Explicit teaching of visualisation through the R.I.D.E.R. strategy to Year 5/6 students will improve comprehension results of fiction texts.

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ABSTRACT

Many students in the upper years of primary school have good decoding skills but poor comprehension skills. They are able to read fluently, and with confidence, but many struggle to answer the most basic literal questions as they are not reading for meaning.

The hypothesis for this study is that the explicit teaching of visualisation through the R.I.D.E.R. strategy to Year 5/6 students will improve comprehension results of fiction texts.

This study compared the comprehension levels of two groups of Year 5/6 students (control and intervention) following the explicit teaching of the R.I.D.E.R. visualisation strategy. Twenty students from two classes were chosen to participate in this study. Both groups were matched equally in terms of male to female ratio, and ESL ratio. All students were pre tested using the TORCH comprehension text, The Swamp Creature and Munro (2005) Visualisation Task – Group Administration. The intervention group then received ten lessons based on the visualisation strategy. All participants were then post tested using the original two tests.

Results showed some support for the hypothesis by the general population, but much stronger support for English as a Second Language students and students currently participating in literacy intervention within the school.

INTRODUCTION

Students in the middle years of school tend to be quite competent at decoding words. Many present as fluent readers, giving the impression that they are 'good' at reading. However, teachers often find this is an illusion and that although students can decode text, many have quite low comprehension skills. According to Wolley (2004) being able to decode well is not enough, 'skilled reading involves more than fluent word recognition, it involves comprehension'.

Difficulties in comprehension can appear at a sentence, conceptual, topic and dispositional level, depending on the skills acquired, or not acquired by the reader (Munro, 2005). In order for a reader to become proficient, they need comprehension skills at each of these levels.

Hibbing and Rankin-Erickson (2003) identified some of the issues facing students with comprehension difficulties as limited vocabulary, little background knowledge about many topics, lack of understanding of the relationships represented in the language of the text, and lack of awareness that attempting to visualize what is happening might be helpful. Hibbing and Rankin-Erickson (2003) found that students who lack the ability to create visual images when reading often experienced comprehension difficulties. It is because of this that visualisation should be explicitly taught to students. Over half the participants in this study are from an English as Second Language (ESL) background, and as such display many of Hibbing and Ranking-Erickson's comprehension difficulties.

Poor decoders have difficulty comprehending texts because they focus their efforts on decoding individual words and as such lose meaning.

One powerful strategy students can be taught to improve comprehension ability is that of visualisation. Visualisation as a reading strategy is described as, 'the process of forming internal pictures of objects or events not present to the eye that can affect later recall and comprehension' (Douville & Algozzine, 2004). Students create an image or movie in their mind of what they are reading, or what they are listening to. The idea being the more links students can make between the text and their own experiences the greater the chance of being able to retrieve the information at a later date from memory.

Wolley (2004), cites Yuill and Oakhill (1991), saying, 'the mental image generation during reading gives poorer comprehenders a mechanism for integrating information derived from the text'. This information can later be used to answer questions relating to the text students have read.

Research has shown that 'proficient readers visualise what they read as they construct meaning from a text' (Onofrey & Theurer, 2007). That they, 'create mental images before, during and after reading to aid their comprehension (Guerrero, 2003). This is supported by Wolley (2010) who states, 'the construction of a mental model is a dynamic constructive processes'.

Douville and Algozzine (2004) explain the importance of the explicit teaching of visualisation strategies as 'without instruction, only some students implicitly use mental imagery'.

To effectively teach students reading strategies such as visualisation, it essential explicit instruction using scaffolding to support students' learning in used (Rupley, Blair and Nichols, 2009). Scaffolding is any support provided by the teacher to help student's bridge the gap between their current knowledge and attainment of new knowledge, or in this case, new skills. Scaffolding can take many forms, including teacher modelling or resources used to teach a new strategy such as prompt cards or posters (Rupley et al, 2009).

Research has also shown that the strategy of visualisation works best when students are not required to expend effort decoding or processing information at the same time. Gambrell (1982) concluded that, 'beginning readers may struggle with trying to visualise and verbally process at the same time'. She also found visualisation benefited third grade students but not first grade students, this makes visualisation a good strategy to use with middle years students who are generally already competent decoders. Based on this research it would be expected that this study will show poorer readers having greater improvement in comprehension ability than those already competent students.

Visualisation is also used as a strategy for teaching English as a second language (ESL) learners.

Visualisation as a strategy has been shown to have some limitations. Duke and Pearson (2002) cited in Wolley (2004) claim, 'poor readers are helped more by imagery instruction that good readers, because good readers may already use imagery effectively'.

The focus of this study is based on the visualisation strategy developed by Clarke, Deshler, Schumaker, Alley & Warner (1984) through their work with learning disabled students. The strategy is known as R.I.D.E.R. and provides students with a sequence of tasks to assist in the visualisation of texts. The process involves:

R – Read – students read or listen to a passage of text

I – Image – students create an image in their mind of what they read

D – Describe – students describe in detail their mind's picture

E – Evaluate – students evaluate if their image matches the description in the text

R – Repeat or Read On – students read on to the next section of text.

Clark et al., (1984) concluded that Learning Disabled students could be taught reading comprehension strategies and that these strategies needed to be explicitly taught before performance improved.

Duke (2003) further discusses the necessary components for effective teaching of comprehension strategies. He lists them as:

_ Explicit description of the strategy and its use

_ Teacher modelling of the strategy in action

_ Collaborative use of the strategy in action

_ Guided practice using the strategy and gradual release of responsibility to the learner.

_ Independent use of the strategy.

HYPOTHESIS

The explicit teaching of Year 5/6 students visualisation through the R.I.D.E.R. strategy with improve comprehension of fiction texts.

METHOD

DESIGN

This case study is designed based on a 'testing, treatment, testing' approach. Gains in reading comprehension, following explicit teaching of visualisation through the R.I.D.E.R. strategy, are monitored for Year 6 students. This study uses a control group and an intervention group of 20 participants in each group.

Comparisons were made between pre and post testing results of the TORCH Test of Reading Comprehension (Mossenson, Stephanou, Forester, Masters, McGregor, Anderson & Hill.2003) and Visualisation Task - Group Administration (Munro 2010).

PARTICIPANTS

The participants in this study were 40 students, 20 made up the intervention group, while another 20 formed the control group. All participants in this study are currently in Year 5/6 and range in age from 10-12 years. Students for the intervention group were taken from one class of year 5/6 students, while the control group was selected from the second stream of year 5/6 students. Students in the control group were selected to best match students in the intervention group.

Students displayed a range of reading abilities as demonstrated by their initial results in the TORCH test (Appendix 1), ranging in TORCH scores of 25 to 78. Each group was evenly matched in terms of male to female participants and English as a Second Language (ESL) students. There were slightly higher number of students in the intervention group who are currently receiving literacy intervention through they ERIK program. There were a higher number of students receiving Education Maintenance Allowance (EMA) and Language, Numeracy and Special Learning Needs funding in the intervention group.

All students have received between 6 – 7 years of formal schooling, excluding Student A who has only received 3 years of formal schooling.

Students have not previously completed either the TORCH test, or Visualisation test and as such all students had the same prior knowledge coming into testing.

MATERIALS

Materials used in this study included:

TESTS:

Test of Reaching Comprehension (Mossenson et al.,2003) – The Swamp Creature

This text is levelled as a year 4 – 6 text. It was used for pre and post testing to assess any improvement in reading comprehension following the explicit teaching of visualisation. This test was administered in a whole class setting during a morning literacy session and was administered at the same time for both control and intervention groups.

Visualising Task – Group Administration (Munro, 2005)

This test was administered in a whole class setting to both intervention and control groups. It was used as a pre and post test to compare gains in visualisation ability as result of intervention.

