessions were held in a separate room from their classroom. The students are accustomed to withdrawal lessons. The lessons were designed to teach a visualisation strategy known as the R.I.D.E.R strategy. The lessons addressed the Sentence level of the (MLOTP) multiple levels of text processing reading framework model. (Munro, 2000) They were designed to be a 'reading action' or 'whilst reading' strategy.

The first lesson introduced the concept of creating pictures like a movie camera in the mind. The students became acquainted with the R.I.D.E.R strategy through modelling in a 'read to' setting. Lesson 2 the students began using the strategy in conjunction with teacher modelling, on a text with no picture support. They made their own bookmarks with the acronym as a resource tool. Lessons 3 – 7 focused on development of the strategy supported by the use of their bookmarks. The students shared reading the text so the focus was not on decoding. The text had all pictures removed. The amount of text that was read as the strategy was implemented increased. Whenever the students imagined, they drew their picture on paper. They then checked one another's pictures in the evaluation step. The final 3 lessons saw teacher scaffolding considerably decreased and the students ceased using their bookmarks so as to become independent practitioners of the strategy. In lesson eight and lesson ten the students gave an oral retell of the whole story.

Each lesson began by rereading the passage from the previous lesson and practising the strategy. Each lesson concluded with a reflection. The reflections ranged from how their images changed whilst reading to the detail in their pictures to how this strategy assisted in reading. The sessions progressed from visualising 2-3 sentences in the beginning sessions to a paragraph, several paragraphs by midway in the lessons to a page by the conclusion.

At the conclusion of the ten lessons the students visualising ability and reading comprehension were re-assessed. Any improvement in visualisation was established in order to determine whether or not by improving visualising, comprehension was, in turn, improved. This would support or disprove the hypothesis that explicitly teaching the visualisation strategy R.I.D.E.R will improve comprehension of narrative texts in year 2 students. (Lessons see Appendix 3)

RESULTS

Results appear to indicate support for the hypothesis that explicit teaching of the visualisation strategy R.I.D.E.R to year 2 students will improve reading comprehension of narrative texts.

The data show that all students improved in the strategy of visualisation after explicit teaching. The data also show that as students improved in visualising so did they display increases in comprehension percentiles and oral retelling percentages. (Table 2) The trend for the group indicates that all students improved in comprehension after the visualisation strategy was explicitly taught. The students' complete data can be seen in Appendix 3.

STUDENT PRE & POST INTERVENTION

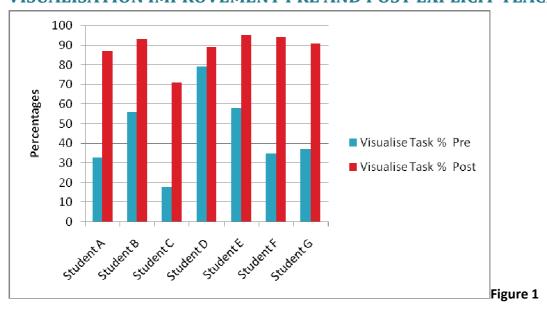| Name	Neale Accur. Percentile Pre	Neale Accur. Percentile Post	Neale Compreh Percentile Pre	Neale Compreh Percentile Post	Munro Spontan Retell % Pre	Munro Spontan Retell % Post	Munro Cued Retell % Pre	Munro Cued Retell % Post	Visualise Task % Pre	Visualise Task % Post
Student A	66	73	40	87	15	43	50	75	33	87
Student B	82	83	67	68	55	75	70	90	56	93
Student C	44	63	34	68	25	87	35	87	18	71
Student D	68	80	79	89	70	94	75	96	79	89
Student E	57	73	52	79	20	83	50	87	58	95
Student F	25	40	9	60	25	75	35	75	35	94
Student G	77	84	59	79	55	93	65	93	37	91

Table 2

Group trends indicated that all students made significant improvement in the visualisation task after explicit teaching. (Figure 1)

