FOCUSING ON EXPLICIT VOCABULARY INSTRUCTION WHEN USING READ-ALOUDS TO YEAR TWO STUDENTS IMPROVES THEIR COMPREHENSION

Abstract

Many students in lower primary grades who have a restricted vocabulary have declining comprehension in later primary years. Word knowledge is highly related to comprehension. Vocabulary size is a predictor of reading comprehension. If students don't understand the words in the text, they have difficulty comprehending the ideas in the text. When struggling readers have limited access to word meanings they experience difficulties in making connections with their existing background knowledge, they cannot reason thoughtfully about the text nor make coherent inferences. As they tend to read simpler books they have limited exposure to print, resulting in lost opportunities to catch up with their reading abilities. Research into explicit vocabulary instruction demonstrates improvements in vocabulary development and increases in the comprehension of texts. Explicit vocabulary instruction enables struggling readers to make connections with their past experiences and allows them to practise and apply word knowledge and so learn and retain new vocabulary which is vital in their reading development.

The hypothesis of the study is that focusing on explicit vocabulary instruction when using read-alouds to year two students improves their comprehension. Research on the development of comprehension skills suggest that enhancing read-alouds with explicit vocabulary instructions contributes to comprehension development. The use

of vocabulary building tasks together with listening comprehension was suggested to build comprehension.

The study compared the results of two groups, a control group and an intervention group of students both demonstrating a lack of depth in comprehension. The intervention students were taught specific vocabulary strategies and skills including synonym use, along with retelling strategies through read-alouds in a series of lessons that were scaffolded from more teacher directed group discussions to more independent student responses. Results indicated support of the hypothesis as the average comprehension improved significantly in the intervention group.

The results suggest that incorporating vocabulary building strategies and read-alouds is a successful strategy which should be taught explicitly to develop student's comprehension skills.

Introduction

Throughout primary school, teachers endeavor to develop phonological awareness through phonics instruction so that students become efficient decoders.

This supports them in becoming fluent readers and as a result they have more cognitive resources to assign to the comprehension of a text. However despite the teaching of reading strategies many children fail to comprehend texts efficiently and are unable to spontaneously retell or answer questions related to the text. Comprehension is a complex process and is influenced by a number of factors. Research has shown there is a definite relationship between reading comprehension and vocabulary knowledge. (Baumann & Kameenui, 1991; cited in Munro 2002) Children's ability to learn vocabulary is crucial for improving comprehension and reading development. Munro 2002 referred to words as 'building blocks' of knowledge.

Joshi (2005) notes that a well developed meaning vocabulary is a prerequisite for fluent reading and is a critical link between decoding and comprehension. He makes the point that exposure to words in early years influence students later vocabulary knowledge so it is important that students know many words and use these extensively. He emphasizes that teachers should encourage students to use numerous receptive vocabulary words when speaking and writing in order for the students to remember words and expand their vocabulary.

Studies have shown that poor vocabulary development in early years affects reading comprehension in later years (Dickinson & Tabors 2001; Hart & Rinsley, 1995 and White, Graves &Slater, 1990 cited in Joshi 2005). Rupley &Nichols (2005) state that when readers and in particular struggling readers have limited access to word

meanings they experience difficulties in making connections with their existing background knowledge. They cannot reason thoughtfully about the text nor make coherent inferences. In fact Nagy & Scott (2000) as reported in Boote (2006) stated that children must be able to understand the meaning of 90-95% of words in a text to totally understand its content.

Reading is the main source of vocabulary development and research indicates that struggling readers have below average vocabularies, which can often attribute to limited exposure to print, resulting in lost opportunities to catch up with their reading abilities Rupley & Nichols (2005). Vigorous readers however read more, comprehend more deeply, continue to read and improve their vocabulary. Joshi (2005) Vocabulary development is continuous and provides the foundation for vocabulary growth and it is the learner's experiences that foster their language potential. Struggling readers however, often lack experiences associated with the texts they come across at school (Rupley & Nichols 2005). Therefore it is extremely important that these students receive explicit vocabulary instruction along with teacher support (Beimiller, 2003; cited in Rupley & Nichols 2005). This enables the students to make connections with their past experiences and allows them to practise and apply word knowledge and so learn and retain new vocabulary which is vital in their reading development (Rupley & Nichols 2005)

Munro (2002) stated that when students learn words explicitly they are more likely to understand the topic. He suggests that in teaching word meanings that students should use the context in which the word is used to work out its meaning instead of a dictionary and that they should check their understanding of a word's meaning through examples and suggest what the word doesn't mean. He emphasises that

students require help to learn word meanings through explicit context relevant teacher processes.

Hickman, Pollard-Durodola, &Vaughn (2004) note that teacher read-alouds provide frequent opportunities to enhance literacy through effective vocabulary development practices. They claim that read-alouds assist students to build and extend vocabulary and content knowledge while at the same time expanding their listening comprehension skills and oral expression. Similarly Blaachowicz & Obrochta (2005) note that children's story books have less familiar vocabulary than everyday speech and that listening to these books presents students with new concepts and vocabulary taking them beyond their existing oral vocabularies. Furthermore Sanmtoro, Chard, Howard & Baker (2008) stated that for those children who struggle with decoding skills or who are developing fluency, read-alouds provide a great opportunity to teach comprehension strategies. In a read-aloud, the teacher does the decoding, so the children are free to think and explore new ideas or concepts. A growing number of studies have confirmed that having a scaffolded approach to read-alouds maximizes students learning while other studies identified that explicit vocabulary instruction in read-alouds is productive in vocabulary learning (Blaachowicz & Obrochta 2005). Read-alouds provide an opportunity to model and discuss the steps or processes at the oral level. According to Sanmtoro, Chard, Howard & Baker (2008) read-alouds can provide a 'teacher centered' approach for introducing and talking about target words. Read-alouds can also be used for text based discussions about words as they provide contexts and opportunities to learn new words before students can read them independently. Also vocabulary can be taught directly with read-alouds as well through discussion of words within their context of the story.

Hickman, Pollard-Durodola, &Vaughn (2004) identified the following benefits of read-alouds stating that the thematic selection of texts offers students many opportunities to use and extend their vocabulary and comprehension skills as well as developing depth and content knowledge as each book is read. They also explained that dividing the book into smaller sections reduces the number of high utility vocabulary words which can be focused on together with their meaning. They even suggested that in doing this it requires the student to maintain and develop story and content comprehension and vocabulary knowledge. In summary they noted that storybook read aloud practice offers elements of effective vocabulary instruction, to promote oral language development and listening comprehension necessary for many struggling readers to acquire new skills.

The work of Sanmtoro, Chard, Howard & Baker (2008) extends this practice even further by including instruction to improve comprehension skills and strategies, along with vocabulary development and content to address subject areas. They claim that their research resulted in higher levels of comprehension and vocabulary knowledge and accurate as well as in depth information in retellings.

