HYPOTHESIS: Teaching students in Year 3 to follow a sequence (cued in by '*Triple M*') for learning word meanings through oral language increases their ability to generate synonyms and improves their reading comprehension.

Table of Contents

| Abstract | Page 2 |
|----------------------------------|---------|
| Introduction | Page 3 |
| Method | Page 6 |
| Design | Page 6 |
| Participants | Page 7 |
| Materials | Page 8 |
| • Procedure | Page 8 |
| Results | Page 10 |
| Discussion | Page 21 |
| References / Bibliography | Page 26 |
| Appendix 1 | Page 28 |
| Appendix 2 | Page 37 |
| Appendix 3 | Page 38 |

ABTRACT:

Many students in the middle years of primary school are adequately able to decode text and are reading at an age appropriate level, but experience difficulties with comprehension. Upon completion of reading a text, they have difficulty with retelling as well as understanding what they have read.

The hypothesis of this study is that teaching students in Year 3 to follow a sequence (cued in by 'Triple M') for learning word meanings through oral language increases their ability to generate synonyms and improves their reading comprehension. Research into the study of comprehension acquisition and skills has shown that there is a clear link between vocabulary knowledge and the understanding of written text. In this study, the students were taught a developmental sequence (cued in by 'Triple M') for learning word meanings. 'Triple M' is an acronym for Make Meaning Matter, used as the cue for tuning into the sequence, which involved saying the problem word, putting it into a sentence, an action for the word, visualizing the action, finding synonyms for word, placing synonyms into context to see if it makes sense.

The study compared the results of two groups of six Year 3 students, an intervention group who received explicit teaching of the strategy and a control group who did not receive any instruction. Findings of the study indicate significant gains in the post-test results of the Synonym Task as well as improvement in comprehension for the students in the intervention group compared to the control group who showed little improvement.

The results suggest that teaching students to use a sequence for learning word meanings (*cued in by 'Triple M'*) is a successful strategy. Explicit teaching of this strategy will lead to increased vocabulary knowledge and improved reading comprehension.

INTRODUCTION

Many students in the middle primary level can adequately decode text but experience difficulty with comprehension due to problems with poor vocabulary acquisition and word meanings. Parkin, Parkin & Poole (2002) note that comprehension is the ability of the mind to understand what is being written or spoken. Reading comprehension is the process of gaining meaning from text, which is the ultimate purpose of reading. It could be argued that reading and comprehension are synonymous in that no reading can be said to have taken place unless the written text has been understood. Students in the junior years of schooling, that is, from Prep to Year 2, are taught to read with emphasis on decoding text at different levels of complexity. Analysis of results at a school based level, show a marked improvement in students' decoding skills across the junior years. This decoding knowledge is retained by students and they continue to successfully decode text through the middle and senior years of schooling.

There remains a group of students throughout the middle and senior years who experience significant comprehension difficulties; there is a significant difference between their oral reading accuracy and their reading comprehension. When questioned about the text that was read, due to their inability to understand what they have read, albeit fluently, many students have difficultly providing accurate answers. Students need to interact with text in order to construct meaning. As Harvey & Goudvis (2000) note, reading encompasses both decoding and the making of meaning. They continue to discuss the notion that reading involves deciphering the alphabetical code to determine the words and thinking about those words to construct meaning. It is at this juncture that many students encounter difficulties – they are able to decode the text but they experience difficulty with the vocabulary presented and the resulting lack of word meanings. Biemiller (2003) in his research says that there have been a number of studies demonstrating that while you can successfully teach children to decode it doesn't automatically lead to greater reading comprehension. He cites (Becker 1977) as noting that disadvantaged children who were taught to successfully decode words did not reach reading comprehension beyond grade two.

He suggested that disadvantaged children's declining reading comprehension in grade three and four was from a lack of vocabulary knowledge.

It must be noted that it is not enough for teachers to focus on the act of comprehension alone. Comprehending leads to comprehension. Comprehension on its own relates to the outcome of the reading; these outcomes relate to the writer's message, that is, the literal, the inferential the evaluative messages. Whereas comprehending relates to the actions by the reader, that is, strategies incorporated, such as re-reading, visualizing synonyms, acting out words and phrases and paraphrasing.

For students to make gains in reading comprehension it is essential for them to acquire vocabulary knowledge. Vocabulary has been recognized as an important component of successful reading as noted by Rupley, William H. & Nichols, William Dee, (2005). Word identification capabilities, vocabulary knowledge and comprehension development are all essential elements for a balanced and successful reading program. As Biemiller and Boote (2006) have noted, vocabulary, that is, knowledge of word meaning, is a powerful predictor of reading comprehension. They argue that current reading instruction appears to be premised on the view that children can build the vocabulary they need after learning to read (decode) fluently, as little or no vocabulary instruction seems to occur during the early years of schooling. They argue that schools should address the need for vocabulary instruction in the early primary years of schooling. Similarly, Joshi (2005) argues that a welldeveloped meaning vocabulary is a prerequisite for fluent reading and is a critical link between decoding and comprehension. Hickman (2004) cites (Grabe, 1991; McLaughlin, 1987) that a student's level of vocabulary knowledge has been shown to be an important predictor of reading ability.

In a study conducted by Roth, Speece and Cooper(2002) relating to the correlation between oral language and early reading acquisition, it became apparent that higher order oral language skills were influential in reading skill acquisition and increased in

importance as the student progressed. Incorporated into their study, they set out to determine the variables most important to reading. The study findings identified that semantic knowledge combined with print awareness was the most important indicators of reading comprehension. Oral definitions and word retrieval were identified as the two main semantic skills necessary for successful reading comprehension. Other studies (Snow,1991; Dickinson & Snow, 1987; Snow, Cancino, Gonzalez & Shriberg, 1989) also support these findings. Their research also show that students' reading comprehension is linked with their ability to define words. Furthermore, Biemiller & Boote (2006) note that students with restricted oral vocabularies comprehend at lower levels.

