# HYPOTHESIS.

Explicit teaching and cued use of the R.I.D.E.R strategy improves the comprehension level of average readers in Year 3.

#### **ABSTRACT:**

The purpose of this research is to investigate whether employment of the R.I.D.E.R. strategy, a visual imagery strategy, improves comprehension levels in year 3 students.

The subjects of the study are a small group of year 3 students who are able to "read" at, and beyond, the expected level for year 3 students. The term "read" refers to the group's ability to flawlessly decode and to read with fluency. This same group does not display matching comprehension skills. In fact, they read mainly with decoding and fluency as the main purpose for reading. Comprehension is limited to the literal level.

This subject in this study involved eight year 3 students who had performed well in the end of year 2 literacy testing, and who had performed at the average level in early year 3 comprehension. These students showed a marked weakness in inferential comprehension and in their critical thinking skills. Considering their reading ability their weak comprehension ability raises concern.

The results of the study do prove that explicitly teaching, and cueing students to employ, the R.I.D.E.R. strategy, will improve the level of comprehension. The results also raise interesting issues regarding an apparent weakness in vocabulary knowledge and critical analysis skills in these students.

#### INTRODUCTION

Moving on from year 2 to year 3 is recognized by educators and parents as a time of "transition". While it is inevitable that children must move onward and upward through their schooling this is often a time that is fraught with overwhelming challenges and changing responsibilities for the children involved.

Although it is difficult to find documentation on this, one area in particular that stands out as being of common concern for educators of year 3 children, is an apparent lack of efficient reading comprehension skills.

Yet the regime of post year 2 test results would testify that these children are "good" readers.

Since the advent of Children's Literacy Success Strategy CLaSS (Crevola and Hill 1995) students entering year 3 come equipped with rich experiences of reading. They have good letter knowledge, excellent word decoding skills and concepts about print in a range of genres. They are often able to read with considerable fluency, texts leveled at, and often beyond, level 28.

Such are the skills that these children can confidently read words of which quite simply, they have no understanding. Observing students at this level while they read, one can mistakenly assume that the reader is also reading for meaning. They read fluently, observe punctuation while reading, rarely miscue or make

errors and yet, when questioned about the meaning of some words and phrases in the text these readers are unable to answer correctly. Furthermore they display alarming weakness in inferential comprehension, reorganizing text to find answers and in giving an opinion based on what they have read.

Over the first three years of schooling, activities focused on higher order response to reading and reading comprehension have been somewhat limited and are largely about predicting, decoding and basic literal comprehension.

Students entering year 3 are often students who cannot extract meaning from text when reading silently, they either cannot locate, or their understanding of silent reading is only at the locate level. They need to be taught strategies for reorganization of text to find information, to use the content of the text to infer and to apply or use the information they find in text. The task for educators of year 3 children then it seems, would be to bring comprehension skills in line with reading level/skills.

As Clay (1998 *Pg. 3*) wrote "What they (teachers) need to do is find points of contact in children's prior learning, the things children can do, and spend a little time helping children firm up their grasp of what they already know."

She goes on to state that successful learning happens when a learner is helped to move forward from where they are toward attaining new skills.

"Comprehending is not just a literacy task (as we may have mistakenly led teachers to think).... If we train the child to read without involving powerful thinking strategies from the beginning, it will be more difficult for some of them to think about content later." (Clay 1998 Pg 217)

While these year 3 fledgling readers can be described as "good" readers according to post year 2 test results, the testing at this level is mainly concerned with Phonemic Awareness and Phonics and Fluency, not comprehension.

Duke and Pearson 2002 (*Ch.10 pgg 205, 206*) would say that "*good*" readers are both active and purposeful when reading. They have goals in mind for their reading; they evaluate, question, predict, construct, revise and try to determine unfamiliar words, phrases and concepts as they read. "*Good*" readers are able to integrate their prior knowledge as well as monitor and adjust their understandings as they read. They are able to identify different text types and read them meaningfully and differently. For these readers the processing of a text occurs prior, during and after reading.

It is apparent then, that if educators of year 3 children are to teach reading for comprehension there needs to be a program for the teaching of essential comprehension strategies to be put into place.

There are many possible strategies that may improve comprehension of text in children. Forming questions about ideas in text while reading, making mental

images about the text, summarizing and analyzing stories read into structural components of setting, characters, complications, partial resolutions, successful resolutions, and conclusion.

Contemporary research indicates that one such strategy is *visualization* or picturing in one's mind what is happening in the text.