TEXTS:

The Coat (Key into inference)

That's What Friends Are For

The Clutching Hand

A Little Election

The Twits

VISUAL AIDES:

Set of visual cues for R.I.D.E.R strategy (Appendix A)

Bookmark to cue student learning (Appendix B)

TEACHING SEQUENCE:

Set of 10 lesson plans (Appendix E)

PROCEDURE

All forty participants in this study were assessed prior to intervention using TORCH test – The Swamp Creature. This text was chosen as it is levelled as year 4 – 6 and as such should generally be suitable for year 5/6 students. A fiction text was chosen as that is the area of reading comprehension this study focuses on. As this test was administered to forty students it was not practical to administer tests based on each individual ability level. This test was administered to all students at the same time, during a morning literacy session. The two administrators of this test have had previous experience with TORCH. TORCH was used to give a baseline comprehension ability score as the basis of this study is to analyse the relationship between visualisation and comprehension of texts.

Students were then given the Visualisation Task – group administration as developed by Munro (2005). Again this was administered to all students at the same time, following the scripted instructions included in the test to ensure impartiality on behalf of the two administrators.

All tests were marked by the research to again ensure consistency.

Following this the control group continued their regular literacy program for two weeks. This literacy learning included individual, group and whole class activities using skills and strategies

such as reciprocal reading, comprehension tasks using Key Into Inferences program, independent reading activities based on texts chosen by students and text analysis using the 'Four Resources Model' developed by Luke and Freebody.

Intervention began for the second group at the commencement of Term 3 and lasted for two weeks. Sessions were designed to last around 45 minutes, but usually lasted longer. Each session was undertaken during the first hour of the morning literacy session and was completed in a whole class setting.

Intervention sessions began by introducing the idea of visualisation using concepts familiar to the students such as their home environment (eg: bedroom), a strong memory such as Christmas or birthday or what students had had for breakfast that morning. Tasks based on visualising gave the instructor the opportunity to explicitly model to students the level of detail required in visualisation, as well introduce paraphrasing to the group and model the language and scripts the students would be encouraged to use.

Students were then introduced to the R.I.D.E.R. model of visualisation as developed by Whitehead (1986). Students were presented with visual cues for each letter of the acronym as well as an individual bookmark to use as a reference throughout the sessions (Appendix A & B). Actions were linked to each step of the R.I.D.E.R. strategy as it was introduced, in order for students to make more explicit connections and help to embed the strategy in their long term memory.

Students then began working with the R.I.D.E.R. strategy. This was introduced using short narrative texts, visualised sentence by sentence. The researcher would read a short sentence and model each stage of the strategy – continuing to link the stage with the associated action, and making reference to the visual cues. The script, 'In my mind I see' was repeatedly used throughout this modelling to tune students in to what was expected of them. Initially students would sketch their image, as well as write an accompanying description. They would evaluate their description with a partner to ensure all key information was included and was correct, before students were asked to share with the class. The researcher used this sharing time to correct any errors made by students, or to probe for further information if required.

As the intervention continued the passage length increased to paragraph by paragraph visualisation. Scaffolding was gradually reduced throughout the intervention with the withdrawal of the sketching step. The inclusion of visual aides such as posters and bookmarks meant those students requiring a longer period of scaffolding still had assistance.

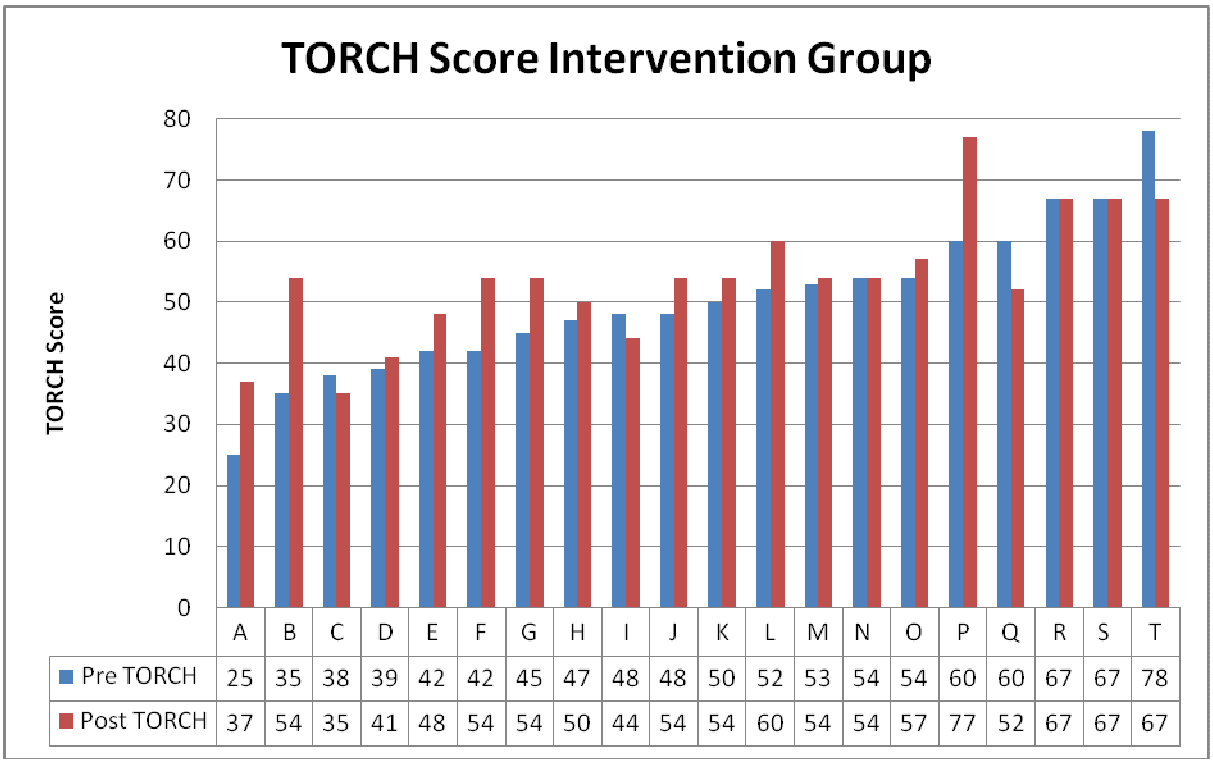
Each session included a review of the previous sessions, introduction of new language that appeared in the text, discussion and review of what had been learnt in each session.

Following the two week intervention period all students (control and intervention) were post tested using the Visualisation Task – group assessment, and The Swamp Creatures, TORCH test.

Results were then compared and analysed.

RESULTS

Results indicate that explicit teaching of visualisation through the R.I.D.E.R. strategy can improve comprehension results of year 5 and 6 students when taught in a whole class setting.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
Pre TORCH	25	35	38	39	42	42	45	47	48	48	50	52	53	54	54	60	60	67	67	78
Post TORCH	37	54	35	41	48	54	54	50	44	54	54	60	54	54	57	77	52	67	67	67

Figure 1: TORCH Score Intervention Group

The above figure shows the pre and post TORCH scores for all participants in the intervention group. Of the intervention students, 65% improved their comprehension score following intervention. 15% of students showed no change, while 20% of students showed a decline in their results following intervention. Of the 35% (7 students) who showed no change or a decline in results, 71% of students originally scored in the upper 50% of the group.

Overall, students showed an average TORCH score improvement of 3.8. Student B, who is ESL and participating in ERIK intervention, displayed the greatest improvement to their TORCH score, improving by 19 points. Students P who is also from an ESL background improved by 17 points, and Student A who is from an ESL background, receives EMA funding and participates in the ERIK program improved by 12 points.