Munro (2006) acknowledges that word meanings are the building blocks of oral language and that oral language is also the platform for all activities. He notes that some children have difficulty learning word meaning and they require explicit and repetitive instruction to improve their vocabulary. The children with poor vocabulary development are the ones who continue to fall further behind, which is the premise of previously mentioned studies conducted by Biemiller & Boote (2005). At the same time, we should be teaching students how to develop their 'meaning making motor' (Munro, 2006) by instruction in metacognitive strategies and by providing students with activities that will improve their 'word meaning making' ability. The act of reading begins with what we know (Munro, 2006); the reader brings to the act of reading both conceptual knowledge and experiential knowledge. The conceptual knowledge relates to the semantic network of meanings whereas the experiential knowledge relates to specific experiences that the reader brings with him. The less able students may only be able to predict and gain meaning related only to their experiences; they are less able to predict abstract ideas. In every subject area, students should be given opportunities for explicit learning of key words relating to specific subjects; they need to know both the conceptual and experiential knowledge of words of each subject taught. Teachers need to have students be able to recall back related words and retrieve meanings. Thus they need to continually have students engage their 'meaning making motor'.

This is crucial for a student's understanding of vocabulary and word meanings. If a student does not understand the vocabulary used in a sentence that is either written or spoken, the meaning of what is being said or read drops out by the end of a sentence. The explicit teaching of synonyms would be an integral part of this instruction and would serve to enhance vocabulary development even further.

This present investigation aims to expand on previous research by measuring the effectiveness in improving students' vocabulary and word meanings with particular focus on the use of synonyms. By following a sequence to work out word meanings, students will develop a strategy to assist them when confronted by problematic words. The students in the intervention group are competent decoders of text but they have difficulties with understanding and retelling what they have read and completing comprehension tasks. The hypothesis is that teaching year 3 students to follow a sequence (cued in by '*Triple M*') for learning word meanings through oral language increases their ability to generate synonyms and improves their reading comprehension.

METHOD

Design:

This study uses a case study OXO design in which the gain in reading comprehension following explicit teaching of word meanings and synonyms is monitored for Year 3 students who have limited vocabulary knowledge. The study compares two groups of students, an intervention group and a control group.

Participants:

Students chosen to participate in the study are currently in Year 3 with ages ranging from 8 to 9 years. They are part of a Year 3/4 classroom which has a total of 28 students, with 14 students in each of the year levels. The classroom teacher identified the students for the intervention group as those who were able to accurately decode text when reading, but experienced difficulties in completing comprehension tasks and using information gained from text. Details of the students involved in the research are presented in Table 1 below.

Table 1. Details of students in Intervention Group and Control Group.

| Student | Group Intervention = 0 Control = 1 | Grade | Age(Years & months) | Age in MONTHS | Sex Male-M Female- F | EMA 0—No 1==Yes | Previous Interven tion: 0=No 1=Yes | Sensory Impairmen t: Wears Glasses 0=No !=Yes |
|------------------|------------------------------------|-------|----------------------|---------------|-------------------------------|-----------------------|------------------------------------|---|
| Interventio | | | | | | | | |
| n Group | | | | | | | | |
| A | 0 | 3 | 8yrs.6m | 102 | M | 1 | 0 | 1 |
| В | 0 | 3 | 8yrs.9m | 105 | F | 0 | 0 | 0 |
| С | 0 | 3 | 8yrs.5m | 101 | M | 0 | 0 | 0 |
| D | 0 | 3 | 8yrs.4m | 100 | M | 0 | 1 | 0 |
| Е | 0 | 3 | 8yrs.7m | 103 | F | 0 | 0 | 0 |
| F | 0 | 3 | 9yrs.0m | 108 | M | 0 | 0 | 0 |
| Control Group | | | | | | | | |
| AA | 1 | 3 | 8yrs.1m | 97 | M | 0 | 0 | 1 |
| BB | 1 | 3 | 8yrs.11m | 107 | M | 0 | 0 | 0 |
| CC | 1 | 3 | 8yrs.10m | 106 | F | 0 | 0 | 0 |
| DD | 1 | 3 | 8yrs.2m | 98 | F | 0 | 0 | 0 |
| EE | 1 | 3 | 8yrs.7m | 103 | M | 0 | 0 | 1 |
| FF | 1 | 3 | 8yrs.4m | 100 | F | 0 | 0 | 0 |

Materials:

The materials used for this study include the following:

- TORCH (Tests of Reading Comprehension) (Mossenman, Hill & Masters. 1987)
- 'Synonyms Task Group' (Munro, J. 2005)
- Furniture catalogue, depicting various styles of couches
- Poster titled: "Triple M": Make Meaning Matter.
- Chart outlining sequence to follow to assist in working out word meanings
- Synonym Activity sheet for 5 sessions, comprising 5 new words, teacher selected.
- Synonym Activity proforma for students to select own base word
- Reading text: "Lightning Fred" (Yellow Bananas), Guided Reading sries
- Flash cards for new words from each session for review in following sessions
- **Teacher journal** to keep anecdotal information for each of the 10 lessons
- White board and markers
- Charts and markers

Procedure:

All students in the study were given the TORCH test, (Test of Reading Comprehension) for the pre-test assessment. As noted by Mossenson, L., Hill, P., & Masters, G. (1987), authors of TORCH, readers are able to obtain meaning from the text. Each of the spaces in the worksheet is an attempt to get the students to answer a question identified as being important to demonstrate comprehension. A context is given to cue readers into the sort of answers students should give. The same TORCH test was used for both pre and post-testing due to the school's testing schedule incorporating the alternative stories. This factor must be kept in mind when discussing the post-test results. Results of this test indicated that students in the intervention group scored Stanine 6 or below, for their year level.

All students were given the Synonym Task (Munro, 2005) to measure their ability to bring meaning to words by generating synonyms. Students were read 29 target words

and they were given time to write as many synonyms as possible for these. Responses were scored according to their words matching the target words semantically and/or grammatically.

The six students in the intervention group were withdrawn from their classroom during the morning literacy block for approximately 40 minutes for the duration of the ten lessons. Students were taught between four and five times a week. The ten teaching sessions were conducted in a spare room so there were no interruptions. The aim of the project was to work with students on a strategy that moved from a high level of teacher support and scaffolding to that where scaffolding was slowly removed and students began using the strategy individually and independently.

The teaching procedure was based on John Munro's (2006) sequence for teaching the meaning of novel words. In each session the students were given a list of new words that they would find in their reading for that day. They were taught a sequence for learning the meanings of unknown words and they were given a cue called 'Triple M... Make Meaning Matter' which was presented on a poster, (Appendix 3). This was intended as their cue to use the sequence when coming across a word for which they didn't know the meaning. The initial sessions began with lots of scaffolding, but as the students became more familiar and proficient with the technique, support was slowly withdrawn, with the students taking more and more control of their learning by incorporating the sequence for making-meaning. Every session began with revision of vocabulary from the previous lesson as well as revising the action. They had the opportunity to read and share information orally. Each lesson culminated with time to share new vocabulary and students were also asked to reflect and verbalize on what they had learnt in that session.