"When we visualize, we create our own movies in our minds. We become attached to the characters we visualize. Visualizing personalizes reading, keeps us engaged, and often prevents us from abandoning a book prematurely."

—<u>Stephanie Harvey and Ann Goudvis</u>, from Strategies That Work: Teaching Comprehension to Enhance Understanding, 2000, p. 97

'The primary literacy of the 21st century will be visual: pictures, graphics, images of every kind. ... Our students must learn to process both words and pictures. They must be able to move gracefully and fluently between text and images, between literal and figurative worlds."

—<u>Lynell Burmark</u>, from Visual Literacy: Learn to See, See to Learn, 2002, p.1

"Imagery, the ability to create a mental image from the words read, is taught by developing students' abilities to add details present in single sentences to ongoing events and descriptions that authors portray. ... Many students require repeated instruction, using a wide variety of genres and hands-on manipulative exercises, before they can visualize concrete and, later, abstract concepts as they read."

—<u>Cathy Collins Block and Michael Pressley</u>, from *Best Practices in Literacy Instruction*, 2003, p. 116

"Key elements to assess are images that are central to understanding key points in the text rather than peripheral detail; images that are detailed and richly descriptive; images that extend and enhance the text; images that come from all the senses and the emotions; images that are adapted and revised as the child

reads or on the basis of conversations with other; and images from text that find new life in the child's writing."

—<u>Ellin Oliver Keene and Susan Zimmerman</u>, from Mosaic of Thought: Teaching Comprehension in a Reader's Workshop, 1997, p. 143

"Proficient readers spontaneously and purposefully create mental images while and after they read. The images emerge from all five senses, as well as the emotions, and are anchored in a reader's prior knowledge. ... Proficient readers use images to draw conclusions, to create distinct and unique interpretations of the text, to recall details significant to the text, and to recall a text after it has been read."

> —<u>Ellin Oliver Keene and Susan Zimmerman</u>, from Mosaic of Thought: Teaching Comprehension in a Reader's Workshop, 1997, p. 141

The mental imagery that we experience while reading, either spontaneously or induced by instruction is now known to have powerful effects on comprehension, memory, and appreciation for text. This may seem self-evident today, but it was not long ago that purely language-based theories of cognition and memory prevailed. If imagery was recognized at all, it was held to be incidental and of little importance. Mental imagery has been of interest since ancient times, and the rebirth of interest in imagery in recent years suggests exciting new directions for researchers and educators.

Sadoski, M. (1998, December).

Mc Laughlin and Allen 2002 write about "Visualizing Using the Sketch-to-Stretch Strategy" to help children become more successful, independent readers. This strategy teaches children to interpret texts through drawings. This particular strategy encourages students to make personal connections to texts and creates a forum for open discussion among the students. Explicit instruction for teaching this and other strategies is strongly emphasized.

Perhaps this notion of developing visualising strategies to aid high order comprehension skills is what year 3 students require in the initial phase of "transition" from year 2.

The current action research aims to implement the RIDER strategy to help year 3 children use visualization to aid development in comprehension.

## **METHOD**

# **DESIGN**:

This research study employed the "*Read, Imagine, Discuss, Evaluate, Read on/Repeat*" (RIDER) strategy for visualization to improve literal and inferential comprehension in Year 3 students of average ability. Pre-testing and post-testing in comprehension (TORCH, PROBE) of a control group and a target group was carried out to monitor comprehension development of each group. Each group came from different classrooms. Between the pre and post testing the target group was subjected to eight lessons of 40-45 minutes during which the RIDER strategy was explicitly taught. The control group during this time was exposed to regular classroom teaching practices. All lessons for both the control group and target group were carried out in normal classroom settings during the prescribed literacy block.

Pre-testing for both groups was done in the normal classroom situation while the post-testing of TORCH required the children to be withdrawn to another area.

Post-testing of PROBE was carried out by the regular classroom teachers in the children's regular classroom.

#### SETTING:

This research study took place in a Catholic Primary school situated in the south eastern area of Melbourne. The school currently has an enrolment of approximately 650 children with an average of 28 children per class. The population includes predominately Anglo-Saxon families of middle class status and a minority grouping of families with a Language Background Other Than English (LBOTE).

## PARTICIPANTS:

The <u>control group</u> was comprised of seven children; 3 boys and 4 girls. The age of these children ranged from 8 years 4 months to 9 years 2 months. All of these children achieved satisfactory results in end of year 2 Literacy Benchmark testing. None of this group had required reading intervention during their first three years of schooling. There were no LBOTE students in this group

The <u>target group</u> was comprised of eight children 4 boys and 4 girls. The age of these children ranged from 8 years 5 months to 9 years 3 months. All of these children achieved satisfactory results in end of year 2 Literacy Benchmark testing. None of this group had required reading intervention during their first three years of schooling. There was one LBOTE student (TT) in this group.