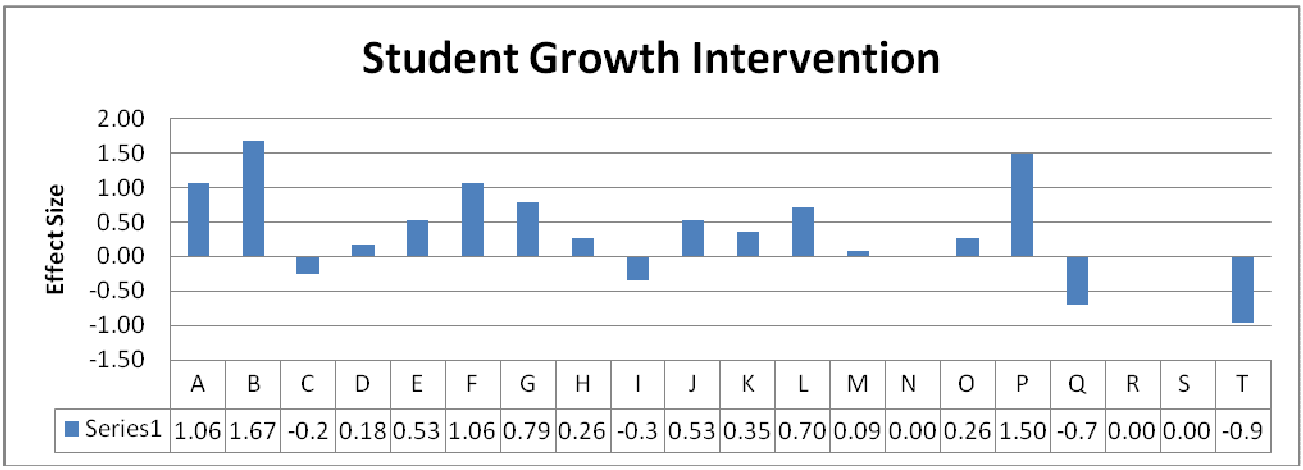


Figure 2: Individual Effect Size of Intervention Students

The above graph shows the effect size for each student in the intervention group. This graph is based on the average pre and post intervention TORCH scores. Based on Hattie's (2009) definition of effect sizes for educational outcomes, Students A, B, G, L and P displayed a large effect sizes, indicating intervention had a large effect on their outcome. Using this same definition, Students E and J showed a medium effect size based on intervention.

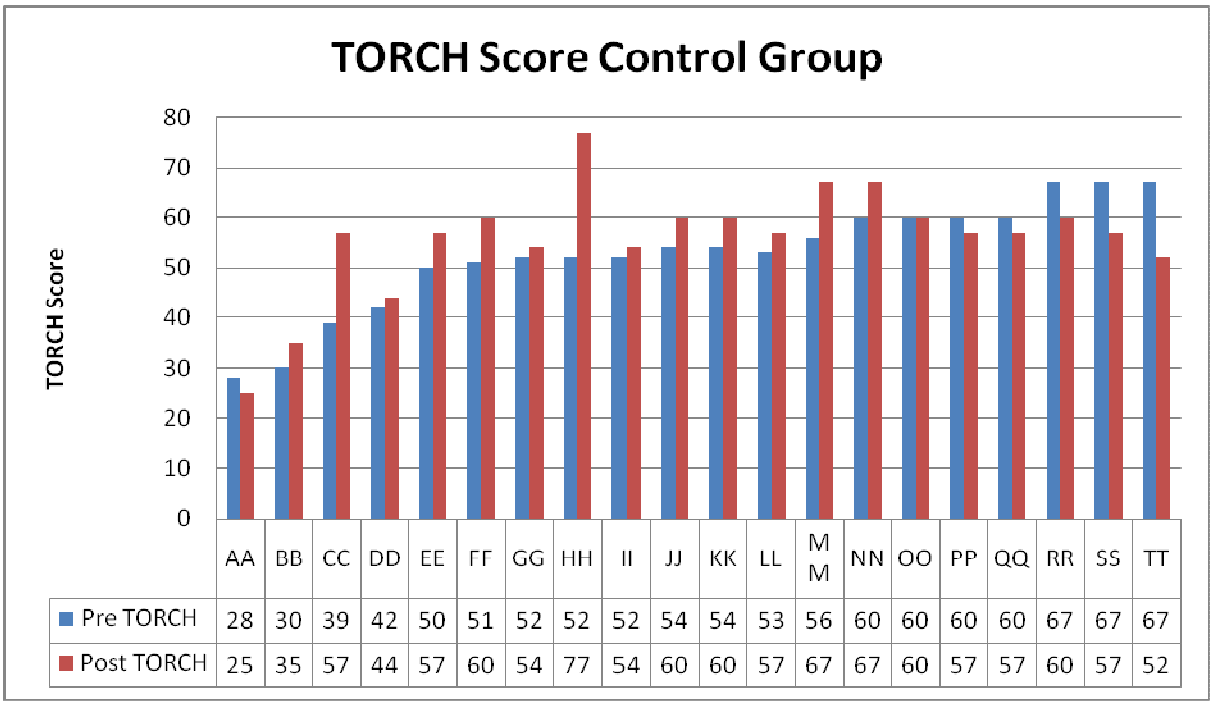


Figure 3: Pre and Post TORCH Score – Control Group

The above graph shows the pre and post testing TORCH score results of the control group. As with the intervention group 65% of students showed improvement in their comprehension results, suggesting intervention has minimal impact on student comprehension skill development. 5% of students showed no improvement while 30% of students showed a decline in their comprehension results. This is greater than the 20% of students in the intervention group who had a decline in scores. Of the 35% of students who showed no improvement or a decline in comprehension scores, 86% (six out of the seven students) were originally the

highest scoring students in the control group. Overall students improved their TORCH score by an average of 3 points, slightly lower than the intervention group who improved by almost 4 points. Student HH showed the greatest improvement in comprehension, improving their TORCH score by 25 points. Student CC improved by 18 points and students MM improved by 11. Students RR, SS and TT all showed the greatest decline in comprehension scores. All three students are from an ESL background.

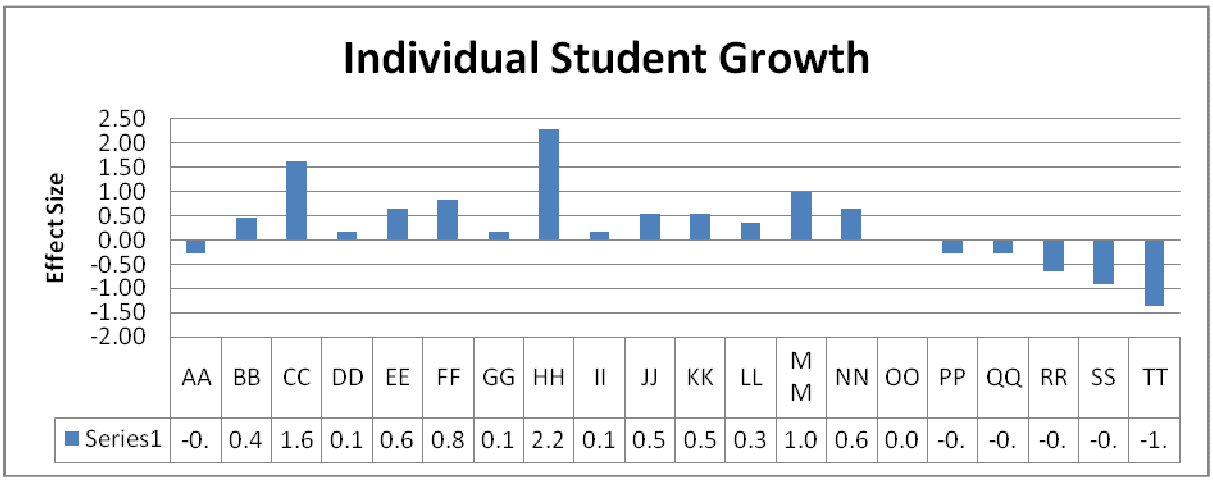


Figure 4: Individual Effect Size – Control Group

The above graph shows the individual effect size of students in the control group following post testing.