The first three lessons were devoted to seeing the need to understand word meanings and to develop the sequence. The students were also given synonym tasks using target words and/or pictures which enabled them to put the sequence into practice. The new words with their synonyms were listed on a synonym chart. Students were given

synonym activities whereby they had to write synonyms for five new words. Their responses were collected so as to ascertain how well they were implementing the strategy.

These observations of students' responses and their reflections were documented in the teaching journal. This data gave information as to how students were applying the strategy and helped inform the teaching focus for the next session.

With lessons that involved reading texts, the students were initially given target words and later, they chose their own problem words and continued to follow the sequence for learning meaning of new words. Synonyms brainstormed from each session were written onto charts. The students worked firstly as a whole group and as the scaffolding was gradually removed, they then worked in pairs and during the last two lessons they worked individually and independently completing activities and implementing the strategy.

Students in the control group maintained regular classroom program and did not attend any of the intervention sessions. Upon completion of the block of targeted teaching intervention, both the intervention group and the control group were reassessed using the same materials and procedures that were used during pre-testing.

RESULTS

The results are explored here in two parts. Firstly, the performance of the teaching group as a whole will be looked at and then each individual participant, exploring both pre and post test results of the key tests.

The synonym task scores for all students in the intervention group indicate significant improvement in this area and the comprehension scores for the intervention group

indicate significant improvement for two-thirds of students. The control group scores indicate little improvement for these students in both of these areas.

The results indicate support for the hypothesis that teaching year 3 students to follow a sequence for learning word meanings through oral language increases their ability to generate synonyms and improves their comprehension.

The synonym knowledge and comprehension scores for most students in the intervention group indicate significant improvement in these areas. The control group scores indicate some improvement for some students in theses areas. The results are shown in Table 2.

Table 2: Pre and Post test data:

| Students | Group | Synonyms | Synonyms | TORCH | TORCH | TORCH | TORCH | TORCH | TORCH | Stanine | Stanine |
|----------|--------------|----------|----------|-------|-------|-------|-------|------------|------------|---------|---------|
| | Intervention | Pre | Post | Raw | Raw | Score | Score | Percentile | Percentile | Pre | Post |
| | 0 | | | Pre | Post | Pre | Post | Pre | Post | | |
| | Control 1 | | | | | | | | | | |
| A | 0 | 19 | 26 | 16 | 18 | 37 | 41 | 65 | 80 | 6 | 7 |
| В | 0 | 16 | 25 | 5 | 13 | 20 | 32 | 2 | 34 | 1 | 4 |
| С | 0 | 23 | 27 | 10 | 19 | 27 | 44 | 14 | 89 | 3 | 8 |
| D | 0 | 9 | 17 | 5 | 13 | 20 | 32 | 2 | 34 | 1 | 4 |
| Е | 0 | 12 | 26 | 7 | 7 | 23 | 23 | 3 | 3 | 1 | 1 |
| F | 0 | 10 | 16 | 14 | 14 | 33 | 33 | 43 | 43 | 5 | 5 |
| AA | 1 | 19 | 19 | 19 | 18 | 44 | 37 | 89 | 80 | 8 | 7 |
| BB | 1 | 16 | 19 | 19 | 19 | 44 | 44 | 89 | 89 | 8 | 8 |
| CC | 1 | 17 | 18 | 21 | 20 | 56 | 49 | 96 | 96 | 9 | 9 |
| DD | 1 | 21 | 23 | 19 | 17 | 44 | 39 | 89 | 73 | 8 | 6 |
| EE | 1 | 12 | 27 | 19 | 20 | 44 | 49 | 89 | 96 | 8 | 9 |
| FF | 1 | 21 | 24 | 18 | 19 | 41 | 44 | 80 | 89 | 7 | 8 |

The pre-test results in the Synonym Task indicate differing levels of achievement for the intervention group whereas the achievements in the control group were more even. The control group's post-test Synonym Task results remained constant with the exception of one student who made a significant gain. It is interesting to note that the scores for the Synonym Task pre-test for three of the students in the intervention group are equal to

students in the control group. The Synonym Task pre and post-test results for both the intervention group and control group are shown in Figure 1.

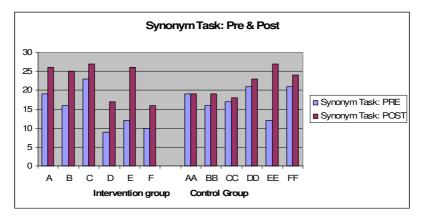


Figure 1 Synonym Task, Pre & Post test

The intervention group showed a 62% improvement in the Average score for the Synonym Task pre to post-test as compared to a 26% improvement for the control group. This is a significant gain. (Figure 2)

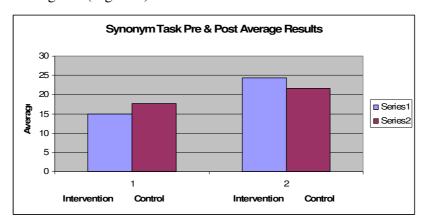


Figure 2 Synonym Task Pre & Post Average

The pre-test TORCH scores show all students in the intervention group scoring below those students in the control group. However the post-test results show a significant gain for students in the intervention group as compared to those of the control group. (Figure 3)

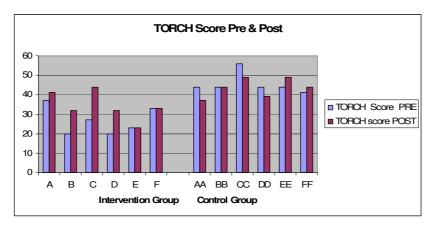


Figure 3 TORCH Score Pre & Post Test results

Gains made by the students in the intervention group in the TORCH test were greater than those of the control group as shown through the comparison of the average pre and post-testing percentile scores. In the post-test, results indicate that the intervention group made gains in comprehension with the average percentile post-test score increasing from 21 to 47, whereas the control group's average percentile remained constant due to these students' ability to comprehend text. (Figure 4)