This present investigation aims to examine the effect of explicitly teaching vocabulary building strategies, through teacher read-alouds, to a small group of children in grade two, with a particular focus on the use of synonyms as a skill to aid the building of word vocabulary. This will assist them to develop their understanding of the meaning of key words within a text. These students are able to decode at an age appropriate level, but do not display good understanding of texts and experience difficulties in retelling a text. The students do not demonstrate the ability to use strategies to assist them in their comprehension, often reading without meaning or learning from the text. Earlier researchers have not examined the effect of developing vocabulary through

read-alouds and scaffolding word learning by focusing attention on specific vocabulary, as well as questioning and probing students to use the new vocabulary and relating it to what they already know. The hypothesis is that focusing on explicit vocabulary instruction when using read-alouds to year two students improves their comprehension.

Method

Design: The study uses a case study OXO design. Gains in vocabulary knowledge and comprehension, following explicit teaching of the use of synonyms and vocabulary building strategies through read-alouds, were monitored for second grade students. The study compares two groups of students, a control group and an intervention group.

Participants: The students chosen for this study are currently in Year two, with ages ranging from 7-8 years. The Intervention students were from one classroom which was a straight year two level while the control students were from another classroom which was a composite one /two level. All of these students were generally able to decode text accurately, but have difficulties in comprehending the text. The students were chosen based on their literacy Advance Data. Students were administered the PM Benchmark running record assessment at the beginning of the year. Those who had remained at a text level between 18 and 22 over a period of time were targeted for this project as they had failed to progress with their reading. They were becoming slow, reluctant readers due to their inability to gain meaning from text and the limited vocabulary they possessed.

Information on Intervention and Control Students

Students							
	Age	Gender	Integration	Previous Intervention	ESL	Record of Oral Language	Text Level
Intervention Student A	7yrs 8mths	Female	No	Yes	Yes	40	21
Intervention Student B	8yrs 1mth	Female	No	No	No	35	22
Intervention Student C	7yrs 1mth	Male	No	No	No	25	20
Intervention Student D	7yrs 7mths	Male	No	No	No	31	20
Control Student E Connor	7yrs 6mths	Male	No	No	No	33	18
Control Student F	7yrs 4mths	Male	No	No	Yes	39	20
Control Student G	7yrs 7mths	Male	No	No	No	21	20
Control Student H	8yrs 2mths	Male	No	No	Yes	29	18

<u>Materials</u>

The Pre and Post Assessment materials included:

Neale Analysis of Reading Ability (3rd Edition, 1999) was used to find the reading age of reading accuracy and reading comprehension.

Synonym Task (Munro, 2006) was used to test the students' ability to generate synonyms. The first 15 synonyms only were used as the test was designed for year 3-6 students and therefore the number of items administered needed to be reduced.

PROBE-Prose Reading Obsevation Behaviour and Evaluation of

Comprehension (Parkin, Parkin& Pool, 2002) The PROBE text used was the fiction text; "Stormy Night"-7 to 8 years. This was also used to for spontaneous and cued retelling analysis during pre and post tests.

During the Intervention

Picture Books used in read-alouds:

Elmer And The Wind By David McKee (Fry's Readability level 2) Follow Me By Rick Searle and Bronwyn Searle (Fry's Readability level 2) The Rain Came Down By David Shannon (Fry's Readability level 3)

Teaching Tools:

Word Wall to display target words and their synonyms.

Flashcards with individual target words.

Pictures related to target words.

Sentences with target words.

Cloze activity sentences from the text. These were used to establish meaning of target words and understanding of text.

Synonym Game used to establish knowledge of target words.
Sorting Game to establish knowledge of synonyms.
Word Maps to gain knowledge of what students know of what the target means, doesn't mean, what it looks like and how it could be used in a sentence.
Students Own Picture Dictionary to take home and discuss with parents.
Students self script for working out the meaning of a word.
Sock puppets used to retell story in a role-play.
Students self script for retelling a story.

Procedure

The pre and post test for all eight students firstly included the Neale Analysis (3rd edition, 1999) forms one and two to acquire age equivalents with particular attention to the accuracy and comprehension elements. After an initial practice passage was read by the student a running record was administered on a passage to note reading errors. Comprehension questions are asked of the passage read and the time was recorded. This process continued with following passages until fifteen errors were recorded at which time testing ceased. Calculations were then made to establish raw score standard score summaries.

The second test administered was the Synonym Task (Munro, 2006) to measure the students' ability to generate synonyms. Students were read only fifteen out of the twenty nine target words (as the test was designed for students from grade three upwards) for which they were given time to write as many synonyms as possible. Responses were scored according to their words matching the target words. The last pre and post test administered was the Comprehension Analysis (Munro- Spontaneous and Cued Retelling Strategy). A PROBE fiction text; "Stormy Night"-7 to 8 years was

used for this purpose as it was a fiction text like those to be used in the teaching procedure and it was also based on the same theme of weather that all grade two students at the school were investigating as part of their inquiry unit. These retells were scored according to Munro's Spontaneous and Cued Retelling Strategy. Students were tested individually over a two day period in a withdrawn setting for both pre and post testing. The teaching sessions were conducted during 'Reading Rotation Task Time' in a class of twenty eight students where the four intervention students were in one group. This teaching group received ten 30-45 minute sessions 3 times a week for approximately 4 weeks. (See Appendix 1.) During this time the whole class focus was on building vocabulary knowledge. Parents were instructed in the read aloud process and used story books based on the weather when interacting with groups. Other groups used word webs, played synonym word games and other vocabulary building activities based around stories they had read on the weather. The intervention group role played two of the read aloud books to the class after which words and synonyms were brainstormed and used in creative writing by all the students in the class.

The teaching procedure was based around John Munro's ideas and activities for teaching vocabulary development. The main emphasis was teaching the meanings of words through target words by introducing the word in its context, displaying pictures of the word, linking actions to the word, suggesting synonyms and antonyms for that word, using the word in other contexts and using the word in sentences to illustrate its meaning. The meaning making motor, MMM acronym was used to assist students in recalling what steps were required when working out the meaning of a word. Students need to be taught how to work out the meanings of new terms for themselves

by using what they know and the context of the word. Students require activities in which they improve their 'word meaning building' ability.

Read-alouds were used to purposefully incorporate vocabulary instructions into the reading sessions and to develop oral vocabulary through retelling. The students' recall of ideas through their retell was used as a measure of their listening comprehension skills. Self scripts were also used to remember how to retell a story. The aim of the project was to scaffold instruction from more teacher directed group discussion to more independent student responses. Sessions 1-3 emphasized teacher demonstration of vocabulary tasks using think-alouds, models, and explanations with particular reference to working out the meanings of words using the MMM script. (See Appendix 2.)

In sessions 4-6 the emphasis was on the demonstration and use of the strategy of retell using a script for retell, together with the development of oral vocabulary. (See Appendix 2.)

During these lessons the aim was to guide student responses through teacher questioning, and eliciting answers to the meaning of target words and recalling of ideas with prompts and support where needed. Sessions 7-10 emphasized guided and more independent student responses to word meanings and retell of the story with less teacher support and prompting. The intervention group was taught as a teacher pullout group for 45 minutes during normal literacy reading rotations approximately three times a week over a four week period. The control students participated in their regular classroom program and after the four week period both the intervention and the control group were assessed again using the same materials and procedures used during pre-testing.