Table 1

	Control PRE	**Control POST**	**Intervention PRE**	**Intervention POST**
Mean TORCH Score	52.7	55.85	50.2	54
Standard Deviation	10.95	11.09	12.43	10.40
Effect Size	0.28		0.33	

Table 1 displays the mean pre and post intervention TORCH scores for the control and intervention groups. Following post testing the control group showed an effect size of 0.28, while the intervention group displayed an effect size slightly higher at 0.33. Based on Hattie's (2009) definition of effect size for educational outcomes, neither effect size is considered significant.

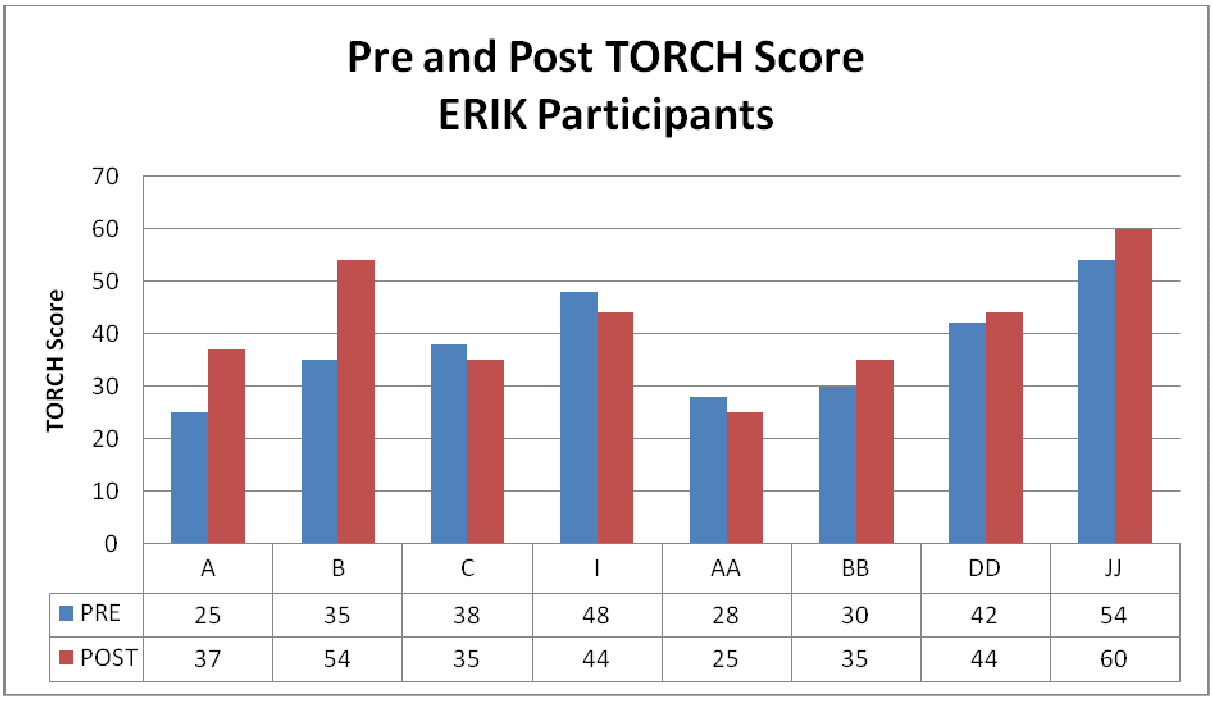


Figure 5: Pre and Post TORCH scores – ERIK participants

Figure 5 shows the pre and post intervention TORCH scores for students participating in the ERIK program. These students have previously been exposed to R.I.D.E.R. as a result of their participation in the ERIK program. Students A, B, C and I are in the intervention group, while students AA, BB, DD, JJ and in the control group. Intervention students showed an average improvement of 6 points, while control group students showed an average improvement of 2.5 points.

Table 2

	Control PRE	**Control POST**	**Intervention PRE**	**Intervention POST**
Mean TORCH Score	38.5	41	36.5	42.5
Standard Deviation	12.04	14.85	9.47	8.58
Effect Size	*d*=0.19		*d*=0.66	

Table 2 shows the effect size (*d*) for the control and intervention ERIK participants based on their TORCH scores. ERIK participants receiving intervention showed an overall effect size of 0.66. In educational terms this is considered significant. This suggests additional intervention for ERIK students in comprehension strategies such as visualisation improves their comprehension skills, thus, supporting the hypothesis.

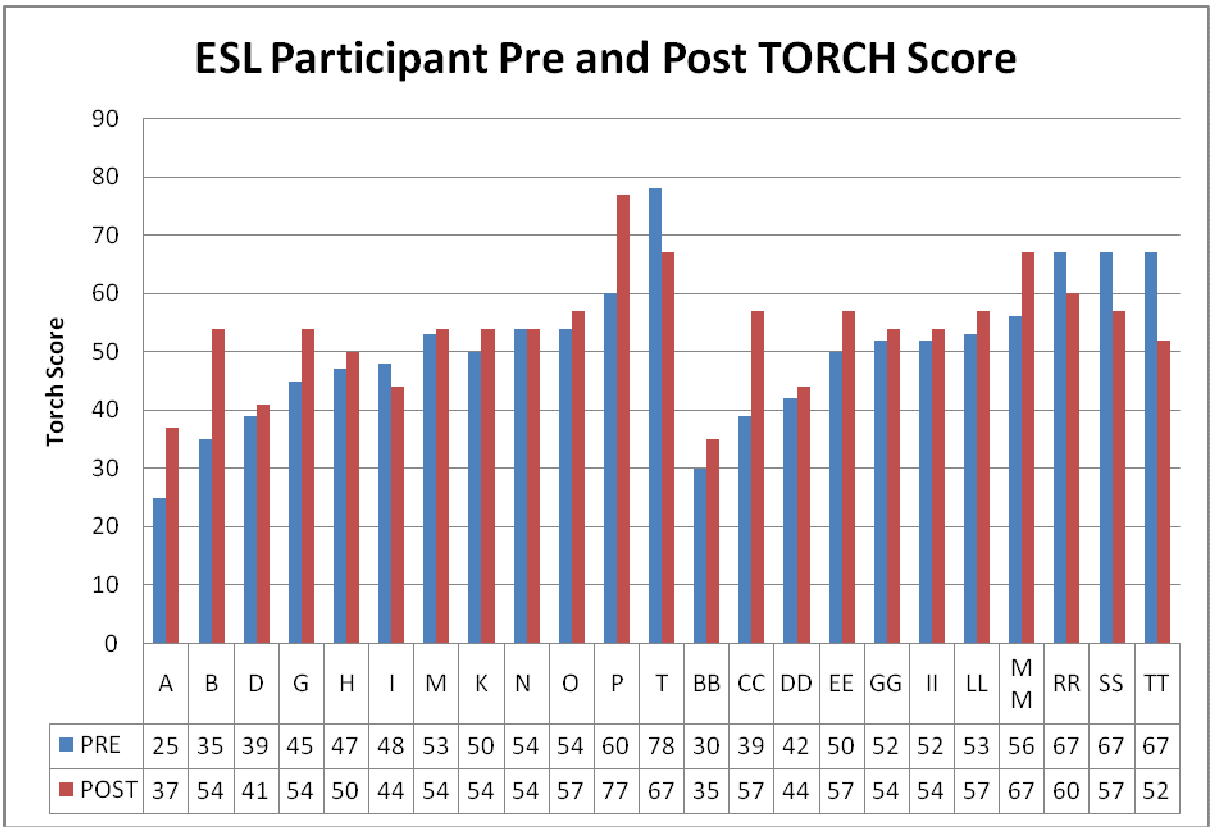


Figure 6: Pre and Post TORCH Score – ESL Participants

Figure 6 shows the pre and post TORCH scores for ESL students in the control and intervention groups. Students A, B, D, G, H, I, M, K, N, O, P AND T were in the intervention group. Students BB, CC, DD, EE, GG, II, LL, MM, RR, SS and TT were in the control group. 75% of ESL students in the intervention group improved their comprehension results following intervention, while 66% of ESL students in the control group showed an improvement in their comprehension scores. ESL students in the intervention group showed an average TORCH score improvement of 4.8, while ESL students in the control group showed an average TORCH score improvement of only 1.7.