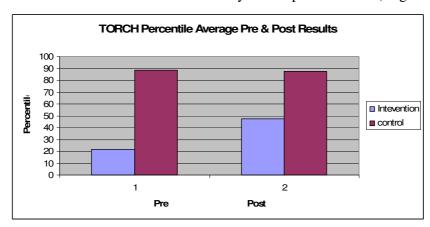


Figure 4 TORCH Percentile Average Pre & Post results

Student A:

Student A made good progress in the synonyms test with an improvement of 32% from the pre to post test. His TORCH results also improved with a percentile rise from 65^{th} %tile to 80^{th} %tile. This student was an active participant throughout the teaching sessions. His enthusiasm had to be curtailed at times as he was prone to

dominate the group. It was interesting to note that as the sessions progressed and other participants became more confident, Student A did not maintain his dominance. In the synonyms pre test, Student A attempted to give one synonym for most of the target words; however with the post test, he gave two to three synonyms for 10 of the 29 target words. The student's improved TORCH post-test result was indicative of his improvement with the given reading tasks. As the teaching sessions progressed, his improvement was noted by his reading and stopping at unknown words; he would actually say out loud, '*Triple M*' and work through the word meaning sequence. The results of Student A's post tests indicate that explicit teaching of a developmental sequence for learning unfamiliar words did increase, to some extent, the student's ability to generate synonyms and improve reading comprehension. (Figure 5 & 6)

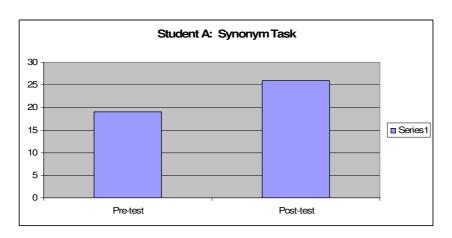


Figure 5 Student A, Synonym Task Pre & Post Results

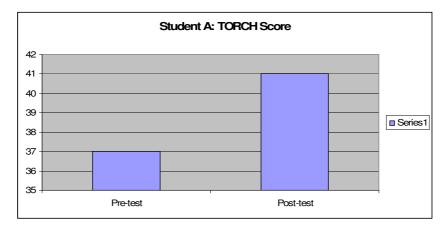


Figure 6 Student A, TORCH Score, Pre & Post Results

Student B:

Student B made significant gains from pre to post synonym task test with a 57% improvement. This correlated with a note-worthy increase in TORCH percentile results from 2nd %tile to 34th %tile. Student B was very quiet in the first few sessions but she did apply herself to all tasks. Student A would initially call out answers when it was Student B's turn but this diminished as Student B gained in confidence and became an active participant in the sessions. Her first reflective response to what she had learnt in that session was 'I don't know'. However her reflective response in the second teaching session was 'there are other meanings for words'; this response indicated that she had understood the word meaning sequence. Student B worked methodically throughout the teaching sessions and she would use the word meaning sequence to find synonyms.

The results of Student B's post tests indicate that explicit teaching of a developmental sequence for learning unfamiliar words did significantly increase the student's ability to generate synonyms and improve in her reading comprehension. (Figure 7 & 8)

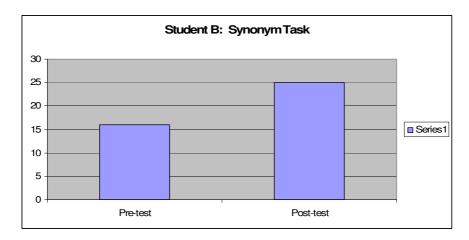


Figure 7 Student B, Synonym Task Pre & Post Results

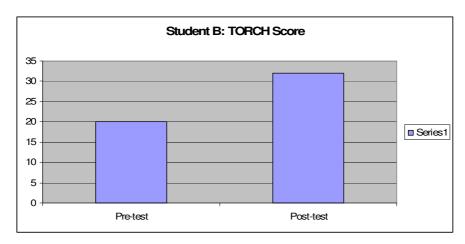


Figure 8 Student B, TORCH Score Pre & Post Results

Student C:

Student C had the highest starting score for the synonym test and he made a 9% improvement from pre to post test result. He is a confident decoder of text and his low TORCH Score indicates that, as this research is investigating, this student is termed as a capable reader of text (decoder) but he has difficulty in understanding and comprehending what he has read. He made a significant improvement in his TORCH post- test with a movement from the 14th %tile to the 89th %tile, indicating that the intervention strategy has impacted significantly on his reading comprehension. Throughout the teaching sessions the student was an active participant and as the sessions progressed, he was regularly able to generate more than one synonym for target words; he relied less on listing unfamiliar words and he was able to self-regulate and sustain the strategy.

The results of Student C's post tests indicate that explicit teaching of a developmental sequence for learning unfamiliar words has increased the student's ability to generate synonyms and significantly improve his reading comprehension. (Figure 9 & 10)

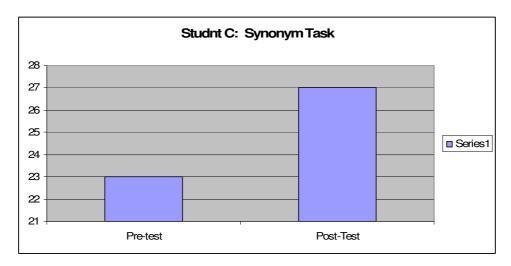


Figure 9 Student C, Synonym Task, Pre & Post Results

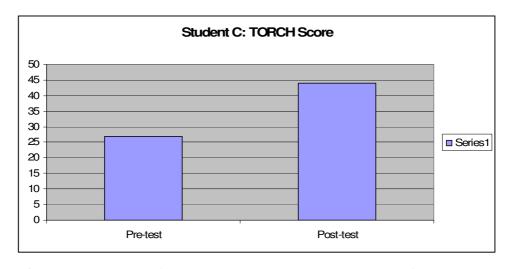


Figure 10 Student C, TORCH Score, Pre & Post Results

Student D:

Student D had the lowest Synonym pre-test score but he made significant improvement in his post test and achieved an improvement of 88%. He also made significant gains in his TORCH assessment where his TORCH percentile rose from 2^{nd} %tile to 34^{th} %tile. This student found the first teaching sessions difficult and he needed extra time and support with the word meaning sequence strategy. During the

third teaching session, the student keenly reported that he had seen a television advertisement for the *Triple M* radio station and he told his family '*Make Meaning Matter*'. Following that incident he became an active participant in the group and he really enjoyed the sequential steps of making a picture in his mind and demonstrating an action for the word. He would keenly participate using these two steps. When having to find synonyms for target words, this student would close his eyes and say he was making a picture in his mind. The results of Student D's post tests indicate that the explicit teaching of a developmental sequence for learning unfamiliar words significantly increased his ability to generate synonyms and also improve his reading comprehension. (Figure 11 & 12)

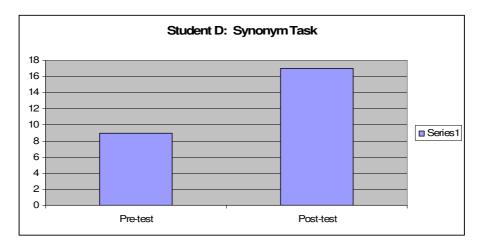


Figure 11 Student D Synonym Task, Pre & Post Results

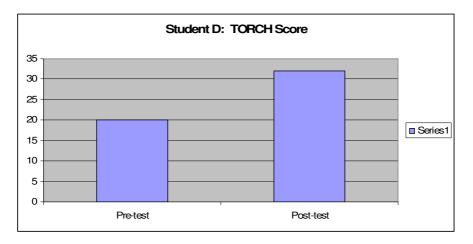


Figure 12 Student D, TORCH Score, Pre & Post Results

Student E:

Student E made a significant gain from pre to post scores on the synonym test with a 116% gain. However her TORCH results remained the same. Student E was a quiet participant and would allow others to answer for her. She completed tasks but she never asked questions nor did she ask for assistance if she was having difficulties. Her TORCH percentile remained at the 3rd %tile, which is critically low. Her improvement in the synonym test seems to indicate that she has been able to generate synonyms following the teaching strategy but she has not transferred this process to reading comprehension. This student would benefit with further explicit teaching of gaining meaning from text using strategies such as paraphrasing and visualizing to develop and support her comprehension strategies.

The results of Student E's post tests indicate that explicit teaching of a developmental sequence for learning unfamiliar words has significantly increased the student's ability to generate synonyms but the student has not transferred this process to reading comprehension .(Figure 13 & 14)

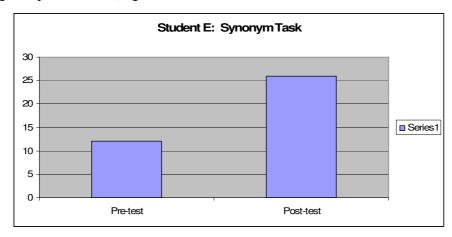


Figure 13 Student E, Synonym Task, Pre & Post Results

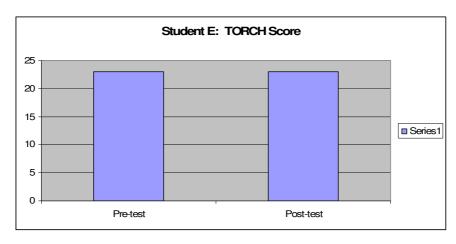


Figure 14 Student E, TORCH Score, Pre & Post Results

Student F:

Student F made a 60% gain in his synonym post test assessment. However his TORCH results remained the same being at the 43rd %tile. As with Student E, he was quiet and did not fully participate with the oral language activities. He was also happy to allow others to speak for him. Like Student E, this student has improved with his ability to generate synonyms but has not transferred this process to assist in gaining meaning from text.

The results of Student F's post tests indicate that explicit teaching of a developmental sequence for learning unfamiliar words has increased the student's ability to generate synonyms but he has not transferred this process to reading comprehension. (Figure 15 & 16). This student would benefit with further explicit teaching of gaining meaning from text using strategies such as paraphrasing and visualizing to assist in developing comprehension strategies.

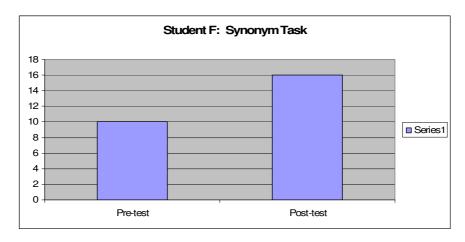


Figure 15 Student F, Synonym Task, Pre & Post Results

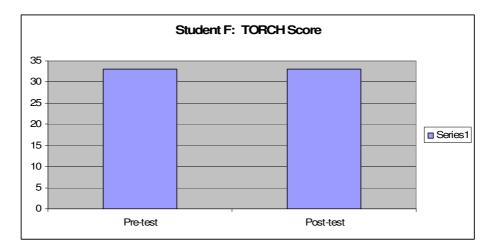


Figure 16 Student F, TORCH Score, Pre & Post Results

DISCUSSION

The aim of this study was to determine if teaching students to use a developmental sequence for learning word meanings through oral language would increase their ability to generate synonyms and improve reading comprehension. Benefits were assessed by comparing the intervention group's individual student performances at the pre and post test levels as well as make ongoing comparisons with the control

group students who did not receive the teaching intervention. In reflecting on the results of this study there is support for this hypothesis. The results of the Synonym Task test showed that the intervention group out performed the control group with the overall average improvement gain greater than that of the control group. The results of the TORCH test also lend support towards the hypothesis in that the average percentage of improvement was greater for the intervention group, from 21.5 to 47.1 as compared to the control group, where the average gain in percentile remained the same from pre to post-test.

The control group showed little or no improvement in either the synonym test or the TORCH test. Students in the control group are generally more fluent readers, they approach text with more confidence and they employ the use of strategies such as reading- on and re-reading and using context to help answer comprehension questions. Control Student EE was the only exception with the results of his synonym test showing an improvement of 108% .This student had been absent for the initial pre test due to illness and he completed this test upon his return to school. His illness may have been a contributing factor for his low pre test synonym score.

The results are supported by the research of Juel, Biancarossa, Coker and Deffes (2003) Beimeller (2003), Nichols and Rupley (2004), who note that the teaching of vocabulary skills can increase students reading comprehension. It is important, however, that students are taught vocabulary in the context in which it is used rather than in isolation. Hickman (2004) and Nichols and Rupley (2004) both suggest the importance of relating vocabulary to context areas and making connections with their background knowledge.