#### PROCEDURE:

#### **PRE TESTS**

Students in both the Control Group and Target Group were pre tested using TORCH and PROBE.

- TORCH test- "Grasshoppers" Suitable for Year 3.
- PROBE test- "Puppy" 3.1 reading age 8 9

#### **LESSONS**

The Target group was then exposed to eight 40 - 45 minute lessons (2 per week). Each lesson focused on developing visualization skills.

- 1. *John Munro's Visualising task*. The group was guided step by step to read the sentence, visualise what the sentences was saying and write what they imagined in their mind.
- 2. Investigating synonyms. "Burglar rings police for help." The group was asked to read the article and visualise what was happening. They were then asked to use their mental picture to give suitable synonyms for some of the verbs in the text. (*First Steps: Reading Course Book addressing current literacy challenges. Pg. 22*)
- 3. Introduction of the R.I.D.E.R strategy. The group was given a cue card (see appendix) to help remember the strategy. For this first time the group was asked to simply read a passage from Nim's Island by Wendy Orr and to use the descriptive language to draw a picture of what they visualized as they read. (*Reading Between the Lines 3 by Margaret Brownie and Merle Morgan Pg 36*)

- 4. Using the R.I.D.E.R strategy the group was asked to re read the passage from Nim's Island and to complete a teacher made cloze. This cloze focused on noun pronoun relationships, inferential comprehension and reoganisation of text.
- 5. 6. 7. Passages from "The Twits" by Roald Dahl. Each lesson asked the group to employ the R.I.D.E.R strategy as they read a selected passage from The Twits. Each lesson was followed up with a cloze activity focused on high order comprehension skills. ("The Twits" by Roald Dahl: Mr Twit pgs. 2-5, Mrs. Twit pgs. 6-8, The Glass eye pgs. 9-11)
- 8. Understanding Advertisements. The group was asked to read the advertisement using the R.I.D.E.R strategy. They were then asked to complete a question sheet.

(Reading Between the Lines 3 by Margaret Brownie and Merle Morgan Pgs. 40 - 41)

At the end of these eight lessons both the Control Group and the Target Group were post tested using TORCH and PROBE.

- TORCH test (seen)- "Grasshoppers" Suitable for Year 3.
- TORCH test (unseen)- "Donna Dingo" A very short piece but contains lots of factual information and is quite detailed. The questions are difficult.
- PROBE test- "Hippos" 3.2 reading age 8 9

## **RESULTS:**

PROBE: PRE TEST 3.1 "PUPPY" POST TEST 3.2 "HIPPOS"												
CONTROL GROUP	INFERENTIAL REORGANISATION EVALUATIVE VOCAB. COMPREHENSION OF TEXT COMPREHENSION KNOWLEDGE											
STUDENT	PRE	POST	PRE	POST	PRE	POST	PRE	POST				
EE	2	1	2	0	0	0	0	0				
MM	3	2	1	1	1	0	0	0				
SS	2	0	1	1	0	1	0	0				
AA	3	2	2	1	0	0	1	1				
NN	3	2	2	1	0	0	0	0				
RR	3	0	3	0	0	0	0	0				
WW	3	1	3	0	1	0	1	0				

Figure 1:

The table in Figure 1 shows a record of the Control Group's scores in pre and post PROBE testing. It should be noted that only levels of comprehension related to the focus of this study have been included.