The mean visualisation percentage of the group prior to teaching was 45%. After teaching intervention the mean was 88%, an increase of 43%. The median visualisation percentage of the group moved from 37% to 91% after explicit teaching intervention. Prior to intervention,

four of the seven students or 57% of the group, visualised less than 40% of the text. After explicit teaching 100% of participants visualised more than 70% of the text. From this the study shows that after explicitly teaching the R.I.D.E.R visualisation strategy, the participants significantly developed their ability to visualise.
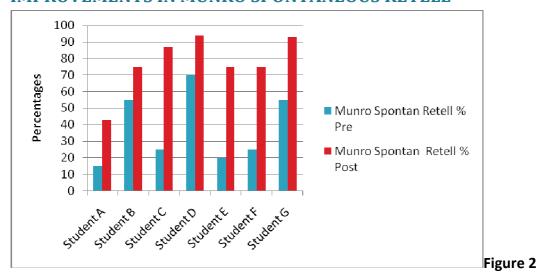
VISUALISATION IMPROVEMENT PRE AND POST EXPLICIT TEACHING

Figure 1

Results indicate that all students improved in their oral retell ability. Differences between the mean retell of students increased from 38% pre intervention to 77% after intervention, an overall increase of 39%. The median spontaneous retell percentage went from 25% to 87%. The data show that 57% of students, or four of the seven participants, more than doubled their spontaneous retell abilities after intervention. (Figure 2)

The data show there was less variance between spontaneous and cued retell post intervention than there was between spontaneous and cued retell prior to the teaching. (Table 2)

IMPROVEMENTS IN MUNRO SPONTANEOUS RETELL

Figure 2

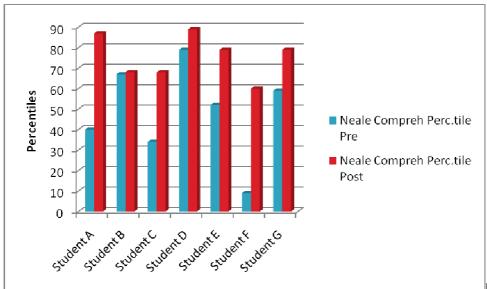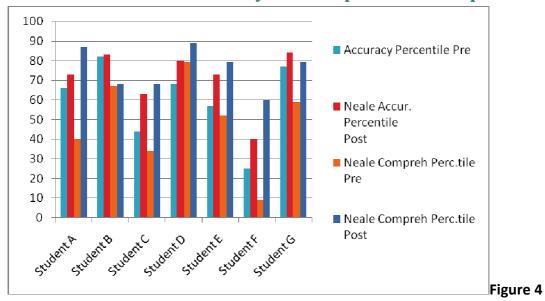## IMPROVEMENT in NEALE READING COMPREHENSION

Figure 3

Trends for the group indicate an improvement in reading comprehension. (Figure 3) Neale

comprehension results showed there were 71% of students below the 60th percentile pre

intervention and 86% above the 60th percentile post intervention. The data show the mean

comprehension of students increases from the 46th percentile (7.1 years) prior to teaching,

to the 67th percentile (7.10 years) after intervention. There was an increase in the students'

median percentile level from the 52nd percentile pre-intervention to the 79th percentile

post-intervention in the Neale Comprehension.

Differences between Accuracy and Comprehension Improvement

Figure 4

This study is examining the hypothesis of the effectiveness a specific strategy may or may not have on reading comprehension. Whilst we are not examining gains in reading accuracy, it can be seen that the data display increases between pre and post intervention in reading accuracy as well as comprehension. However, the differences in reading comprehension results show far greater improvement. (Figure 4)

The students generally displayed average to very good self efficacy in Pre intervention data. (Table 3) They believed they were generally competent decoders and smooth, fluent readers who could talk about the story and the ideas they had read. Students C and G were a little less confident in their ability to hold on to and remember ideas, whilst Student F lacked a little confidence in his word decoding ability and reading style. Post teaching results show an increase in all students' self efficacy particularly with regard to recalling story detail. (Table3)

The data also show a range of abilities in students' control over oral language utterances and grammatical structures. (Table3) Four of the seven students - 71%, display acceptable results in their Record of Oral Language. Students A and C displayed less control over sentence construction and grammatical structures. They both altered the more complex sentences to

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simpler but grammatically incorrect structures. They generally maintained the meaning.