Students A & C brought a great deal of knowledge and experience to the group, they were keen learners and worked well in group situations. They readily contributed to group activities and they enjoyed participating and often leading oral discussions. However Students B,D,E &F made the most gains in vocabulary development and I would suggest that the group dynamics contributed to this factor in that the sharing of

Students A & C's knowledge through the oral activities allowed for the other participants to also develop in their knowledge and understanding of word meanings.

Student C entered the teaching sessions with the highest synonym pre test score and had a good understanding of the concept of the role of synonyms. Starting at a higher pre- test synonym attainment score, he made the least gains in the synonym post test. However the surprising factor was this student's low pre test TORCH score. The author has known this student since he commenced in the Prep year and he has a history of being a successful reader. This student was successful at decoding text but he had not been constructing meaning from text. Harvey & Goudvis (2002) and Biemiller and Boote (2006) both suggest the importance of reading encompassing both decoding and the making of meaning. Upon completion of the intervention sessions, this student made a significant gain in his post test TORCH result. I would suggest that this gain was due to the student transferring the strategy of the word meaning sequence to reading for meaning.

Students E & F both made significant gains in the synonym post test thus demonstrating to the author that the strategy of following a developmental sequence for learning unfamiliar words has been successful. However these students continued to experience difficulty in gaining meaning and understanding from what they were reading. Both their pre and post TORCH results remained the same (with student E being critically low) indicating to the author that these students have not transferred the word meaning strategy to understanding and comprehension of text. These students may have benefited from the brainstorming of synonyms for problem words and discussion about texts, which took place during the teaching sessions, but as this process was not part of the testing situation, they experienced difficulties in gaining understanding and meaning fro text. In shared sessions where these students were supported with reading the text, their ability to generate synonyms was much more pronounced. They were also more confident at retelling what had been read. Both of these students would benefit from the intervention teaching taking place over an extended period of time. As both of these students failed to transfer the word meaning

strategy to reading comprehension, it may follow that they would benefit from using a strategy such as *R.I.D.E.R.* to assist with comprehension. As their Synonym Task test results support their ability to successfully generate synonyms, these students would benefit from incorporating a strategy whereby they learn to visualise and then paraphrase a sentence. The teaching of the *R.I.D.R.R* strategy for all students in the class would be a recommendation for the classroom teacher.

During the teaching sessions there was a lot of oral discussion about the meaning of the target words in text and the modelling of retelling of text using synonyms. The aim of the author was to incorporate the word meaning sequence through oral language so that the participants were able to interact with one another and join in with discussions. It also allowed for the students to *hear* what the words sounded like. When students are confronted by a problematic or unknown word, actually hearing the correct pronunciation assists in word knowledge. This became evident during a teaching session whereby the students were presented with the unknown word 'halt', and the given synonym responses were 'carry' and 'hold.' Upon questioning about these responses for the then spoken word 'halt', students stated that they thought the word was 'hold' as they didn't know the written word 'halt'. However as soon as the word 'halt' was articulated the students were immediately able to give and act out correct synonyms. It is important that students are given opportunities to develop vocabulary knowledge in a variety of ways. Hickman (2004) talks about the importance of developing oral competencies that are critical to language and comprehension skills by orally responding to texts and encouraging students conversations about text. The non-gains in the results of the TORCH test for both Student E & F supports the fact that the test does not allow for the oral discussion and brainstorming for meaning, strategies that both these students were used to doing and still requiring the support of such activities.

Part of the strategy for developing a sequence for word meaning was to visualise the word, act it out and think of a synonym. The students enjoyed using this part of the strategy and they often referred back to actions acted out in previous sessions.

Students D in was particularly enthusiastic towards this part of the strategy and he took on this learning throughout the sessions. He would read text, stop at the problem word, close his eyes and visualise the word (and often smile as he visualised the action!).

There is a need to provide many opportunities to practice, apply and discuss word knowledge in order to retain it. In the teaching sessions, there is evidence of this through the practice of revisiting new words through the games and follow up discussions which did help to reinforce the students' vocabulary knowledge. Student D highlights the success of the practice of reviewing daily the sequential strategies previously learnt prior to the commencement of each teaching session. This daily routine of good teaching practice assists in students' ability to recall and retain previous learning. As the scaffolding was removed, the students in the intervention group had internalized the sequence for learning word meanings and they continually called out '*Triple M*' as their cue to 'Make Meaning Matter.'

The results indicate that teaching students a developmental sequence for learning word meaning through oral language increases their ability to generate synonyms and improves their reading comprehension. Allowing students to have the time to orally work through the sequence enables them to discuss and share their learning. While this intervention was an intensive, small group instruction, I would recommend that the strategy, cued in by *'Triple M'* be incorporated into a classroom situation where all students would benefit from this explicit teaching. This has proved to be a successful strategy and one that should be explicitly taught to all students to assist in their reading comprehension.

References:

Books:

Harvey, S. & Goudvis, A. (2000) Strategies That Work: Teaching Comprehension to Enhance Understanding. Markham, Ontario, Canada: Pembroke Publishers.

Parkin, C., Parkin, C. & Pool, B. (2002): Key into Inference: Guide and Answers. *Key Comprehension Series teaching resource*. TRIUNE initiatives, New Zealand.

Journal articles:

Biemiller, Andrew (2003) Vocabulary: Needed if more children are to read well. *Reading Psychology* v4, p.323-335

Biemiller, Andrew and Boote, Catherine (2006). An effective Method for Building Meaning Vocabulary in Primary Grades. *Journal of Educational Psychology*, 2006, Vol. 98. No. 1, 44-62.

Hickman, Peggy, Pollard-Durodola, Sharolyn & Vaughn, Sharon (2004) Storybook Reading: Improving vovaculary and comprehension foe English language learners. *The Reading Teacher*, v.57, Iss. 8 p.720-731.

Nichols, William Dee & Rupley, William (2004) Matching Instructional Design with Vocabulary Instruction. *Reading Horizons*, v.45 Is.1, p.55-71

Rupley, William H& Nichols, William Dee (2005). Vocabulary Instruction for the Struggling Reader. Reading and Writing Quarterly; Jul-Sept 2005. Vol. 21 Issue 3.

Roth, F.P. Speece, D.L. & Cooper, D.H. (2002). A longitudinal analysis of the connction between oral language and early reading. *Journal of Educational Research*, 95, 295-274.