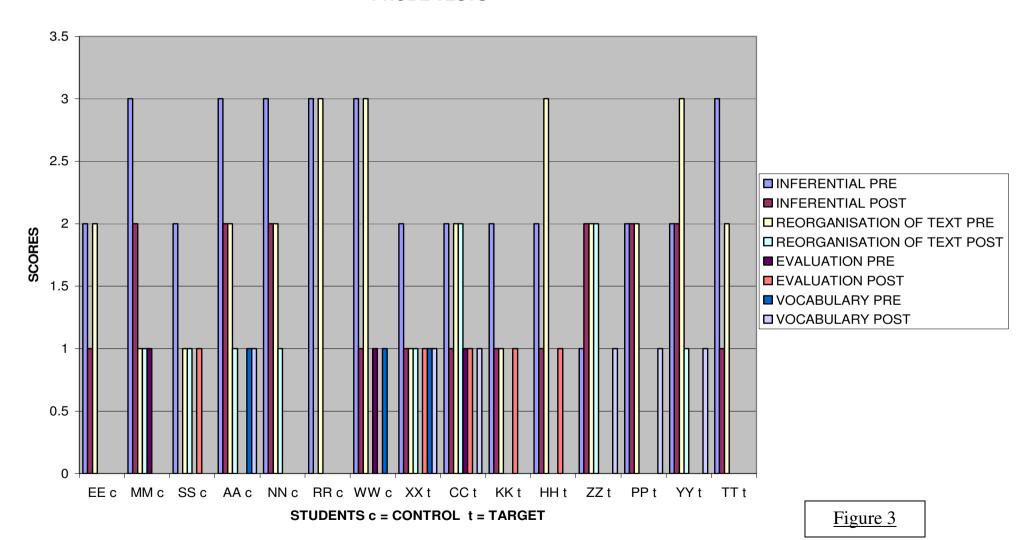
PROBE: PRE TEST 3.1 "PUPPY" POST TEST 3.2 "HIPPOS"												
TARGET GROUP	· ·	ENTIAL EHENSION	REORGAN OF TI			UATIVE EHENSION	VOCAB. KNOWLEDGE					
STUDENT	PRE	POST	PRE	POST	PRE POST		PRE	POST				
XX	2	1	1	1	0	1	1	1				
CC	2	1	2	2	1	1	0	1				
KK	2	1	1	0	0	1	0	0				
HH	2	1	3	0	0	1	0	0				
ZZ	1	2	2	2	0	0	0	1				
PP	2	2	2	0	0	0	0	1				
YY	2	2	3	1	0	0	0	1				
TT	3	1	2	0	0	0	0	0				

Figure 2:

The table in Figure 2 shows a record of the Target Group's scores in pre and post PROBE testing. It should be noted that only levels of comprehension related to the focus of this study have been included.

Figure 3 shows a column graph representing all the pre and post PROBE testing for both the Control Group and the Target Group. It should be noted that a missing column translates to a "0" score.

## **PROBE TESTS**



## RESULTS: cont.

Control		raw	torch	%		raw	torch	%		raw	torch	%
Group									Post			
E.E	Pre Test	12	33	44		17	46	81	Test	13	44.5	78
M.M	Grasshoppers	13	35	51	Post Test	11	31.2	38	Donna	9	37.5	58
S. S	• •	11	31	38	Grasshoppers	15	39.6	65	Dingo	14	46.4	82
A.A	unseen	14	37	57	seen	19	58.6	97		15	48.4	86
N.N		14	37	57		15	39.6	65	unseen	11	41	69
R.R		14	37	57		18	51.4	91		12	42.7	74
W.W		15	40	65		13	35.1	51		10	39.2	64

Figure 4

The table in Figure 4 displays the Control Group's scores for pre and post TORCH testing. Although the *raw score*, *TORCH score and percentile score* are recorded, only the *percentile* score has been represented in graphic form.

Target		raw	torch	%		raw	torch	%		raw	torch	%
Group									_			
K.K	ъ п	11	31	38	ъ . п	16	42.4	73	Post	13	44.5	78
Z.Z	Pre Test	12	33	44	Post Test	14	37.2	57	Test Donna	15	48.4	86
X.X	Grasshoppers	12	33	44	Grasshoppers	18	51.4	91	Dingo	16	50.6	89
C.C	unseen	12	33	44	seen	16	42.4	73	Dingo	15	48.4	86
P.P	anscen	12	33	44	Seen	14	37.2	57	unseen	12	42.7	74
T.T		11	31	38		18	51.4	91		8	35.7	53
Y.Y		11	31	38		13	35.1	51		17	53.3	93
H.H		14	37	57		16	42.4	73		17	53.3	93

Figure 5

The table in Figure 5 displays the Target Group's scores for pre and post TORCH testing. Although the *raw score*, *TORCH score and percentile score* are recorded, only the *percentile* score has been represented in graphic form.