Although they are in their fourth and third year of schooling respectively, they are both

students who have ESL backgrounds and this assessment highlights the impact that this factor

may have on their reading and comprehension. Student B, the student with receptive and

expressive language issues, also had a result that might be below grade two expectations.

Name	PRE Self efficacy Excell=1 VeryGood=2 Average=3 Poor=4	POST Self Efficacy Excell=1 VeryGood=2 Average=3 Poor=4	Record of Oral Language 0-42
Student A	2	2	29
Student B	2	2	36
Student C	3	2	24
Student D	2	1	37
Student E	2	2	40
Student F	3	2	39
Student G	3	2	39

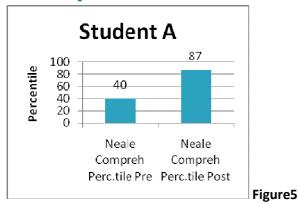SELF EFFICACY & ORAL LANGUAGE   Table 3

Trends for the group support the prediction that explicit teaching of the visualisation

strategy R.I.D.E.R to Year 2 students will improve their reading comprehension of narrative
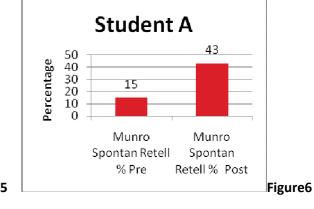
texts.

Name	Neale Comprehension Percentile Pre	Neale Comprehension Percentile Post	Munro Spontaneous Retell % Pre	Munro Spontaneous Retell % Post
Student A	40	87	15	43
Student B	67	68	55	75
Student C	34	68	25	87
Student D	79	89	70	94
Student E	52	79	20	75
Student F	9	60	25	75
Student G	59	79	55	93

Table 4

The learning trend for each student supports the prediction that explicit teaching of the visualisation strategy R.I.D.E.R will improve reading comprehension for year 2 students. (Table 4)
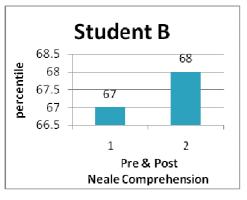
Student A demonstrated great improvement in reading comprehension after explicit teaching in a visualisation strategy. His Neale percentile ranking more than doubled and his oral retell ability increased well over 100%. The amount of detail he was now able to hold about the narrative text and the degree of connection between details had developed. (Figure 5 & 6) He regularly rereads text to aid understanding and this was very evident in the post Munro retell assessment.

Comprehension Results Before and After Intervention

Figure5

Figure6

Student B demonstrated no real increase in Neale comprehension percentiles after intervention. In undertaking this assessment it was noted that the student had difficulty with vocabulary knowledge and meanings. This caused some problem with understanding the text and he was not always able to follow the thread of what had occurred. He did however demonstrate improvement in Munro's spontaneous retell assessment. He was able to give far more descriptive detail. He encountered no vocabulary problems in this particular text. (Figure 7 & 8)
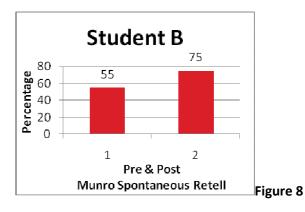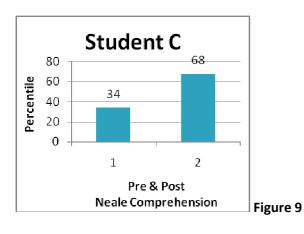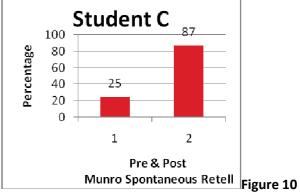
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Figure7