Snow, C.E., Cancino, H., Gonzalez, P. & Shriberg, E (1989). Giving formal definitions: An oral language correlate of literacy. In D.Bloom (Ed.), *Classroom literacy 9pp. 233-249*). *Norwood, NJ: Ablex*.

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

Resources:

King-Smith, D., (1985). *Lightning Fred*. Yellow Bananas series. London, Great Britain. Heinemann Educational Publishers.

Mossenson, L., Hill, P. & Masters, G. (1987) *TORCH tests of Reading Comprehension. Australia: ACER*.

Munro, J. (2006). Teaching the meanings of unfamiliar words. *A sequence for teaching the meanings of novel words*. In Oral Language Supporting Early Literacy (OLSEL) lecture notes, 2007.

Munro, J., (2005). Synonyms Task – Group. Literacy Intervention Course notes, 2007.

Goldberg, R., & Rothstein, V. (1992). *Monkeying Around with Vocabulary. Grades K-2*. LinguiSystems, Inc. East Moline, U.S.A.

Goldberg, R., & Rothstein, V. (1992). *Monkeying Around with Vocabulary. Grades 3-5*. LinguiSystems, Inc. East Moline, U.S.A.

Appendix 1:

Session 1: Introducing the Targeted Teaching Session: John Munro's (2006) 'Sequence for teaching the meaning of novel words'.

When we are reading, we often come across new or difficult words. Sometimes we skip over words we don't know, but when we do this, we also lose the meaning of what we are reading. Instead of skipping over theses words you are going to learn a way of helping you to know what to do when you come across such a word.

The first way of helping you is to "Tune into 'Triple M', that is, 'Make Meaning Matter'. It is really important to make yourself stop reading when you don't know the meaning of a word. I want you to always say to yourself that you are tuned into 'Triple M' and that you will Make Meaning Matter.

Once you have tuned into 'Triple M', (Make Meaning Matter), there is a sequence you can follow that will help you work out word meanings.

| G | |
|--|---|
| Sequence | Teaching Activity |
| Introduce the word in a context that clearly | • "couch" |
| shows its meaning for the students. Say the | • I can sit on a couch |
| word and then say the word in a sentence | |
| Show 3 or 4 pictures of the word and talk | Here are pictures of couches I have |
| about them. What do all the pictures show? | seen in people's houses. Show the |
| Say what seems to be the same or shared | pictures. Describe what you can see |
| by all of them | that is similar by all of them. |
| Link a key action with the word; | Students |
| When students hear the word, they link | • Use their arms and legs to make the |
| characteristic actions with it. | shape of a couch |
| Show pictures of non-examples of the | I have some pictures that are not |
| word; that is, examples of what the word | couches. Show pictures of chairs, |
| does not mean. Students say how the real | stools, benches, seats, steps. <i>How</i> |
| differ from the non-real | are they different from couches? |
| Synonyms for the word: students link the | • A couch is like a sofa. |
| word with words they already know that | • A couch is like a lounge. |
| are similar to it. | • We can sit or lie down on a couch. |
| Show the word in several other contexts. | We can sit or lie down on a couch. |
| Students say the word in a sentence that | Three or four people can fit on a couch. |
| describes each context. | Most houses have at least one couch. |
| | A couch is usually in the lounge room. |
| | A couch is usually very soft. |
| | |
| Students recognize real and non-real | Students: |
| examples of the word | Hear sentences and decide whether |
| | each could describe the word, |
| | (couch), for example: |
| | ~ Only one person can fit on it |
| | ~ It is used for standing |

| | ~ People like to sit on a couch |
|---|---------------------------------|
| Meaning of the word: students use the | |
| word in several sentences that illustrate | |
| word meaning | |

(Adapted from John Munro,2006)

Samples of Teaching Sequence:

Sessions 2:

| Activity | Task Description | Time |
|---|---|---------|
| Introduction to teaching sequence | Tune into <i>Triple M</i> ~ Make Meaning Matter. Ask students 'Why is it important to make the meaning matter?' Review the sequence that students can use to help work out word meaning from the previous session Ask students 'What is a synonym?' | 10 mins |
| Text Reading ~ Shared reading Synonym selection | Students and teacher read passage on pages 1 -3 from text Students to give synonyms for the 6 teacher-selected key content words, (tubby, short, stumbled, sofa, flashed, wail), using the sequence to assist in working out word meanings Students orally replace key word with a suggested synonym, re-read sentence using the synonym and state whether the meaning is retained. Using the chart, teacher writes the synonym next to the target word as each student gives his/her response | 20 mins |
| Synonym Task. | Students are given a list of 5 target words and are to write down one or more synonyms for each. | 10 mins |
| Student Reflection | Ask each student to restate the word meaning procedure Students comment individually on what they have learnt in the session | 5 mins |

Sessions 3:

| Activity | Task Description | Time |
|--------------------|--|---------|
| Revise the action | Tune into Triple M ~ Make Meaning Matter. Ask students 'Why is it important to make the meaning matter?' Review the sequence that students can use to help work out word meaning from the previous session Ask students 'What is a synonym?' | 5 mins |
| More Than One Name | Students look at each picture on the worksheet and then find a word in the box that means the same thing as the word next to the picture; each student writes their word (synonym) underneath each picture. Each student reads target word and appropriate synonym; teacher writes each pair onto chart. Each student chooses a synonym from the chart and gives a sentence containing new word; ask group if sentence makes sentence. | 20 mins |
| Synonym Task. | Students are given a list of 5 target words and are to write down one or more synonyms for each. (This is to be used for anecdotal information) | 10 mins |
| Student Reflection | Each student restates the word meaning procedure Students comment individually on what they have learnt in the session | 5 ins |

Session 4:

| Activity | Task Description | Time |
|--|--|-----------------|
| Revise the action Vocabulary :word meaning / synonym activity | Tune into <i>Triple M</i> ~ Make Meaning Matter. Ask students 'Why is it important to make the meaning matter?' Review the sequence that students can use to help work out word meaning from the previous session Ask students 'What is a synonym?' Students work in pairs and are given task sheet; teacher reads the words in the box and explains procedure Students look at each picture on task sheet and find two words in the box that can name the picture; in pairs, they each write their choice of word in the space underneath each picture and work out actions for words Each pair has a turn to read out their written set of words and demonstrate actions As these are read out the teacher writes each set onto a chart which will be given a heading of 'Synonym Chart' following the next step: Students are asked to identify what the activity was actually having them do and what the word pairs can be called (synonyms). Following this step, the | 5 mins 20 mins |
| D | teacher labels the chart as 'Synonym Chart' | 10 |
| Putting words in a context | The words from the above activity are used by each student and they place their choice of word into a sentence. | 10 mins |
| Student Reflection | Ask each student what they have learnt in the session. Each student restates the word meaning procedure | 5 mins |