Table 3:

	Control PRE	Control POST	Intervention PRE	Intervention POST
Mean Score	52.3	54	49	53.58
Standard Deviation	12.03	8.40	13.22	10.78
Effect Size	*d*=0.16		*d*=0.38	

Table 3 displays the mean score for pre and post tests for control and intervention groups, as well as the standard deviation for each group and the effect size. Although the average pre test scores were different for each group, post testing averages were very similar. The control group has an effect size of 0.16 which is considered small, while the intervention group has an effect size close to 0.4 which based on Hattie (2009) is considered a medium effect size. This indicates the hypothesis is supported by ESL students.

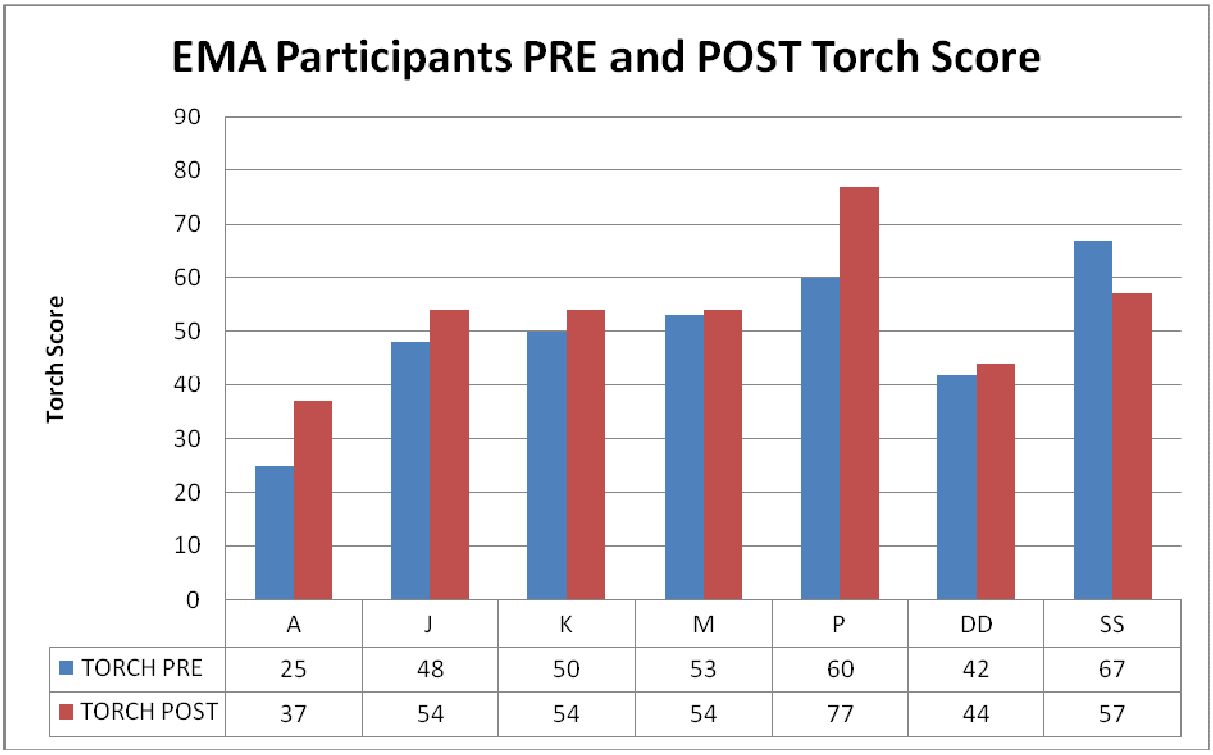


Figure 7: Pre and Post TORCH Scores EMA students

Figure 7 shows the pre and post test results for students receiving Education Maintenance Allowance (EMA). Students A, J, K, M and P were in the intervention group, while students DD and SS were in the control group. EMA students in the intervention group showed an average improvement to their TORCH score of 6 points. EMA students in the control group showed an average decline in comprehension scores by 4 points. The effect size for EMA students in the intervention group was 0.58, considered a large effect by Hattie (2009).

Table 4:

	Control PRE	Control POST	Intervention PRE	Intervention POST
Mean Score	54.5	50.5	47.2	55.2
Standard Deviation	9.19	13.43	13.21	14.23
Effect Size	*d*=0.29		*d*= -0.58	

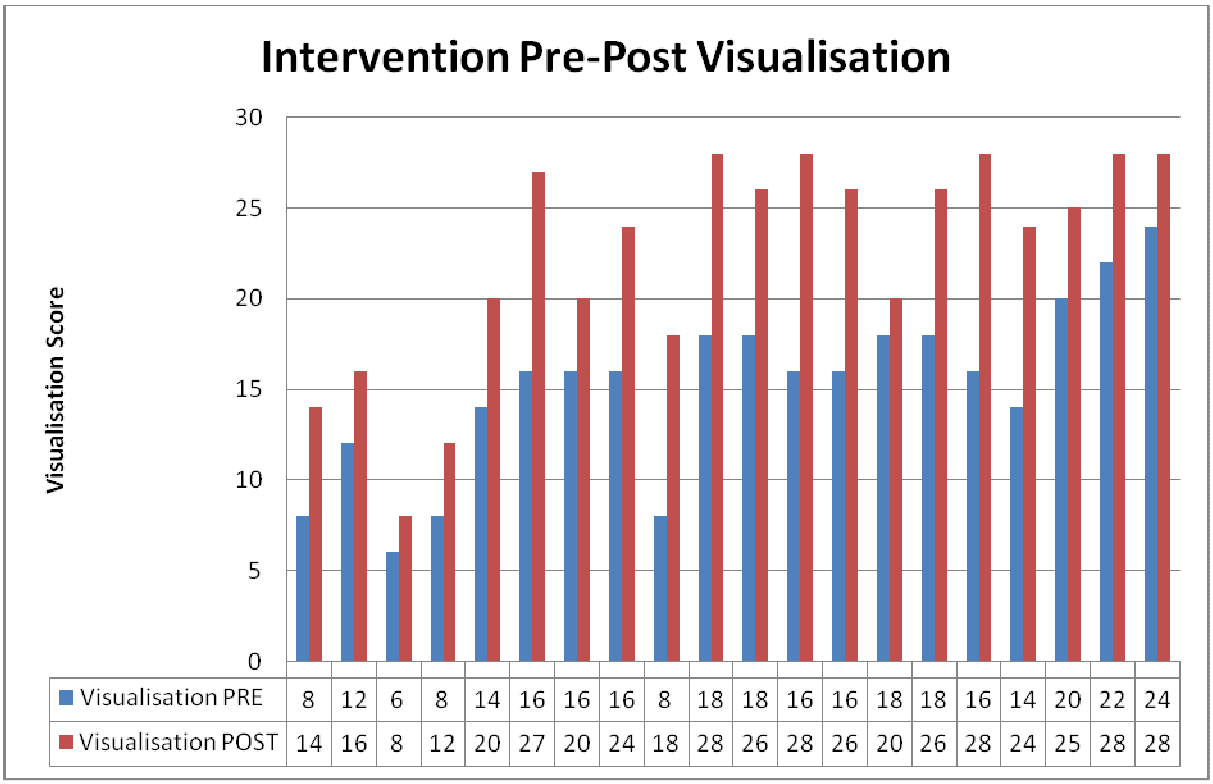


Figure 8: Pre and Post Visualisation Score – Intervention Group

Figure 8 shows the pre and post intervention scores for the Munro Visualisation Task – group administration. This Graph shows all students have improved following intervention. The average pre test score was 15.2 the average post test score was 22.3. On average students improved their score by 7 points. Students F, I, P, J, L, M and Q improved the most, improving by 10 – 12 points. Students B, C, D, N and T showed the least improvement, increasing scores of between 2 and 4 points.