Figure 8

Student C increased his reading comprehension percentile rank by 100% and his retell ability by over 300%. In the comprehension assessment he showed difficulties with the meaning of certain vocabulary and this caused some problems with complete understanding of text. This was not an issue in the retell as he encountered no unknown vocabulary. (Figure 9 & 10)

Figure 9

Figure 10

Student D displayed the smallest percentile gain in reading comprehension after teaching intervention when compared with other students' gains. This student however, demonstrated the most understanding and achieved the highest score on the Neale Analysis in the initial assessment. His percentage score in the retell assessment improved by a greater margin in comparison with his Neale results. (Figure 11 & 12) Student D is the oldest participant in the group. (Table 1)
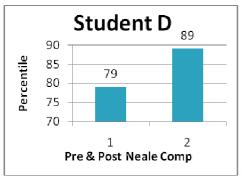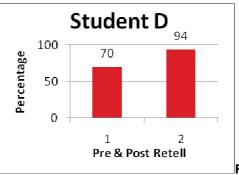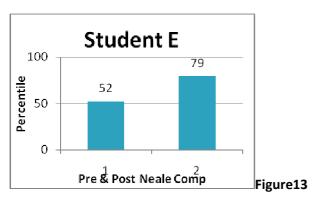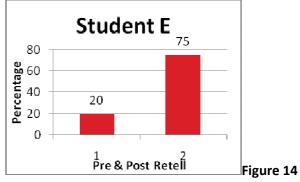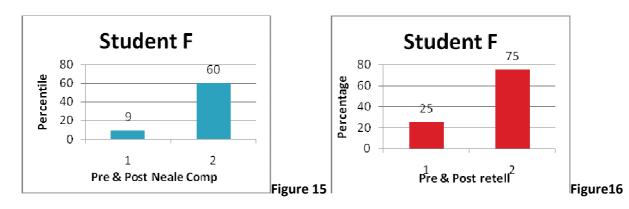

Figure 11

Figure 12

Student E (Figure 13 & 14) showed gains in reading comprehension after intervention increasing his percentile rank by 27 places. It was in the area of retell that he really showed improvement. His retell ability improved by 300%. He was able to give more specific detail and information in his response. He read in a slightly slower manner but it was evident he was connecting the information by the answers he gave at the conclusion of the reading.
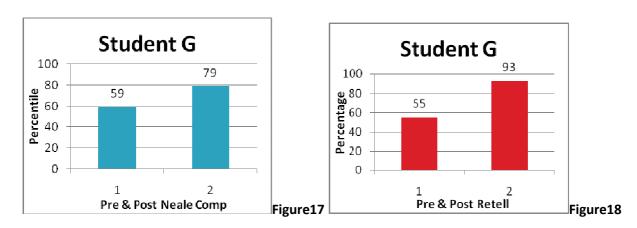

Figure13

Figure 14

Student F (Figure 15 & 16) completed the Neale reading comprehension in the same way as the other students. However, due to the challenge in the readability level of the retell text as a result of this student's reading difficulties, the text was read to him. This was done so as the emphasis would be on his comprehension and not become bogged down at the word level in reading, and thus become a word recognition and decoding exercise. Given this modification to the testing procedure, the student displayed large gains in comprehension and retell ability. In completing the post assessment tasks it was evident that the student was far more confident in his ability to give information. He made general comments on the stories as he read and was more engaged.

Figure 15

Figure16

Student G (Figure 17 & 18) also followed the learning trend of improvement in reading comprehension after teaching intervention which supported the study prediction. He made

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gains in the Neale analysis for reading comprehension as well as in his ability to spontaneously retell a text in the Munro retell. He initially lacked a little confidence in his ability to hold and recall information and ideas prior to the study, but it was noted that he was more confident when completing the post assessment tasks.

Figure17

Figure18

The data show that Student F made enormous gains in reading comprehension and oral retell as did Student A, Student C, Student E and Student G. It can be seen that within the group the two ESL participants, Student A and Student C, displayed the greatest gains in comprehension results after intervention. These students improved their reading comprehension results by 100% and their retell results by more than 200%. Their backgrounds and low Record of Oral Language scores (Table 3) do not appear to have had an effect on their results.