## **TORCH Pre and Post Tests**

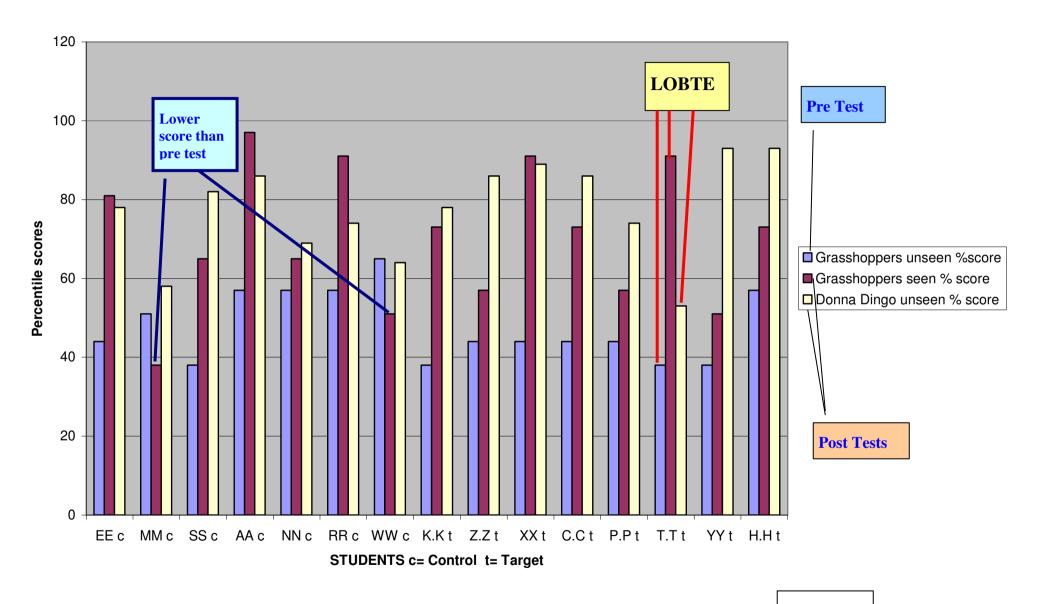


Figure 6

### DISCUSSION:

## **Probe Testing**

Firstly it needs to be noted that PROBE is not a normed or standardized test therefore the student cannot be given a percentile rating. However PROBE is an interesting test to administer as it requires a one to one situation between teacher and student. Valuable information can be gained about how students present as readers and speakers if one takes clinical notes during the testing.

In this study the graphic representation of the PROBE test scores (Figure 3) show many gaps in skills across both the Control Group and the Target Group. These gaps occur in the pre test and post tests. It is clear that each group contained students who were generally more able than the others. Eg. MM and SS in the Control Group and WW and XX in the Target Group.

It is interesting to note that in the pre test both groups recorded a correct answer 18 times, whereas, in the post tests the Control Group recorded correct answers 10 times and the Target Group recorded a correct answer 21 times.

As there were only seven students in the Control Group and eight students in the Target Group the comparison is weighted in favour of the Target Group. To compensate for the imbalance one may remove the highest scoring student (XX) in the Target Group leaving a comparison of correct answers 10 times in the Control Group to correct answers 14 times in the Target Group.

While the Target Group appears to have performed marginally better than the Control Group, to put any real confidence in using the PROBE this way would be grossly negligent.

## **TORCH Testing**

Comparing the TORCH results gives a somewhat more balanced approach as the TORCH test is a normed, standardized test.

Individuals performed in various degrees of success. The Control Group performed better than the Target Group in the pre test "Grasshoppers" with the average percentile rate being 52 compared to the Target Group with 43.

In two cases students (MM, WW) within the Control Group scored *lower* in the post test "Grasshoppers" while the entire Target Group, in varying degrees, *improved* their performance.

It is of interest to note that the Control Group improved their post test "Grasshoppers" scores when tested on post test "Donna Dingo".

Looking at the Target Group results it is apparent that there was considerable improvement on the post test "Grasshoppers" performance and further improvement on post test "Donna Dingo".

It would appear that the Target Group did in fact perform better than the Control Group in the post test situation. Therefore it is fair to say that employing the R.I.D.E.R. strategy when teaching children to read for comprehension does improve outcomes.

However, to comment further in favour of the Target Group, a more sophisticated statistical analysis of the data should be employed.

## Going further..

Observations and notes taken during the 10 intensive lessons indicate that common vocabulary weaknesses and confusion with noun/pronoun relationship impair students' ability to comprehend higher order issues in a text that has been, by running records standards, labeled as *easy* to read. The term "easy" really refers to decoding and fluency ability not comprehension.

For the average ability year 3 student to achieve significant improvement in all levels of comprehension teachers would need to explicitly teach a wide range of strategies.

#### CONCLUSION:

After looking at all the action research data results and interpretations, it would be reasonable to say that the hypothesis has been proved to be correct. Children who employ the R.I.D.E.R strategy when they read text set at their reading ability do in fact improve their comprehension level. It is also true to say that the improvement is not hugely significant and that there are other comprehension strategies that need to taught and employed before the average year 3 student is able to comprehend at the same level they are able to read.

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