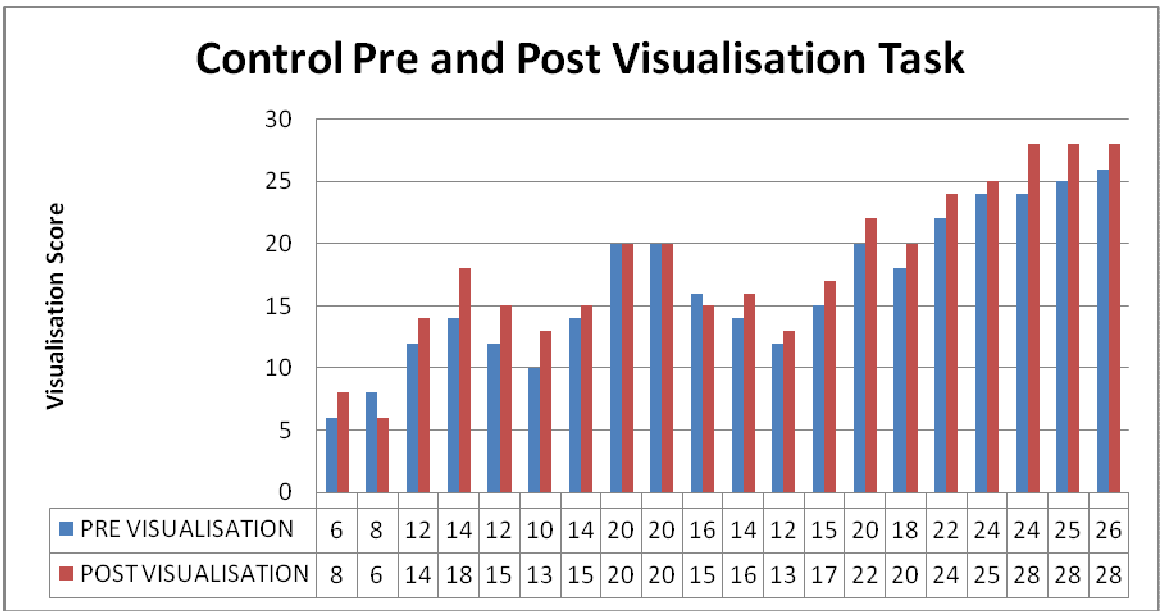


Figure 9: Pre and Post Visualisation Score – Control Group

Figure 9 shows the pre and post test score results for the control test on Munro's Visualisation Task – Group Administration. Students RR, SS, DD, EE and FF showed the most improvement, ranging from 3 to 4 points. Students BB, HH, II and JJ showed no growth or a decline in score. Students in the control group had an average score of 16.6 in their pre test, and an average score of 18.25 on the post test.

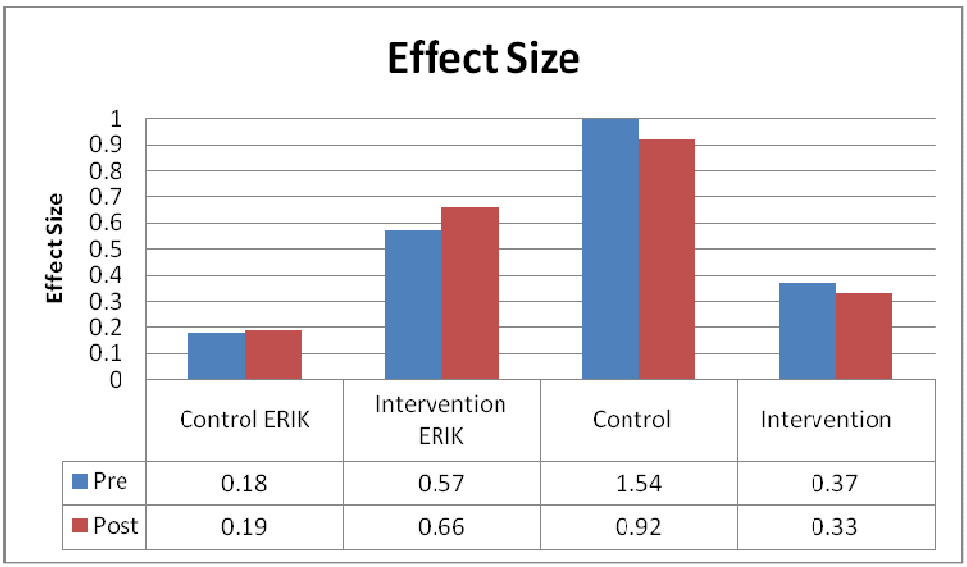


Figure 10: Effect Size

Figure 10 Shows the effect size for pre and post testing of students within the control and intervention group who are current participants of the ERIK program compared to the effect size for the intervention and control groups. This graph shows ERIK participants within the intervention group have a large effect size.

DISCUSSION

This study was designed to test the hypothesis that the explicit teaching of visualisation to competent year 5/6 readers would improve comprehension results. Comparisons between the control and intervention group indicate support for the hypothesis. Post testing results for comprehension using TORCH and visualisation results using Visualisation Task – Group Administration as developed by Munro (2005) showed a greater improvement by the intervention group, compared to the control group. Although not considered statistically significant, intervention students showed an average improvement of 3.8 points, while the control group showed an average improvement of 3.15.

More significant comparisons were discovered when analysing results of ESL students, Literacy intervention students and students receiving EMA funding.

Students from an English as Second Language background in the intervention group showed significant improvement in comprehension skills when compared to ESL students in the control group. The effect size for ESL participant in the intervention group was 0.38, considered by Hattie (2009) to be a medium effect size, while the effect size for ESL participants in the control group was 0.17, considered to be small. This result suggest the explicit teaching of visualisation for ESL students is a good strategy for improving their comprehension results.

Students who are currently participating in literacy intervention through the ERIK program, in both the control and intervention group showed the greatest improvement of all sub groups. These students have previously been exposed to the R.I.D.E.R. strategy and were able to recall the meaning of the acronym and how to use the strategy. Students participating in literacy intervention in the intervention group showed an average improvement to their TORCH comprehension score or 6 points, they produced an effect size of 0.66, suggesting a statistically significant gain in comprehension skills. However when questioned on their current use of visualisation, these students admitted to not regularly using it to help with comprehension. This suggests that although the students are familiar with the strategy they are not yet using the strategy automatically.

Results indicate the explicit teaching of reading comprehension strategies such as visualisation should be undertaken as part of a literacy program. Anecdotal records indicate that many students were using visualisation automatically when reading for pleasure, but had not considered using this strategy to help in comprehension tasks. As such the explicit teaching of visualisation is necessary. This supports research by Douville and Algozzine (2004) who suggest that although good readers use visualisation automatically, without explicit instruction only some students will implicitly use visualisation strategies.