There is a seventeen month age difference between Student D and Student E (Table 1) yet this does not appear to have had a negative impact on Student E's results. He showed a greater gain than older students in the study.

Student B compared least favourably with the other participants in terms of improvement between pre and post teaching intervention. He showed virtually no movement in Neale percentile rankings. However his oral retell ability improved by 20% in post assessment results. Student B is also the student that has receptive and expressive language difficulties. (Table 1)

All students displayed substantial increases in their retell scores.

This study appears to support the prediction that explicitly teaching the visualisation strategy R.I.D.E.R to Year 2 students will improve reading comprehension of narrative texts.

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DISCUSSION

In examining the results in this study, there is support for the hypothesis that explicitly teaching a visualisation strategy improves reading comprehension. This study is similar in findings to previous research. It supports the research of Sadoski and Quast (1990) that spontaneous visual imagery supports reading comprehension and is related to deeper levels of comprehension. The findings also agree with research by Sadoski (Sadoski and Paivio, 2001, cited in Whitbread, 2002,) that visual imagery can enhance reader's recall and comprehension.

There was a positive trend towards the development of improved comprehension, with no unexpected or unusual results.

Support for the prediction was assisted in that these participants were the weakest readers in the class and therefore had the greatest margin for improvement. The students' reading ability was the independent variable and their comprehension results were the dependent variable. The dependent variable improved as a result of intervention. Prior to any intervention, apart from Student D, their ability to visualise was rather poor. Their corresponding comprehension abilities were also fairly low. As a result of intervention, their skill in visualising improved enormously and a correlation was evident with an improvement in comprehension results. This is in keeping with research (Oakhill and Patel, 1991; Oakhill and Yuill, 1995; 1996;) that found after training in visual imagery there was marked improvement in poor comprehender's memory for reading comprehension passages, and to a greater extent than good comprehenders.

The conditions under which this study was conducted also benefitted the prediction. In conducting the intervention as a pull out group outside of classroom distractions, this

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provided a better learning environment conducive to more positive results. The students were focused and positive in attitude and demonstrated increased proficiency in the task as the lessons progressed. As five of the seven participants attended 100% of the lesson series (Appendix 4) the consistent practise helped make the strategy more embedded. The explicit teaching sessions' impact on learning, is supported by Whitehead (2002) who states "While readers image spontaneously, imagery can be deliberately induced while reading. Further, teacher's can guide student's use and manipulation of their images as a way of enhancing meaning."

Keene and Zimmerman (1997, p.141, cited in Menner, 2007) state that "Proficient readers use images to immerse themselves in rich detail as they read. The detail gives depth and dimension to the reading, engaging the reader more deeply, making the text more memorable." The results of the Munro retell, far more descriptive after teaching intervention, lend support for this depth of detail.

Use of visual imagery also allowed the students to make their own connection with the text. It formed a link between the written word and making meaning and was not just about written structure forms. By connecting with the text in an individual way, the students were able to have ownership of the reading and make it meaningful. In this way it was no longer a decoding exercise but an incidence of text to self connections and text to world connections. Through this we are also activating students' prior knowledge, an essential aspect in being a competent reader. Duke and Pearson, (2002, cited in Woolley, 2006) argue that visual imagery improves comprehension monitoring and enhances children's ability to use their own prior experiences by using elements of past experiences to imagine what is happening within the read text. In the Munro retell the students were able to draw upon their knowledge of the subject matter perhaps adding to increased ability to visualise. However, it was noted that in

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completing the Neale reading comprehension, as the texts became more difficult, the students did not have a great deal of prior knowledge of the subject or topic word meanings to assist in visualising.