Results

Group Results

The results indicate support of the hypothesis that focusing on explicit vocabulary instruction when using read-alouds to year two students improves their comprehension.

Neale Analysis Results

Gains made by the intervention students were greater all over than those of the control students in all the Neale Analysis Tests. (See appendix 3.) These are demonstrated through the comparison of the average pre and post- testing scores in Figures 1, 2 and 3.

The focus of this study was to assess students' comprehension and accuracy, however the use of the Neale Analysis led to the added benefit of testing the students reading rate which gave some incite as to how these students approached reading. There was an overall improvement of 12.2% in the average comprehension scores of the intervention group ranging from 84% to 94.25% with all students showing increases in their percentile ranks except for intervention student B where the score remained the same. (Figure 4) In contrast the control students' average scores for comprehension decreased by 4% ranging from 67.25% to 64.25%. It should be noted however that control students demonstrated lower comprehension scores in pretesting. (Figure 5) There was an overall average improvement of 4% in the accuracy of the intervention group compared to a decrease of 2% in the control group. (Figures 6 and 7) The rate percentile decreased slightly in both groups which might indicate that most of the students found the texts in the form 2 section of the Neale Analysis more difficult to read than those in form 1. (Figures 8 and 9) The standard deviation for the intervention group decreased from pre to post test in comprehension, accuracy

and rate demonstrating that the average increases in these areas are significant for all intervention students. Whereas in the control group, the standard deviation increased in comprehension, accuracy, and rate. (See Appendix 4.)

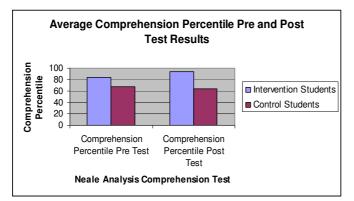


Figure 1

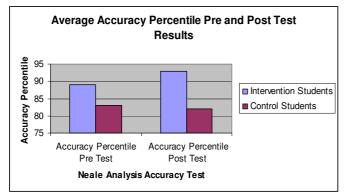


Figure 2

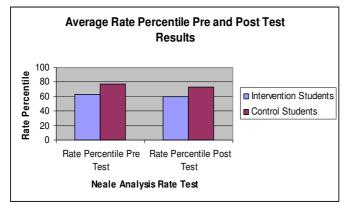


Figure 3

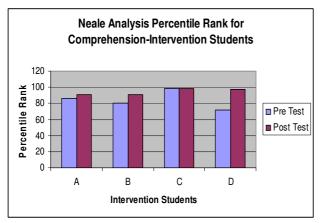


Figure 4

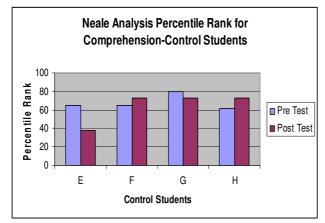


Figure 5

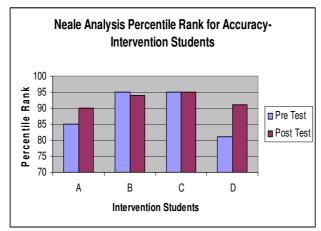


Figure 6

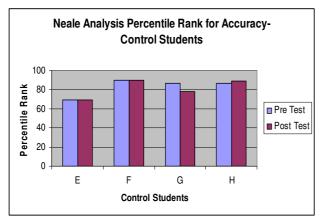


Figure 7

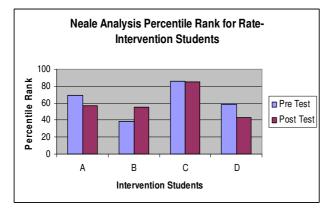


Figure 8

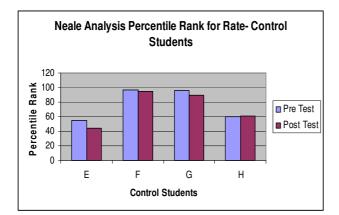


Figure 9

Synonym Task Results

In the pre test all eight students had difficulty contemplating synonyms for the words being tested. Results indicate that all of the intervention students made significant gains in their ability to produce synonyms. (Figures 10 and 11) The control group made less improvement in their ability to produce synonyms. (Figures 10 and 12) The average test results demonstrate a 159% increase, ranging from 20.25% to 52.5% in the intervention group compared to an overall increase of 41% in the control group where the range was from 18.75% to 26.5%. (See Appendix 5) Even though this increase in the average for the intervention group was significant the standard deviation increased slightly by 1.4% from pre to post test indicating that this strategy had greater impact on some intervention students than others. In the control group the standard deviation almost doubled from 8.7% to 15%. (See Appendix 4)

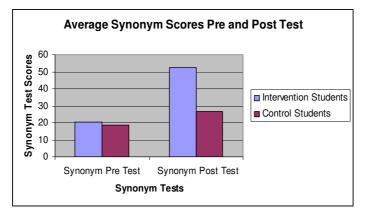


Figure 10

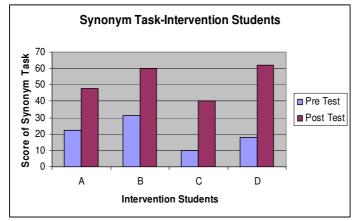


Figure 11

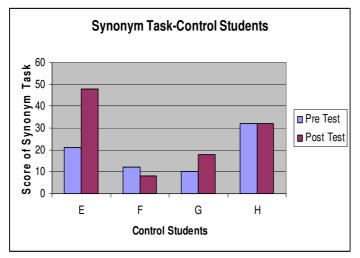


Figure 12

Spontaneous and Cued Retell Results

All students showed an increase in recall from pre to post test which is not surprising as they had some familiarity with the text. (Figures 13 and 14 and Appendix 6) However there was a significant improvement in the results of the intervention group in spite of the fact that their average recall was lower than that of the control group in the pre test. (Figure 15) Their overall average increase from pre to post testing was 51% ranging from 53% to 80% for the intervention group compared to 6% in the control group where the range was from 68% to 72%. The standard deviation showed a decrease from pre to post testing for the intervention group which indicated that the increase in the average recall of ideas is significant for all intervention students. In the control group the standard deviation did not change which showed there was no shift in the understanding of the group. (See Appendix 4)

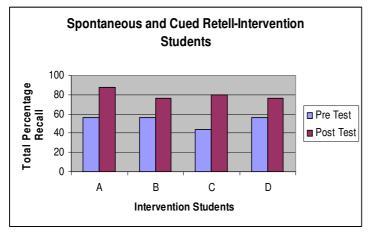


Figure 13

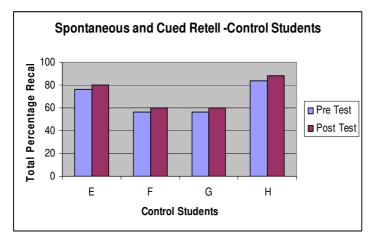


Figure 14

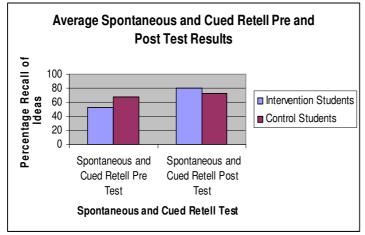


Figure 15

These results indicate that explicit teaching of vocabulary development strategies, using synonyms, increases the student's ability to generate synonyms. Also teaching students how to retell a story, using a narrative structure and inferential questioning, increases their ability to recall ideas.