Although improvement was shown by all intervention students on the Visualisation Task, many students were simply re ordering the words in the text. This could suggest limitations in students' ability to provide synonyms for words. As such, a teaching sequence on paraphrasing and synonyms could be introduced prior to the introduction of visualisation strategies.

In both the control and intervention groups, the students who initially scored the highest displayed the least growth following intervention. Students L, M, N, O, P, Q, R, S and T scored above the group average on the TORCH pre test, only improved an average of 1.1 points following intervention. This is much lower than the group's average improvement of 3.8 points. This suggests that although the explicit teaching of visualisation in a whole class setting is

successful in improving comprehension results, the strategy is more beneficial to students who display below average comprehension skills. This supports research by Duke and Peason (2004) who suggest visualisation may already be used by good readers and that the teaching of visualisation is therefore most beneficial to poor readers. This in turn suggests teachers should target their teaching based on testing results. Many teachers assess student comprehension ability, but at the upper primary level many teachers do not continue to teach these skills.

The limited growth by above average students could be due to the limitations in text used for this study. As the intervention was delivered in a whole class setting many of the texts used were year 4 level texts. Students of above average standards may not have found the texts challenging enough and as such were disengaged from the lessons. The TORCH test used (The Swamp Creature) was levelled as year 4 – 6 and again may not having provided above average students with the opportunity to show much growth or development.

A further limitation to teaching this strategy in a whole class setting is that it can be difficult for the teacher to monitor the descriptions of each student and as such can miss the opportunity to correct students and provide feedback. This can result in students forming incorrect images and therefore being unable to recall the correct information in a comprehension activity.

Further research into the impact of explicit teaching of visualisation to ESL and literacy intervention students should be undertaken. Results indicated these two groups performed the best following intervention, but due to the limited sample size these results would need to be replicated amongst a larger group to be considered significant.

This current study also focussed on the use of fiction texts. Further study should be undertaken into the impact of visualisation on non-fiction texts. Teaching could continue with non-fiction texts. Students in upper primary and lower secondary are exposed to a higher percentage of non-fiction texts than fiction, and as such non-fiction texts should be included in a teaching sequence relating to visualisation.

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R

Read

I

Image

D

Describe

E

Evaluate

R

Read

On

Read 	Read 	Read 	Read 
Image 	Image 	Image 	Image 
Describe 	Describe 	Describe 	Describe 
Evaluate 	Evaluate 	Evaluate 	Evaluate 
Read On 	Read On 	Read On 	Read 

APPENDIX C

R.I.D.E.R. RECORD SHEET

TEXT: NAME:

Visualising task: Group administration

Student work sheet

Student name: _____ Grade: _____ Date: _____

Sentence	Teacher	Your try
A toy maker went to live in another city.	This person who makes toys moved to a new town.	
He wanted to find a place to live.		
He needs to get to know the city.		
After he bought a map he looked for a bus.		

	Sentences	In my mind I see...
1.	The young man and his friend rode on the bike.	
2	They were enjoying themselves.	
3	The birds were singing in the trees.	
4	The two friends chatted. They were not paying attention to anything.	
5	They were supposed to watch where they were going.	
6	The track became narrow and twisted.	
7	Suddenly it began to slope down and the bike sped up.	
8	People in the park watched and gasped as it went faster and faster.	
9	The two riders weren't smiling and chatting any longer.	
10	Now they were gripping the bike as tightly as they could, showing fear on their faces.	
11	People in the park had stopped what they were doing and started to yell, "Stop" or "Be careful."	
12	All of a sudden the path goes around a sharp curve.	
13	Ahead they see in the middle of the path, a huge stone.	
14	The closer they get to it, the more enormous	

	it becomes.	
15	As they fly towards it, their hearts are beating louder and louder and they try to take avoidance action.	
16	There is loud thud, the front wheel crumples and the young couple is airborne, flying over the obstacle to the grass on the side of the path.	

Scoring System

At the completion of reading (or listening to) each sentence, ask the student to describe the image they have in their mind in his/her own words.

Give 2 points for a description/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, or the words have just been reordered.

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 E

TEACHING SEQUENCE

SESSION ONE

Introduce the Strategy

Materials: A4 paper
Grey lead pencils

Today we are going to do something to help you remember what you read. It is called visualising. What other words do you know that sound like visualising? What do you think this strategy might involve? Try to illicit from students responses such as visual – an in something you see, or an image.

Visualising is when you make a picture or movie in your mind of what you have just read, to help you remember details about the text.

I want you to think about what you ate for breakfast this morning. Picture what you ate, what the table looked like, what the plate/bowl looked like.

Model a good response, beginning with the script, 'In my mind I see…'

Ask student volunteers to describe their 'breakfast'. If students have left out details such as what the bowl/plate looked like, ask for more details. Ensure there is sufficient detail in the descriptions that someone could draw what was being described.

Ask students to make a picture in their mind of a special experience such as a recent Christmas celebration, birthday or family celebration. Using the white A4 paper, ask students to draw a sketch and to write what they see in their mind. Explain to students it is not an art activity, and the illustration is to help prompt them with their writing.

Once students have completed this task, ask them to share their description with a partner. Ask for volunteers to share with the class. Again, ensure there is adequate detail in the student's description.

Review with students what we do when we visualize, and how to describe what they see (In my mind I see..)

Materials: R.I.D.E.R. Prompt posters (Appendix A)

R.I.D.E.R. Bookmark (Appendix B)

R.I.D.E.R. Record Sheet (Appendix C)

Text: The Coat

Review the previous session. Ask students to recall what one of their classmates had for breakfast the previous day.

Introduce R.I.D.E.R.: Write the acronym R.I.D.E.R on the board. Ask students what they think each step might mean.

As students guess (or you tell them) what each letter stands for, present students with the prompt poster for that letter. Add an action to each word eg: make a book opening and shutting gesture for 'Read', point to your head for 'Image', make a speaking gesture for 'Describe', a ticking gesture for 'Evaluate' and a reading gesture for 'Read On'.

Write a description of each stage of the strategy as you introduce them to students.

R – Read – Read a passage of a text

I – Image – Create an image in your mind of what you have read/heard

D – Describe what you see in your mind using the sentence, 'In my mind I see..'

E – Evaluate – does your description match the text?

R – Read On – Continue reading the next passage.

Remember to link the action to the words as you go.

Ask students to repeat back to you what each letter means, displaying the action as they do.

Demonstrate how to use R.I.D.E.R. on a short paragraph.

Ask students to describe the sequence and the actions.

Materials: R.I.D.E.R. Prompt Posters

Student Bookmark

Record Sheet – Student

Text – The Coat

Before Reading: Review with students the acronym R.I.D.E.R. and what each word means, and the associated action.

Ask students to recall the text they heard yesterday.

During Reading: Read the first sentence of the text, 'The Coat' to students. Model for them the stages of R.I.D.E.R. Eg – In my mind I see a young girl rushing to get out of the classroom after the bell has rung. Ask students to record in words and pictures on their record sheet what they see in their mind. Reminding students again that the sketch is simply to help them recall the passage.

Ask students to share their description with a partner to evaluate how well their description matches the passage students heard.

Ask students to share their description. Use this to model the evaluate stage – eg: did someone say 'boy' instead of 'girl', did they have the wrong location? Etc

Continue this process with the remaining sentences in the first paragraph. Taking care to review the student descriptions at each stage, asking a range of students to share their descriptions with the class.

After Reading: Review with students the R.I.D.E.R. acronym and accompanying actions. Ask students to recall the story they have just heard.

SESSION FOUR AND FIVE

Materials: R.I.D.E.R. Prompt Posters

Student Bookmark

Record Sheet – Student

Text – That's What Friends Are For – Indian Folk Tale

Before Reading: Review with students the acronym R.I.D.E.R. and what each word means, and the associated action.