Vocabulary knowledge, rather than receptive and expressive language issues, could be one factor that may have had an impact on Student B's reading comprehension results fully supporting the prediction. Student B lacked knowledge of particular words and meanings in the Neale comprehension task. This factor could have led to an inability to fully utilise the intervention strategy and therefore have an effect on the dependent variable - comprehension. This may account for any lack of real movement on the Neale percentile pre and post intervention. Insufficient vocabulary knowledge caused no problems in the Munro retell task.

Vocabulary knowledge did not appear to affect the two ESL participants in this study. Whilst the data show a lower knowledge of grammatical structures as evidenced in the Record of Oral Language for these students, (Table 3) this did not impact upon strategy effectiveness. In accordance with the Munro (2000) reading model, the reading moved beyond the word level to the sentence level and therefore an unknown word could be tackled within a context. Thus an implication from this study might be that this strategy could benefit reading comprehension for ESL students. Further research might examine this area of improved comprehension in ESL learners through direct instruction in visualisation strategies.

The visualisation strategy is a simple tool to use and one which is easy for students to put into practise and expand its usage. As Whitehead (2002, p.4) argues, "...most of us see pictures in our heads as we read," therefore this is a natural concept. Explicit instruction in this strategy, the R.I.D.E.R strategy, is not a complicated or painstaking task to put into place, and the results certainly support the practice. This strategy also allowed for variation in the amount of

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teacher scaffolding. The students could move through a practise scale of full teacher control to student independence. This would enable the strategy to become embedded in student practice in reading. The results support earlier research which found that text visualisation strategies enhanced students' reading comprehension, attitude to reading, and involvement with reading, when strategies were taught directly using a framework of modelling, guided practice and independent practice (Pressley, 2002, cited in Woolley, 2007)

As stated earlier, Gee (2000) believes that reading needs to be an active process and the results of this study appear to show the benefits of active participation. The students were active in their connection and involvement with the texts.

From this study we can observe the strategy's effectiveness when reading narrative texts. Whitehead (2002) argues some text types evoke images more readily than others. As a result of research we understand that highly descriptive concrete texts are easier to image than abstract ones (Whitehead, 2002) and the direct translation of text into visual images, may be more efficient for the comprehension of narrative texts (Peters, Levin, McGivern and Pressley, 1985; cited in Center et al, 1995). A possible further investigation might be whether it was as effective with other text types. Would R.I.D.E.R produce the same level of gains in reading comprehension involving other text types?

Another factor that that might be investigated is the effect reading rate has on a student's ability to visualise. Does a quicker rate of reading impede a student's ability to visualise or does a slow reading rate prevent a student from forming good mind images or does it have no impact at all on visualisation? This factor was not investigated in this study as due to the competitive nature of the participants, the researcher did not want the aspect of timing to take away the focus on reading ability. This might be one area for future investigations.

The issue of continued practise for embedded usage is an area that needs to be addressed. As a result of the findings showing such positive gains, the usage of this strategy needs to continue. An implication for future teaching is to carry this into general classroom practice so that not only the small group but whole class will utilise this as an every-day practise and therefore ensure it becomes a long-term strategy. If not, the strategy might only be seen as an isolated activity and future gains may not eventuate.

Another factor that might be raised is that the R.I.D.E.R strategy in this study was taught in a small group setting and hence the positive results. Would the results have changed if it had been taught as part of a whole class setting? Research previously presented in this study would argue that neither setting nor mixed genders would not have changed the results.

As a result of this study, future directions for research might look at the possibilities for improvement in the comprehension of ESL students using this strategy, the extent of the role vocabulary plays in making a success of this strategy, the transference of this skill back into general classroom work without ongoing instruction or regular checking and if students continue to maintain high comprehension levels over an extended period of time.

In conclusion the results of this action research study found that in explicitly teaching the R.I.D.E.R visualisation strategy to Year 2 students their reading comprehension of narrative texts improved. This will be beneficial to these students as they move from the early years in their education to the more advanced expectations of the middle primary years.

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APPENDIX 1

TESTING RESOURCES

Alpha Assess Benchmark Kit, (2004). Australia, Oxford University Press.