Both of these strategies proved to be significant in the comprehension gains of the intervention group.

Individual Student Results

Student A

Student A made gains in most areas. (See figures 16, 17 & 18.) Her largest gain was in spontaneous and cued retell which was significant as she is quite hesitant to participate in most class discussions but really enjoyed the interaction with her peers in the intervention group. Student A was in reading recovery last year and came into class on Level 23 and has remained on that level for a period of time. She is also an ESL student which may account for some of the difficulties she has encountered in reading. When playing the vocabulary games she was quite competitive trying to recall as many synonyms as possible which would reflect her increase in her post synonym score. Her results in comprehension showed an increase. Her accuracy improved slightly however her rate dropped which may be due to the fact that she was using her MMM script to work out meanings of unknown words.

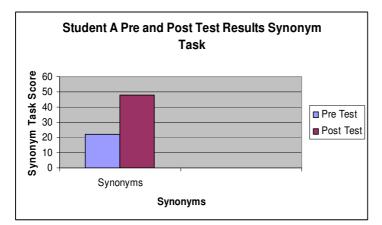


Figure 16

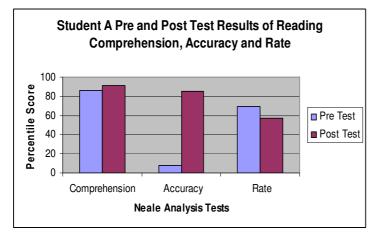


Figure 17

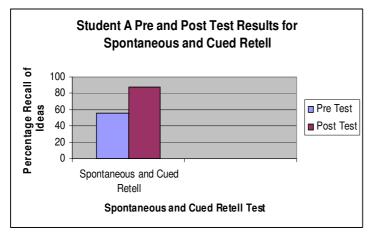


Figure 18

<u>Student B</u>

Student B made improvements in all areas except for accuracy. (See figure 19, 20, & 21.) This is not significant considering her pre test was the highest of all the students and the decrease was quite small. Student B lacks self confidence however she was

more comfortable and eager to participate in the intervention group and was one of the main contributors. She was able to make links from her present knowledge to new vocabulary and was one of the highest scorers in the post test synonym tasks showing an increase of nearly 50%. She was able to recall a large number of ideas from the read-alouds and took a major part in the role-play. She was keen to share her knowledge with the rest of the class and as a result of this interaction her comprehension scores in post testing increased as did her reading rate.

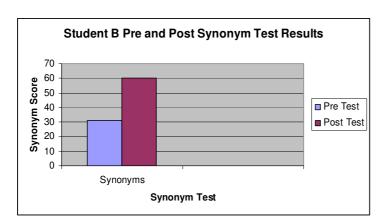


Figure 19

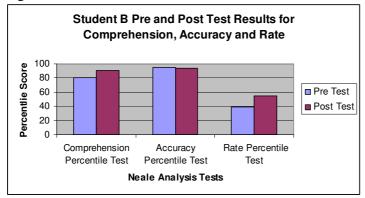


Figure 20

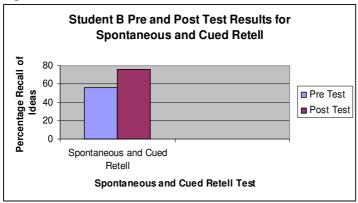


Figure 21

Student C

Student C didn't make as many gains in scores as the other intervention students due to the fact that his pre test results were high in comparison to the other students. (See figure 22, 23, &24.) The areas that demonstrated greater improvement were the synonym task with an increase of 10% to 40% in pre and post testing and spontaneous and cued retell with an increase of around 40% to 80%. Student C's reading has improved recently jumping from a Level 21 to a 27. This may be due the oral language component of our intervention group. Student C rarely participates in class and has difficulty with handwriting, spelling and any form of written work. At present he is being assessed by an occupational therapist and will undergo further testing for auditory problems. Even though Student C had to be constantly reminded to stay on task he enjoyed the interaction and was confident in his self scripts and his ability to role play his character in the retell of the read aloud.

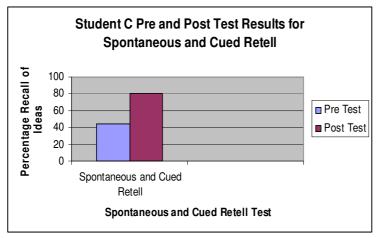


Figure 22

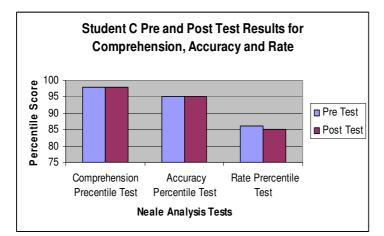


Figure 23

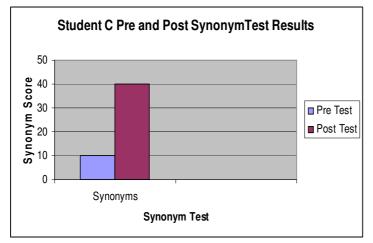


Figure 24

<u>Student D</u>

Student D made the biggest gain in comprehension of both the intervention and the control students with his pre score of 72% being the lowest of all the intervention students and his post score of 97% being 1% off the highest score of all the students. (See figures 25, 26, and 27.) This coincided with the largest gain in synonym score of all students as well which indicates that improvement in vocabulary knowledge increases comprehension. Student D's accuracy did increase, however he needed to put a lot of effort into his reading as indicated by the low rate percentile. He was attempting to use his self script to work out the meanings of words. Hopefully this will become more automatic with practice. In the intervention group he was forthright in his retell of read alouds, however when it came to reading the text himself his

confidence decreased and he was unable to recall as many details as he had previously. This demonstrates that the use of teacher directed read alouds together with vocabulary instruction was effective in improving his comprehension.

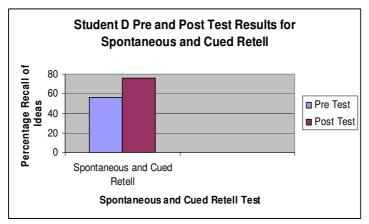


Figure 25

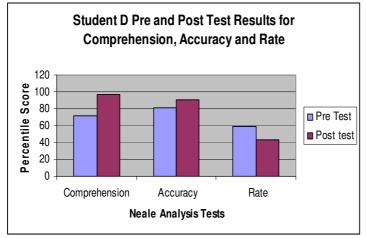


Figure 26

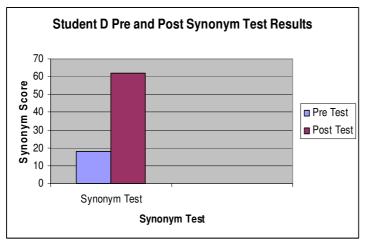


Figure 27

The control group demonstrated significantly less improvement than the intervention group. Even though Student E showed gains in synonym use and recall of ideas there was a decrease in his comprehension and reading rate and no change in his accuracy scores. Student F actually regressed in his use of synonyms with a slight increase in recall of ideas and comprehension scores; however his reading rate and accuracy declined. Student G showed slight gains in synonyms scores and recall of ideas but decreased in comprehension, accuracy and rate. Student H showed no improvement in synonym use, recall of ideas, accuracy or rate and only a slight increase in comprehension.