Session 5 & 6:

| Activity | Task Description | Time |
|--------------------------------|---|---------|
| Revise the action | "Triple M, Make Meaning Matter" Ask students 'Why is it important to make the meaning matter?' Revise the action that will help you work out word meaning: 'When I reach a word I don't know I Ask students 'What is a synonym?' | 5 mins |
| Shared reading of text | Teacher reads first chapter of text aloud with target words written on chart Teacher asks students to orally apply above 'Triple M Make Meaning Matter' strategywhen I come to a word I don't knowto the target words. | 5 mins |
| Building synonyms and meanings | Students take turns to read the above text and when they reach the target word, they articulate and apply the learnt strategy to work out the synonym for the target word Students are asked 'does the sentence still make sense with the new synonym?' Teacher lists synonyms next to written target words on the chart as each student applies the strategy | 20 mins |
| Synonym Task - (Lesson 5 only) | Students are given a list of 5 target words and are to write down one or more synonyms for each. (This is to be used for anecdotal information) | 5 mins |
| Student Reflection | Ask each student what they have learnt in the session. Each student restates the word meaning procedure | 5 mins |

Session 7:

| Activity | Task Description | Time |
|--------------------|---|---------|
| Revise the action | Revise 'Triple M Make Meaning Matter', Ask students 'Why is it important to make the meaning matter?' Revise the action that will help you work out word meaning: 'When I reach a word I don't know I' Ask students 'What is a synonym?' | 5 mins |
| Synonym Game | Game: students work with a partner; each pair is given a set of flashcards of target words and their synonyms; these are to be sorted with each student taking turns with their partner and matching a target word with its synonym. Each student reads out list of words | 10mins |
| Means the Same | Group is presented with a chart containing sentences; the first sentence has a target word circled and then the sentence is repeated with a synonym given for the target word. Each student comes out and uses a texta to circle the synonym in the sentences. Words and synonyms are added to a separate synonym chart | 10 mins |
| Synonym Task | Students are given a list of 5 target words and are to write down one or more synonyms for each. (This is to be used for anecdotal information) | 10 mins |
| Student Reflection | Ask each student what they have learnt today Students articulate how they work out word meanings 'When I come to a word I don't know I | 5 ins |

Session 8:

| Activity | Task description | Time |
|--------------------|---|---------|
| Revise the Action | Revise 'Triple M Make Meaning Matter' Students individually state why it is important to understand the meaning of words Revise what you are going to do to help work out word meanings: 'When I come to a word I don't know I' Clarify term 'synonym' | 5 mins |
| Synonym Game | Game: students work with a partner; each pair is given a new set of flashcards of target words and their synonyms; these are to be sorted with each student taking turns with their partner and matching a target word with its synonym. Each student reads out list of words | 10 mins |
| Find a Synonym | Students are presented with a chart containing sentences. Each sentence has a space for a word (synonym for target word) to be inserted; the target word is written underneath this space. Teacher completes first sentence to demonstrate activity; Each student has a turn to write their synonym onto the chart. Student then reads new sentence to the group and teacher asks the group 'Does this sentence make sense?' | 20 mins |
| Student Reflection | Ask each student what they have learnt today Students articulate how they work out word meanings 'When I come to a word I don't know I | 5 mins |

Sessions 9:

| Activity | Task Description | Time |
|--------------------------------|--|---------|
| Revise the action | Revise 'Triple M Make Meaning Matter' Revise the action that will help you work out word meaning: 'When I reach a word I don't know I say the word, I' | 5 mins |
| Synonym Game | Each student has own set of flashcards containing target words and their synonyms; these are to be sorted and each word matched to its synonym. Each student reads out own list. | 5 mins |
| Shared Reading | Present a short passage with the target word written under the gap where the word would normally be written; (this is presented as a similar activity to a cloze activity except that the space is to be filled in using a synonym for the target word which is written under the gap) Each student has a turn to read aloud one sentence until the passage is finished. | 5 mins |
| Building synonyms and meanings | Individual students come out to the enlarged version of the passage and using a texta, they each have a turn to fill in their choice of synonym. Student then reads back the sentence and group decides if it makes sense. If there are more synonym choices, they are also written onto the chart. Words and synonyms are added to chart | 15 mins |
| Synonym Task | Students are given a list of 5 target words and are to write down one or more synonyms for each. (This is to be used for anecdotal information) | 10 mins |
| Student reflection | Ask each student what they have learnt today? What have you learnt in the sessions that you will use when you read? | 5 mins |

Session 10:

| Activity | Task Description | Time |
|--------------------|--|---------|
| Revise the action | Revise 'Triple M Make Meaning Matter' Students individually state why it is important to understand the meaning of words Revise what you are going to do to help work out word meanings: 'When I come to a word I don't know I' Clarify term 'synonym' | 5 mins |
| Shared reading | Present a short passage with the target word written under the gap where the word would normally be written; (this is presented as a similar activity to a cloze activity except that the space is to be filled in using a synonym for the target word which is written under the gap) Each student has a turn to read aloud one sentence until the passage is finished. | 5 mins |
| Building synonyms | Each student is given their own copy of the story and using their own pencils, they complete the synonym activity. Upon completion of activity, individual students come out to the enlarged version of the passage and using a texta, they each have a turn to fill in their choice of synonym. Student then reads back the sentence and group decides if it makes sense. If there are more synonym choices, they are also written onto the chart. | 20 mins |
| Student Reflection | Ask each student what they have learnt today? Students articulate how they work out word meanings. Students reflect on their learning from the 10 lessons and articulate how they are going to use this strategy back in the classroom. | 10 mins |

| Sample of Synonym Activity. | | |
|-----------------------------|------------------|----|
| | Synonym Activity | #1 |

Student Name.....

Appendix 2:

| | Word | Synonym | Synonym | Synonym |
|---|-------|---------|---------|---------|
| 1 | | | | |
| | gap | | | |
| 2 | close | | | |
| 3 | enter | | | |
| 4 | halt | | | |
| 5 | home | | | |

Appendix 3