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Randell, B. (2002). Leo the Lion Cub. Melbourne, PM Benchmark Kit 2, Thomson Learning

Appendix 2

TEXTS USED DURING LESSONS

Khoury, S. "My Trip to the Blue Mountains" in Brownie,M. & Morcom, M. (2003).Reading Between the Lines 2. New South Wales, Horwitz Martin

Smith, A. (2001). Kayaking at Blue Lake. Melbourne, Nelson Thompson Learning

Smith, A. (1999). The Surprise Dinner. Melbourne, Nelson Thompson Learning

Smith, A. (2001). Grandad's Mask. Melbourne , Nelson Thompson Learning

APPENDIX 3

INTERVENTION LESSONS

LESSON 1

*The teacher introduced the concept of the mind being like a movie camera, capturing images. The group discussed making mind movies/pictures then practised the concept of making a mind movie using 3 given phrases - a bright sunny day, an angry dog, a baby crying. Each student described their own picture.

 *The teacher discussed how making pictures whilst reading helped our understanding of what we read. She introduced the visualisation strategy R.I.D.E.R and described what this strategy was and explained how it worked. The acronym was introduced to the students with the use of a cue card. (Appendix 5)

Read – read a sentence, paragraph, paragraphs
Imagine – imagine the picture/draw the picture
Describe – describe what your picture looks like
Evaluate – evaluate/check your picture matches the story
Read on – continue reading

*The teacher read a text, "My Trip to the Blue Mountains" by Siobhan Khoury, (a short story that had no picture support), to the group.
*Teacher reread the text and modelled the R.I.D.E.R strategy to the students using the white-board for drawing her images and the cue card for reference to the steps, sentence by sentence.
*The teacher reviewed the strategy at the end of the lesson.

LESSON 2

Text: Kayaking at Blue Lake (PM+ Story Books)   L22
Author: Annette Smith
Whiteboard, paper& grey lead pencils for drawing image,
Bookmarks (Appendix 6) & Coloured pencils

*Teacher/students revised R.I.D.E.R strategy with the use of a cue card.
*Children each have a copy of the text that had all pictures removed.
*Teacher modelled imaging her picture& describing it along with the children's turns.
*Each student had a turn reading the text aloud whist the others followed along. When it came to the imagining step, the teacher drew her picture on the whiteboard & the students drew their pictures on blank paper.
*Any vocabulary that needed further explanation was done at the moment in the story.
*The R.I.D.E.R. strategy was implemented after each 1-2 sentences using the enlarged cue card that was attached to the board.
*Read & implemented the strategy on pages 2-4
*Each student was given a R.I.D.E.R. bookmark (Appendix 6) to decorate for themselves.
*Reflected on what we had learned this lesson.

LESSON 3
Text: Kayaking at Blue Lake (PM Story Book L22)- Own copy with all pictures removed
Author: Annette Smith
Blank paper, grey lead pencils for drawing image, bookmarks

*Teacher/students revise R.I.D.E.R strategy together
*Teacher rereads pages 2-4 - practise the steps using their bookmark as a prompt
*Students read pages 5-7 taking turns.
*Students practise R.I.D.E.R strategy after each 2-3 sentences using their bookmark
* Reflect on what they learnt in lesson.

LESSON 4
Text : Kayaking at Blue Lake (PM Story Book L22) – Own copy no pictures
Author: Annette Smith
Blank paper, grey lead pencils, for drawing image, bookmarks

*Teacher/students revise R.I.D.E.R strategy
*Teacher summarises the early part of text then rereads pages 5-7 whilst students
  practise the R.I.D.E.R strategy using bookmarks as a prompt.
*Students continue reading- pages 8-11, practising the R.I.D.E.R strategy after each
  paragraph with the aid of their bookmark.
*Reflect on how they are going with the strategy

LESSON 5
Text: Kayaking at Blue Lake (PM Story Book L22) - Own copy no pictures
Author: Annette Smith
Blank paper& grey lead pencils for drawing image, bookmarks