The results from all four intervention students demonstrated gains in synonym, recall of ideas, comprehension and accuracy scores which support the prediction that focusing on explicit vocabulary instruction when using read-alouds to year two students improves their comprehension.

Discussion

The aim of this study was to determine whether explicitly teaching vocabulary through read-alouds improves students' comprehension.

Reflecting on the results there is support for this hypothesis. Students in the intervention group improved significantly in the use of synonyms and recalling ideas demonstrating improvement in comprehension. It is worth noting that intervention students with lower pre test vocabulary and comprehension scores made greater gains in their post test scores than students who had higher pre test vocabulary and

comprehension scores. The reason for this might simply be that that any explicit instruction on a regular basis within a small group setting would be beneficial to a struggling student. This seems to be consistent with the views of Tomensen and Aarnoutse (1998) as cited in Nelson and Stage (2007).

On the whole the trends indicated in the results are positive; however this intervention would need to take place over a longer period of time, as well as with a larger number of students to bring about significant change.

The results from this intervention are also supported in studies by Munro (2002), Hickman et al., (2004) Nichols & Rupley (2004) Joshi (2005), who suggest that, teaching vocabulary strategies increases comprehension.

The students chosen for the intervention group were very keen to participate, resulting in a positive rapport amongst the group. However the control group was only withdrawn from the classroom on two or three occasions and therefore never developed the same close connections. It could therefore be claimed that minimal gains by the control group could be attributed to the lack of involvement with the teacher and the gains by the intervention group may be partly due to the improvement in self esteem however it would seem more likely to be due to the intervention which has taken place.

As well as developing synonym knowledge students in the intervention group used target words orally in sentences, used actions to describe these words, answered questions to apply the word, identified examples to differentiate the word from other situations, associated target words with sentences or phrases, completed cloze activities and played sorting games. All these activities helped to develop word meanings.

Munro (2002), Nichols & Rupley (2004) and Joshi (2005) all reinforce the importance of providing a number of different strategies and opportunities for students to internalize vocabulary.

As the grade two level was investigating the weather as part of their inquiry unit it seemed sensible to include story read-alouds based on this theme so that the intervention students could be immersed in the language. Generally the inquiry topic is incorporated into the reading and writing to make it more relevant to the students. Therefore as well as the intervention group focusing on weather, other literacy rotations were developed around this theme. The aim was to develop vocabulary in all the groups and to use read-alouds as a means of explicitly teaching vocabulary. As a result of these activities, all students were able to make connections with the vocabulary being discussed. Hickman et al., (2004) in their research recommended working thematically with students so that words could be used in context and that students could be encouraged to make connections with their background knowledge. The self scripts that the students used to remember the steps in working out the meanings of words, and to retell the events of the read-alouds, were invaluable. The students were able to articulate the steps quite confidently. Munro (2002) suggests that the long term aim of teaching vocabulary strategies explicitly is that students will learn to use these spontaneously as part of self talk when they need to comprehend the text. The teaching procedures cue students to use these explicitly. Students talk about what they do when they use the strategies, realise their usefulness and when to use them. These then become self instruction strategies that when learnt become self dialogue helping students convert information to knowledge. The self talk helps the student manage their learning.

Students A, B and D were not as fluent as student C and at times struggled with meaning particularly in the pre test. Even though no direct relationship between vocabulary knowledge and fluency has been established Joshi (2005) believes that vocabulary knowledge assists fluency. Read-alouds don't provide opportunities for students to develop their fluency so that may account for the decrease of 5% in the average reading rate of the intervention students. According to Blachowicz & Obrochta (2005) Hickman et al., (2004) read-alouds gives students opportunities to develop new vocabulary. Cunningham & Stanovich (1998) as cited in Blachowicz & Obrochta (2005) state that listening to books being read helps students go beyond their existing oral vocabulary and gives them new concepts and vocabulary. Students with small vocabularies need a scaffolded approach to maximize their learning through read alouds and those students who can engage with words by hearing them; using them, manipulating them semantically and playing with them are more likely to remember new vocabulary (Beck, McKeown, & Kukcan, 2002; Blachowicz & Fisher, 2005; Stahl & Fairbanks, 1986 as stated in Blachowicz & Obrochta, 2005)

According to Santoro, Chard, Howard and Baker (2008) read-aloud time is an ideal chance to build comprehension through extending vocabulary and content knowledge, as well as oral language activities, listening comprehension and text based discussion. They suggested that students who have taken part in read aloud lessons have longer and more in depth retelling that reflected comprehension. During the intervention teaching sessions there was a lot of oral discussion particularly during the retelling of the text when target words and their synonyms were used. Hickman et al., (2004) also emphasise this fact by stating the importance of developing oral competencies by orally responding to the text and encouraging student conversations about the text.

Furthermore read-aloud practice incorporates key vocabulary instructions which promote both oral language development and listening comprehension necessary for struggling readers to acquire new skills (Nagy, 1998; cited in Hickman et al., 2004). The results of the intervention students in this study suggest that teaching vocabulary through read-alouds and using self scripts for working out the meaning of words and retelling stories is a successful strategy which should be taught explicitly to assist students to improve their comprehension. The read-alouds were a great success. There are many purposes for engaging in read-alouds ranging from simply enjoying and listening to a story, to giving instructions for improving comprehension skills and strategies, to enhancing vocabulary knowledge, and introducing content on a particular topic. The strategies used with the read-alouds for this intervention were basically for vocabulary development. It would be interesting to teach comprehension strategies as well throughout the story readings to see if reading comprehension improved further.

Further research of the strategic enhancement of read-alouds with vocabulary and comprehension strategies, and text based discussion in the classroom, would determine the influence the intervention would have on students of varying comprehension levels.

References

Blachowicz, C.L.Z., & Obrochta, C. (2005) Vocabulary Visits: Virtual Field Trips for Content Vocabulary Development. *The Reading Teacher*, 59(3), 1-7.

Boote, C. (2006). Vocabulary: Reasons to Teach It, an Effective Teaching Method, and Words Worth Teaching. *New England Reading Association Journal*, 42(2), 24-28.

Hickman, P., Pollard-Durodola, S., & Vaughn, S. (2004). Storybook Reading: Improving Vocabulary and Comprehension for English Language Learners. *The Reading Teacher*, 57(8), 720-731.

Joshi, R. (2005). Vocabulary: A Critical Component of Comprehension. *Reading and Writing Quarterly.* 21, 209-219.

Munro, J. (2002). High Readability Literacy Teaching Procedures: A means of Fostering Learning Across the Curriculum. *Idiom* 38(1), 23-31.

Nelson, R.J., & Stage, S.A. (2007). Fostering the Development of Vocabulary Knowledge and Reading Comprehension Through Contextually- Based Multiple Meaning Vocabulary Instruction. *Education and Treatment of Children*. 30(1), 1-22.