Ask students to recall the text they heard yesterday.

Discus with students how they were able to recall so many details, what strategy did they use?

During Reading: Introduce students to the text, 'That's What Friends Are For'.

Discuss with students any language they may not be familiar with

Explain to students that they are continuing to practice the R.I.D.E.R.

strategy but will be listening to longer passages of text.

Begin by reading the first couple of sentences together. Model your description beginning with , 'In my mind I see…' Ask students to record on their record sheet what they see in words and pictures. Again explaining that it is not an art activity and that the illustration should be a simple sketch.

Students evaluate their description with a partner.

Ask a selection of students to share their description with the class, checking for accuracy in their description.

Repeat this process using increasingly longer passages of text if the student's seem capable. If students require more support, continue to read only a few sentences at a time.

After Reading: Assess student understanding of the text by asking a range of literal and inferential comprehension questions, and asking students to explain how they knew the answer. Questions could include, What colour was the bear? Was it climbing up or down the tree? How did the mean feel about returning to his home? Was he successful in business?

SESSION SIX AND SEVEN

Materials: R.I.D.E.R. Prompt Posters

Student Bookmark

Record Sheet – Student

Text – The Clutching Hand

Before Reading: Review with students the acronym R.I.D.E.R. and what each word means, and the associated action.

Ask students to recall what they can remember of 'That's What Friends Are For'.

During Reading:

Introduce students to the text, 'A Little Election.

Discuss with students any language they may not be familiar with.

Explain to students that they are continuing to practice the R.I.D.E.R.

strategy but will be listening to longer passages of text.

Begin by reading the first two pages. Model your description beginning with , 'In my mind I see…' Ask students to record on their record sheet what they see in words only. If some students are finding this too difficult, allow them to continue drawing and writing.

Students evaluate their description with a partner.

Ask a selection of students to share their description with the class, checking for accuracy in their description.

Repeat this process using increasingly longer passages of text if the student's seem capable. If students require more support, continue to read only a short passage at a time.

After Reading: Assess student understanding of the text by asking a range of literal and inferential comprehension questions, and asking students to explain how they knew the answer.

SESSION EIGHT AND NINE

Materials: R.I.D.E.R. Record Sheet

The Twits – copy of text enlarged, and individual copy for students

R.I.D.E.R. Prompt Posters on display, but not explicitly referred to

Before Reading: Ask students to write a summary of 'A Little Election' using their images to help recall details of the text. Ask students a range of comprehension questions to evaluate the retention of images.

During Reading: Introduce students to the text, 'The Twits.

Discuss with students any language they may not be familiar with

Explain to students that they are continuing to practice the R.I.D.E.R.

strategy but will be reading paragraphs on their own.

Ask students to read each paragraph, one at a time. Students to record their image on their record sheet and self evaluate the accuracy of their description.

Periodically ask a selection of students to share their description with the class, checking for accuracy in their description.

Students to ask each other questions about the text to check practice using visual images to recall details regarding comprehension.

After Reading: Assess student understanding of the text by asking a range of literal and inferential comprehension questions, and asking students to explain how they knew the answer.

SESSION TEN

Materials: R.I.D.E.R. Record Sheet

Student reading text

Before Reading: Review with students what was learned at the previous session. Discuss the ease or difficulty of answering comprehension questions when using visualisation to recall details.

During Reading: Students read their current class reader and practice using the visualisation strategy – R.I.D.E.R. This gives students an opportunity to work at their own pace, and on their own choice of text.

After Reading: Ask students to share their opinions of the R.I.D.E.R. strategy – would they use it again? When could they use it? What situations would it be good for?

Name	Intervention =0, Control = 1	Age in MONTHS	Gender 0=Male 1= Female	Years of Schooling	ESL No=0 Yes= 1	EMA No = 0 Yes = 1	LNSLN funding 0=SLD 1=ID 2=Asp	Earlier Inteventio n No=0 RR=1 Bridges=2 ERIK=3…	TORCH raw PRE	TORCH raw POST	TORCH Score PRE	TORCH score POST	Visualisation PRE	Visualisation POST
A	0	129	**0**	3	1	1		3	2	8	25	37	8	14
B	0	117	**0**	6	1	0		3	7	20	35	54	12	16
C	0	151	**1**	7	0	0	0	3	9	7	38	35	6	8
D	0	120	**1**	6	1	0	1	1	10	12	39	41	8	12
E	0	118	**0**	6	0	0		0	12	17	42	48	14	20
F	0	131	**1**	6	0	0		0	12	20	42	54	16	27
G	0	129	**0**	6	1	0		0	15	20	45	54	16	20
H	0	124	**1**	7	1	0		0	16	18	47	50	16	24
I	0	124	**1**	7	1	0		3	17	14	48	44	8	18
J	0	137	**1**	7	0	1		0	17	20	48	54	18	28
K	0	137	**0**	6	1	1		0	18	20	50	54	18	26
L	0	136	**1**	6	0	0		0	19	22	52	60	16	28
M	0	132	**0**	6	1	1		0	20	20	53	54	16	26
N	0	145	**1**	7	1	0		0	20	20	54	54	18	20
O	0	130	**0**	6	1	0		0	20	21	54	57	18	26
P	0	136	**1**	7	1	1		0	22	24	60	77	16	28
Q	0	124	**0**	6	0	0		0	22	19	60	52	14	24
R	0	147	**0**	7	0	0		0	23	23	67	67	20	25
S	0	129	**1**	6	0	0		0	23	23	67	67	22	28
T	0	141	**1**	7	1	0		0	24	23	78	67	24	28
Mean Average									16.4	18.55	50.2	54	15.2	22.3
Average pre - average post									2.00		3.80			

Standard Deviation								6.02	4.77	12.34	10.40	4.79	6.04
Average Standard Deviation								5.40		11.37			
Effect Size								0.37		0.33			

AA	1	142	**0**	6	0	0		1 3	3	2	28	25	6	8
BB	1	134	**0**	6	1	0		3	4	7	30	35	8	6
CC	1	130	**1**	6	1	0		0	10	21	39	57	12	14
DD	1	118	**1**	6	1	1		3	12	14	42	44	14	18
EE	1	127	0	6	1	0		0	18	21	50	57	12	15
FF	1	136	**1**	7	0	0		0	19	22	51	60	10	13
GG	1	120	**0**	6	1	0		0	19	20	52	54	14	15
HH	1	135	**1**	6	0	0		0	19	24	52	77	20	20
II	1	133	**0**	6	1	0		0	19	20	52	54	20	20
JJ	1	129	**1**	6	0	0		3	20	22	54	60	16	15
KK	1	138	**1**	7	0	0		0	20	22	54	60	14	16
LL	1	137	**1**	6	1	0		0	20	21	53	57	12	13
MM	1	136	**0**	7	1	0		0	21	23	56	67	15	17
NN	1	118	**1**	6	0	0		0	22	23	60	67	20	22
OO	1	137	**0**	6	1	0		0	22	22	60	60	18	20
PP	1	132	**1**	7	1	0		0	22	21	60	57	22	24
QQ	1	137	**0**	7	0	0		0	22	21	60	57	24	25
RR	1	135	**1**	6	1	0		0	23	22	67	60	24	28
SS	1	142	**0**	7	1	1		0	23	21	67	57	25	28
TT	1	137	**1**	7	1	0		0	23	19	67	52	26	28
Mean (average)									18.05	19.40	52.70	55.85	16.6	18.25
Average pre-average post									1.35		3.15			
Standard Deviation									0.50	1.26	3.50	3.32		

Average Standard Deviation									0.88		3.41			
Effect Size									1.54		0.92			