*Teacher/students revise R.I.D.E.R strategy together
*Teacher rereads the last few pages & students use their bookmark prompts to practise the
  R.I.D.E.R strategy.
*Students continue reading from page 12 to the end of the story.
*Students practise the R.I.D.E.R strategy at the end of every couple of paragraphs.
* Reflect on how their pictures changed with more story information

LESSON 6
Text: A Surprise Dinner (PM Story Book L22) - Own copy all pictures removed
Author: Annette Smith
Blank paper& grey lead pencils for drawing image, bookmarks

*Teacher/students revise R.I.D.E.R strategy together
*Teacher discusses title and possible story predictions with students.
*Students read half a page of text then used bookmarks to practise R.I.D.E.R strategy.
*Students read pages 2 - 8
* Reflected on their learning and how their picture changed
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LESSON 7
Text: A Birthday Surprise (PM Story Book L22) –Own copy with all pictures removed
Author: Annette Smith
Bookmarks

*Teacher/students revise R.I.D.E.R strategy
*Teacher rereads pages 2-8 as students practise R.I.D.E.R strategy with bookmarks
*Students continue reading pages 9-13 using bookmarks
*Students practise R.I.D.E.R strategy at the end of each page
* Reflect on how detailed their image became and how it changed

LESSON 8
Text: A Birthday Surprise (PM Story Book L22)
Author: Annette Smith

*Teacher/students revise R.I.D.E.R strategy together
*Teacher reread last few pages as students practise R.I.D.E.R strategy without aids.
*Students continue reading until the end of the story
*Students practise R.I.D.E.R strategy at the conclusion of each page
*Students give an oral retell and reflect on how the story picture changed

LESSON 9
Text: Grandad's Mask (PM Story Book L20)
Author: Annette Smith

*Teacher/students revise R.I.D.E.R strategy together
*Teacher reads title of story & quick discussion on masks & their purpose/predictions
*Students read page 2-8
*Students practise R.I.D.E.R strategy at the conclusion of each page
* Reflect on the detail of their pictures and the difference the strategy has made

LESSON 10
Text: Grandad's Mask (PM Story Book L20)
Author: Annette Smith

*Teacher/students revise R.I.D.E.R strategy
*Teacher rereads last few pages and students practise R.I.D.E.R strategy
*Students continue reading until the end of the story
*Students practise R.I.D.E.R strategy at the conclusion of each page
*Students give an oral retell of the story
*Students reflect on how this strategy has assisted and improved their reading.

APPENDIX 4

Name	Attend No. Of Sessions	Text Benchmk Level (Feb)	BURT Word Recog (Feb)	Self Effic. Excell=1 V.good=2 Av=3 Poor=4	R O L	Neale Accur. Perctil Pre	Neale Accur. Perctil Post	Neale Comp Perctil Pre	Neale Comp Perctil Post	Munro Spontan Retell % Pre	Munro Spontan Retell % Post	Munro Cued Retell % Pre	Munro Cued Retell % Post	Visualise Task % Pre	Visualise Task % Post
Student A	10	27	39	2	29	66	73	40	87	15	43	50	75	33	87
Student B	10	28	49	2	36	82	83	67	68	55	75	70	90	56	93
Student C	8	27	38	3	24	44	63	34	68	25	87	35	87	18	71
Student D	10	28	45	2	37	68	80	79	89	70	94	75	96	79	89
Student E	10	27	36	2	40	57	73	52	79	20	75	50	87	58	95
Student F	10	8	26	3	39	25	40	9	60	25	75	35	75	35	94
Student G	9	28	45	3	39	77	84	59	79	55	93	65	93	37	91

STUDENT INFORMATION & PRE / POST ASSESSMENT DATA

Cue Card

RIDER

1. **R**ead

2. **I**magine – picture

3. **D**escribe

4. **E**valuate / check

5. **R**ead on

APPENDIX 6

R.I.D.E.R BOOKMARK

1. **R**ead

2. **I**magine – picture

3. **D**escribe

4. **E**valuate / check

5. **R**ead on