Rupley, William H., & Nichols, William Dee. (2005). Vocabulary Instruction For the Struggling Reader. *Reading and Writing Quarterly*, 21(3), 239-260.

Santoro, L.E., Chard, D.J., Howard, L., and Baker, S.K. (2008). Making The Very Most OF Classroom Read-Alouds to Promote Comprehension and Vocabulary. *The Reading Teacher*, 61(5), 396-408.

Resources

McKee, David. Elmer and the Wind, Random House Australia.

Munro, J. (2005) Synonyms Task

Munro, John, (2006) Teaching Vocabulary. p. 1-30

Neale, Marie. D. (1999). Neale Analysis of Reading Ability -3rd edition. Melbourne: ACER Press.

Searle, Rick. & Searle, Bronwyn. *Follow Me* A Scholastic Press book from Scholastic Australia.

Shannon, David. *The Rain Came Down* The Blue Sky Press, ann imprint of Scholastic Inc., New York.

Appendix 1

Session Plans

Session	Goal of Session	<u>Teaching Activity</u>	Student Activity	Monitoring Task
1	Introduce and model the strategy of working out word meanings.	 Introduce strategy to work out the meaning of words. Demonstrate how to develop prior knowledge by explaining what the text-'Elmer and the Wind' is about. Read aloud sentence containing first target word from text. Display word and a picture of the word. Demonstrate strategies to use step by step to work out the meaning of a word using the target word. Provide examples of word in similar context, demonstrate questions that require the application of the word, identify word from 	 Read aloud sentence containing first target word. Students repeat each step after teacher giving their own response in the group. Students read a script of the steps taken to work out the meaning of a word. 	 Record student responses Ask children what they say to themselve s when they are working out the meaning of a word.

2 Students as part of the group apply strategies required to work out meanings of new target words, review steps involved, practise interactively.	 examples and non-examples and demonstrate word associations. Complete word map of target word. Review action used and steps taken. Review last target word and introduce new target words from text. Review and model steps. Practise working out meanings of words interactively and in groups. Read part of text aloud ask students to respond on hearing target words. Review what students do when working out meaning of words-using their meaning making motor (MMM). 	 Students say what they will do. Practice working out meanings of target words as a whole group. Review meaning after reading text as a group. As a group use vocabulary activities to extend oral vocabulary knowledge of words. Complete word map as part of a group. Students complete cloze activity with synonym of target words as a group. 	 Record student oral responses and give feedback. Responses to word map and cloze activity.
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3	Students attempt to work out meanings of words with teacher assistance in a group situation and then individually.	 Teacher models steps and reviews previous target words. Introduce new target words. Remind students of the nature of the task and have them review their action to find the meaning of words. 	 In a group then individually students state the steps for working out meanings of words. In a group then individually use this script to work out the meaning of one target word. In a group then use vocabulary activities to develop oral vocabulary and then complete cloze and word map. 	 Individual responses to word. meanings Individual responses to oral activities, word map and cloze activity.
4	Introduce strategy of retelling and the steps involved in retelling a story and its use in understanding the text.	 Introduce strategy to retell a story. Model a retell of a familiar event while charting information under headings appropriate for a retell. Demonstrate steps to be taken. Review steps for a retell 	 Students repeat each step after the teacher and say what they will do when retelling Students practice retelling a familiar event to each other in a group. Read script of steps to retell a story. As a group then in pairs use strategy to orally retell text using a simple pictures and words. Review what to do when retelling. 	 Ask students what they do when retelling. Ideas given in retell.

5	Introduce new vocabulary and instruct individual students to work out word meanings and review steps taken for meaning and retelling. Model how to retell the text using target words or their meanings and allow students to have a go.	 Remind students of strategies for retelling and using their MMM. Introduce new vocabulary. Read the rest of text. Display words in context ask students to use their self script to work out meanings. Complete read aloud and model and ask students to use script to retell part of text from that day using synonyms for target words. Review actions taken and correct responses. 	 Review what they do to find the meaning of a word. In a group then individually students use self script to work out meanings of all target words. As a group retell part of text using synonyms for target words with teacher assistance then individually. 	 Student responses to word meanings. Use of correct synonyms in retell.
6	Introduce new text, 'Follow Me' but choose fewer target words so that students begin to use their MMM with prompts from teacher.	 Introduce new target words in context in context. Read text aloud and ask students to retell text containing unfamiliar words using synonyms. Review what students know about 	 Students use self script for working out meanings of target words. Students attempt to work out meanings of words identified. Students use vocabulary activities to develop oral vocabulary and 	 Students response to word meanings. Results of oral activities including bingo. Synonyms used in retell.

7	The number of target words is again reduced	 working out meaning of words and retelling a text. Introduce target words and review 	 then complete cloze and word map. Students retell text using target words or meanings. Use self script of MMM establish 	 Word map. Sentences
	and students are asked to identify some of their own target words and use self script to work out meanings.	 what students do when using their MMM. Teacher completes read aloud. Ask student to identify their target words and using their MMM state meaning. 	 meanings of words. Use vocabulary activities to develop oral vocabulary and then complete cloze and word map. 	of target word in context.
8	Students retell whole text using synonyms to demonstrate understanding.	 Teacher reviews script for retelling text. Review target and student words and meanings. Review what students know about retell and word meanings. 	 Review what students do to retell. Students retell text as a role- play using synonyms for unfamiliar words. 	 Synonyms used. Ideas of text through retell in role-play.

9	Students to practise strategies with more difficult text, 'The Rain Came Down.'	 Ask students to review what they do when they don't know meanings of words. Choose a limited number of words in context and review their words and meanings. Read text aloud. 	 Students review self script of MMM. Students suggest meanings of as many words as possible using their MMM. 	• Bingo game using unfamiliar words and their synonyms.
10	Students listen to read aloud and automatize what they know to work out meanings.	 Teacher instructs students to use their MMM and retell strategies while listening to read aloud. Review what students know about retelling and finding meanings of words. 	• Students use their MMM while listening to read aloud and retell story through role- play demonstrating their understanding of the meaning of the words and text	• Language - synonyms used during role-play and what students know of the text.

Script for Meaning Making Motor (MMM)

- 1. Think of the type of word it is.
- 2 Imagine a picture of that word in the sentence.
- 3 Guess what you think the word means
- 4 Put a synonym in the place of the word and see if it fits.
- 5 Say what you think the word means

Script for Oral Retell

- 1 Who are the characters in the story?
- 2 What was the main problem, why was it important and how was it solved?
- 3 What message is the author giving you?
- 4 List the events in order.

<u>Results of Neale Analysis Test</u> <u>Results of Neale Analysis Reading Accuracy Pre and Post Test Results</u>

Student	Chronological Age	Neale Analy Readi Accur Pre	vsis ng Age	Neale Analy Stanin Score Accur Pre	ysis ne	Neale Analy Percer Rank Accur Pre	ntile	Neale Analy Raw S Accur Pre	vsis Score
Intervention A	7yrs 8mths	7.0	7.3	7	8	85	90	26	28
Intervention B	8yrs 1mth	7.8	7.9	8	8	95	94	36	36
Intervention C	7yrs 1mth	7.7	8.0	8	8	95	95	35	39
Intervention D	7yrs 7mths	6.11	7.5	7	8	81	91	25	30
Control E	7yrs 6mths	6.7	6.6	6	6	69	69	19	15
Control F	7yrs 4mths	7.3	7.3	8	8	90	90	30	28
Control G	7yrs 7mths	7.1	6.11	7	7	87	78	28	22
Control H	8yrs 2mths	7.1	7.3	7	7	87	89	28	27

Results of Neale Analysis Reading Comprehension Pre and Post Test Results

Student		_	_						_
	Chronological Age	Neale Analysis Reading Age Commehension		Neale Analysis Stanine Score	Comprehension	Neale Analysis Percentile Rank	Comprehension	Neale Analysis Raw Score	Comprehension
	Ch	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Intervention A	7yrs 8mths	7.1	7.5	7	8	86	91	10	11
Intervention B	8yrs 1mth	6.11	7.5	7	8	80	91	9	11
Intervention C	7yrs 1mth	7.10	8.3	9	9	98	98	14	16
Intervention D	7yrs 7mths	6.9	8.1	6	9	72	97	8	15
Control E	7yrs 6mths	6.7	6.2	6	4	65	38	7	3
Control F	7yrs 4mths	6.7	6.6	6	6	65	73	7	5
Control G	7yrs 7mths	6.11	6.6	7	6	80	73	9	5
Control H	8yrs 2mths	6.3	6.6	6	6	61	73	5	5

Results of Neale Analysis Test

Results of Neale Analysis Reading Rate Pre and Post Test Results

Student	Chronological Age	Rate Pre	rsis ng Age Post	Neale Analy Stanin Score Rate Pre	Post	Neale Analy Percer Rank Rate Pre	sis ntile Post	Neale Analy Raw S Rate Pre	rsis Score Post
Intervention A	7yrs 8mths	6.6	6.6	6	5	69	57	28	24
Intervention B	8yrs 1mth	6.0	6.6	4	5	39	55	15	23
Intervention C	7yrs 1mth	7.3	7.4	7	7	86	85	40	39
Intervention D	7yrs 7mths	6.3	6.3	5	5	59	43	24	18
Control E	7yrs 6mths	6.1	6.3	5	5	55	44	21	19
Control F	7yrs 4mths	9.0	8.3	9	8	97	95	62	53
Control G	7yrs 7mths	8.9	7.8	8	8	96	90	60	45
Control H	8yrs 2mths	6.4	6.8	6	6	60	61	25	26

Standard Deviation and Average Scores of the Intervention Students

Intervention Students	Synonym Pre	Synonym Post		
Standard Deviation	7.562242	8.9861		
	20.25	52.5		
Average				
Average percentage increase is 159%				

Intervention Students	Neale Score Pre Percentile Rank Comprehension	Neale Score Post Percentile Rank Comprehension		
Standard Deviation	9.486833	3.269174		
Average 84 94.25				
Average percentage increase is 12.2%				

Intervention Students	Neale Score Pre Percentile Rank Accuracy	Neale Score Post Percentile Rank Accuracy		
Standard Deviation	6.164414	2.061553		
Average 89 92.5				
Average percentage increase is 4%				

Intervention Students	Neale Score Pre Percentile Rank Rate	Neale Score Post Percentile Rank Rate		
Standard Deviation	17.00551	15.3948		
Average 63.25 60				
Average percentage decrease is 5%				

Intervention Students	Spontaneous and Cued Retell Pre	Spontaneous and Cued Retell Post		
Standard	5.196152	4.898979		
Deviation				
Average	53	80		
Average percentage increase is 51%				

Standard Deviation and Average Scores of the Control Students

Control	Synonym	Synonym Post			
Students	Pre				
Standard	8.699856	15.05822			
Deviation					
	18.75	26.5			
Average					
Average percentage increase is 41%					

Control	Neale Score	Neale Score Post		
Students	Pre Percentile	Percentile Rank		
	Rank	Comprehension		
	Comprehension	_		
Standard	7.258616	15.15544		
Deviation				
	67.25	64.25		
Average				
Average percentage decrease is 4%				

Control Students	Neale Score Pre Percentile Rank Accuracy	Neale Score Post Percentile Rank Accuracy							
Standard Deviation	8.317902	8.616844							
Average	83.25	81.5							
Average percentage decrease is 2%									

Control	Neale Score	Neale Score Post							
Students	Pre Percentile	Percentile Rank							
	Rank Rate	Rate							
Standard	19.58316	20.95829							
Deviation									
Average	77	72.5							
Average percentage decrease is 6%									

Control	Spontaneous	Spontaneous and							
Students	and Cued	Cued Retell Post							
	Retell Pre								
Standard	12.32883	12.32883							
Deviation									
	68	72							
Average									
Average percentage increase is 6%									

Synonym Task Results Pre and Post Test

Student	Synonym Task Score Pre Test	Synonym Task Score Post Test	Spontaneous and Cued Retell Pre Test	Spontaneous and Cued Retell Post Test
Intervention A	22	48	56%	88%
Intervention B	31	60	56%	76%
Intervention C	10	40	44%	80%
Intervention D	18	62	56%	76%
Control E	21	48	76%	80%
Control F	12	8	56%	60%
Control G	10	18	56%	60%
Control H	30	30	84%	88%

COMPREHENSION - SPONTANEOUS AND CUED RETELLING

Title of selected passage/story: **STORMY NIGHT** It was a dark, stormy night. The moon was behind the clouds. The rain was coming down very hard and the wind was blowing strongly. Tom was glad he was in bed. He was warm and dry and he was reading a book that he liked very much. Suddenly he heard a CRASH outside the window. He jumped with fright but felt brave enough to go to the window to look out. Through the rain he saw that an old tree had been blown over and it was across the drive. He hoped that tomorrow the storm would be gone.

Characteris tic of retelling	Ideas in the story	Cued recall questions	No of ideas/ points		Ideas reader mentioned/score in spontaneous retelling												o/sco	onses ore for recall ions	r
				Α	В	С	D	E	F	G	Н	Α	В	С	D	E	F	G	н
Main characters	The main character is Tom	Was there anyone else in the story?	1	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1
Theme of story	Tom was reading in bed on a stormy night.	Why was Tom glad that he was in bed?	2	0	1	0	2	2	2	1	1	1	0	0	2	2	2	2	
Plot of the story	Tom was in bed on a stormy night reading his favourite book when a tree collapsed in the drive.	What happened on the stormy night? If this story was in the newspaper, what do you think the heading might be?	3	1	1	1	2	3	2	1	2	1	1	1	2	3	3	2	3

Events of	It was a stormy	What was the	2	2	0	2	0	1	1	1	0	1	1	2	1	1	1	2	1
the story	night, the wind was blowing strongly and it was raining hard.	weather like?																	
	Tom was in bed reading his favourite book.	What was Tom doing before he heard the crash?	2	0	0	1	2	2	1	2	2	1	1	1	2	2	1	2	2
	He heard a crash and looked out the window.	Why did Tom look out the window?	2	1	0	1	1	2	0	0	2	1	2	i	1	2	0	0	2
	Saw an old tree lying in the drive.	What did Tom see when he looked out the window? Did the tree get blown over before the crash?	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	0	1
Inferential ideas (infer, predict, explain, read between the lines)	Tom was comfortable and safe in bed reading his favourite book even though it was a stormy night.	Why was Tom glad he was in bed? What time do you think it was? Why do you think that?	4	1	0	2	2	3	2	3	2	2	2	1	2	3	2	3	3
	Tom got a fright when he heard the noise because he didn't know what had happened.	Was Tom frightened by the crash? How do you know that?	2	0	0	1	1	1	1	0	2	1	1	1	1	1	1	0	2
	When Tom heard the crash and looked out the window he realized the tree had fallen down because of the wind.	Why did Tom look out the window? Did the noise of the crash wake Tom up? How do you know? Why did the tree fall down? Would it have fallen down if it had just been raining?	3	2	1	1	1	2	0	0	3	2	1	1	1	2	1	1	3
	Tom was brave.	Did Tom stay in bed and ignore the noise? How do you think Tom would have felt?	1	1	0	0	0	0	0	0	1	1	1	0	0	0	0	1	1
	Tom hoped the next day would not cause the same problem and the wind would be gone.	What do you think Tom hoped would happen the next day?	2	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1

Students	А	В	С	D	E	F	G	Н
Percentage of main ideas recalled spontaneously	36%	24%	40%	44%	68%	36%	36%	68%
Additional percentage recall under cued comprehension	20%	32%	4%	12%	8%	20%	20%	16%
Total percentage recall of ideas	56%	56%	44%	56%	76%	56%	56%	84%

COMPREHENSION - SPONTANEOUS AND CUED RETELLING

Title of selected passage/story: STORMY NIGHT

POST-TEST

It was a dark, stormy night. The moon was behind the clouds. The rain was coming down very hard and the wind was blowing strongly. Tom was glad he was in bed. He was warm and dry and he was reading a book that he liked very much. Suddenly he heard a CRASH outside the window. He jumped with fright but felt brave enough to go to the window to look out. Through the rain he saw that an old tree had been blown over and it was across the drive. He hoped that tomorrow the storm would be gone.

Characteris tic of retelling	Ideas in the story	Cued recall questions	No of idea		Ideas reader mentioned/score in spontaneous retelling								cue	spons d rec estion		o/sco	ore fo	or	
			s/ poin ts	A	В	С	D	E	F	G	Н	Α	В	С	D	E	F	G	н
Main characters	The main character is Tom	Was there anyone else in the story?	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1
Theme of story	Tom was reading in bed on a stormy night.	Why was Tom glad that he was in bed?	2	2	2	1	2	2	2	1	1	2	2	1	2	2	2	2	1
Plot of the story	Tom was in bed on a stormy night reading his favourite book when a tree collapsed in the drive.	What happened on the stormy night? If this story was in the newspaper, what do you think the heading might be?	3	3	2	2	2	3	2	1	2	3	2	2	2	3	3	2	3
Events of the story	 It was a stormy night, the wind was blowing 	What was the weather like?	2	2	1	2	2	1	1	1	0	2	2	2	2	1	2	2	2
	strongly and it was raining	What was Tom doing before he heard the crash?	2	1	1	2	2	2	2	2	2	1	1	2	2	2	2	2	2
	hard.	Why did Tom look out the window?	2	2	2	1	1	2	0	0	2	2	2	1	1	2	0	0	2
	 Tom was in bed reading his favourite book. He heard a crash and looked out the window. Saw an old tree lying in the drive. 	What did Tom see when he looked out the window? Did the tree get blown over before the crash?	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1

Ideas (infer, predict, explain, read between the lines)	Tom was comfortable and safe in bed reading his favourite book even though it was a stormy night.	Why was Tom glad he was in bed? What time do you think it was? Why do you think that?	4	3	2	3	3	3	3	3	2	3	3	3	3	3	3	3	3
	Tom got a fright when he heard the noise because he didn't know what had happened.	Was Tom frightened by the crash? How do you know that?	2	0	1	2	1	1	1	0	2	1	2	2	1	1	1	0	2
	When Tom heard the crash and looked out the window he realized the tree had fallen down because of the wind.	Why did Tom look out the window? Did the noise of the crash wake Tom up? How do you know? Why did the tree fall down? Would it have fallen down if it had just been raining?	3	2	3	2	2	2	0	1	3	3	1	2	2	2	1	1	3
	Tom was brave.	Did Tom stay in bed and ignore the noise? How do you think Tom would have felt?	1	1	1	0	0	1	0	0	1	1	1	1	0	1	0	1	1
	Tom hoped the next day would not cause the same problem and the wind would be gone.	What do you think Tom hoped would happen the next day?	2	2	1	2	2	0	2	0	1	2	1	2	2	1	2	0	1

Students	A	В	С	D	E	F	G	н
Percentage of main ideas recalled spontaneously	76%	72%	76%	72%	76%	52%	44%	72%
Additional percentage recall under cued comprehension	12%	4%	4%	4%	4%	8%	16%	16%
Total percentage recall of ideas	88%	76%	80%	76%	80%	60%	60%	88%
Overall percentage increase in recall of ideas from pre to post testing	32%	20%	40%	20%	4%	4%	6%	4%

Text- 'The Rain Came Down'

Example of Target Words

Moaned, Bickering, Ruckus, Shimmered

Sentences from the text showing the context of the word.

"My roof is leaking, and my cakes are getting wet!" he moaned.

"My roof is leaking, and my cakes are getting wet!" he ------.

So they joined in the bickering, too.

So they joined in the -----, too.

"What is this ruckus about?" he asked.

"What is this ----- about?" he asked.

Everything shimmered, and a rainbow stretched across the rooftops.

Everything -----, and a rainbow stretched across the rooftops.

<u>Synonyms</u>

Moaned	Groaned	Sighed	Whined	Sobbed
Bickering Quarrelling	Arguing	Disagreeing	g Fighting	
Ruckus	Fuss	Uproar	Excitement	Riot
Shimmered	Glisten	Twinkle	Sparkle	Shine

Vocabulary Activities

Defining the word: Moaned is to have complained abut something.

Example of 'Moaned' in a meaningful sentence.

I moaned when I was told to go to bed.

Apply the word by giving an example or explanation or by identifying a synonym or antonym of the word. Students relate words to personal experiences.

Have you ever moaned about anything before?

Say whether these are or are not examples of moaning.

You happily going to bed when told.

You are whining if you don't get to do what you want.

You are lying on your bed sobbing because you are not allowed to go to your friend's house.

You have a big smile on your face as you put away all your brothers' toys.

Making choices allows students to apply the meaning of the word. Which is an example of the meaning of the word moaned?

Sighing when someone asks you to do something.

Looking out the window.

Students identify examples and non examples of the word by differentiating between two descriptions.

Which of these sentences tells you when a person moaned?

My brother groaned when he had to go to bed.

My brother hummed when he went to bed.

Use synonyms of words in a bingo game or a sorting activity or play a game of charades.