Explicitly teaching synonyms to Year 2 students will foster the development of vocabulary knowledge and reading comprehension.

ABSTRACT

The primary purpose of this study was to assess the effects of explicit vocabulary instruction on the vocabulary knowledge and reading comprehension of students in Year 2.

The study compared the results of two groups of students; a control group and an intervention group. The intervention group received explicit vocabulary instruction for 30-45 minutes a day during the classroom literacy program, over a 10 day period. They were taught how to generate synonyms for content words in a text to assist with comprehension. In contrast, the control group went about their regular classroom literacy program without explicit vocabulary instruction; the purpose of this was to allow for comparison and to see if intervention did indeed lead to development in vocabulary knowledge and reading comprehension.

Results of this study lend some support to the hypothesis. The results showed that those students with low pre intervention vocabulary knowledge and reading comprehension made greater gains in vocabulary knowledge and reading comprehension relative to those students who did not receive explicit vocabulary instruction. Conversely, those students with average to high achievement who received explicit vocabulary instruction only showed significant gains in their vocabulary knowledge but not in reading comprehension relative to those students who did not receive explicit vocabulary instruction. In fact, the results of these students showed a regression in their reading comprehension, yet the students with similar abilities in the control showed greater gains in reading comprehension.

This study suggests that explicitly teaching synonyms can be an effective strategy to develop vocabulary knowledge and improve the comprehension ability of students in Year 2 given time and regular opportunities. The results and implications are discussed.
INTRODUCTION

“Our knowledge of words determines how we understand texts, define ourselves for others and define the way we see the world. (Sthal, 1999)

Words, written or spoken, play a decisive role in our lives. They enable us to articulate our ideas and perspectives and build upon our bank of knowledge and understandings. A rich and functional repertoire of vocabulary knowledge sets the foundation for all learning; in particular it underlies the comprehension of written and spoken text.

Comprehension is the fundamental essence of written and spoken text. Past research has shown a correlation between vocabulary knowledge and reading comprehension. ‘Vocabulary knowledge is important to reading comprehension as it determines how well an individual is able to comprehend a text’ (Anderson and Freebody, 1990). It is also important because as an individual begins to read, reading vocabulary draws upon prior vocabulary knowledge

From the age of two the average child learns between six to eight new words per day; this equates to 2000 to 3000 words a year. By the time they begin school, they have an average vocabulary of 14 000 words (Anderson and Nagy, 1992). It is ideal that by the time a child commences school that they have a rich and functional vocabulary but children enter school with meaningful differences in vocabulary knowledge as a result of differences in experiences and exposure to literacy (Hart & Risley, 1995).

The differences in vocabulary knowledge begin to appear early in children’s lives. This in part is due to the varying range of words children are exposed to within their homes and immediate environment. Exposure to new words can differ significantly among the children of families from different socio-economic backgrounds. Studies have shown that those children of parents with professional backgrounds can be exposed to 50 per cent more words than children of parents with a working class background (Hart and Risley, 1995).

The importance of vocabulary knowledge to school success, in general and reading comprehension in particular is widely documented. Rupley and Nichols (2005) state, that a beginning reader’s ability to learn vocabulary is crucial for improving comprehension and reading development. They also suggest that struggling readers often lack experiences associated with texts encountered in school. They go further to state the strong link vocabulary makes with decoding and comprehension. With this in mind, fostering the development of vocabulary knowledge through explicit vocabulary instruction and promoting reading should be a fundamental goal for students during the early years of schooling.

“The vocabulary gap grows larger in the early years. Children who enter with limited vocabulary knowledge grow more discrepant over time from their peers who have a rich vocabulary.” (Biemiller and Slonin, 2001)

Poor readers often lack adequate meaning from what they read. Consequently reading becomes difficult and tiresome for them; and they are unable and often unwilling to do the large amount of reading that they must do to encounter unknown words often enough to learn them (Stahl, 1999).
A situation like this contributes to what Sthal (1999) refers to as ‘Matthew Effects.’ He draws an analogy between a verse in the book of Matthew in the Bible; ‘the rich get richer and the poor get poorer’ and how those individuals who are good at reading read widely and tend to increase their vocabulary.

With all the research that has been done in relation to vocabulary knowledge and reading comprehension, many would agree that vocabulary knowledge is effectively developed through wide reading. Rupley and Nichols (2005) believe that to foster vocabulary knowledge effectively, we must teach further than the definitional knowledge but also develop contextual knowledge. If words are more meaningful they are more easily learned and retained, than if they are just memorised. If we know a word beyond its definition, we are more able to use it in different situations and transfer this knowledge and understanding when reading.

“Good vocabulary teaching makes students excited about words and leads them to attend more closely to them” (Stahl and Shiel, 1999).

The primary focus in the early years of schooling should be on developing vocabulary knowledge and critical beginning reading skills. Children need to be provided with opportunities read to a wide range of texts and take part in interactive discussions to develop vocabulary knowledge. They need to be taught the meanings of unfamiliar words and concepts and be given opportunities process these and relate them to their own experience. Explicit vocabulary instruction nurtures and appreciation and consciousness of words and their use.
METHOD

Design

The study uses a case study XOX design. Gains in vocabulary knowledge and reading comprehension, following explicit teaching of the use of synonyms, were monitored for 2nd grade students. The study compares two groups of students, a control group and an intervention group.

Participants

The participants in this study were ten Year 2 students, from two multi-age classrooms within the same school. They come from middle class, working families. where for 60 per cent of the students, English is the first and only language spoken at home. 40 per cent of the students come from bilingual families where both English and the second language are spoken regularly. The table below gives a general profile of each participant.

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Gender</th>
<th>Integration</th>
<th>Previous Intervention (Reading Recovery)</th>
<th>ESL as a Second Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>8.3</td>
<td>M</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Student B</td>
<td>7.11</td>
<td>F</td>
<td>No</td>
<td>No</td>
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</tr>
<tr>
<td>Student C</td>
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<td>F</td>
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<td>No</td>
</tr>
<tr>
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<td>Student E</td>
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<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Student BB</td>
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<td>F</td>
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<td>Yes</td>
</tr>
<tr>
<td>Student CC</td>
<td>8.3</td>
<td>M</td>
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<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Student DD</td>
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<td>M</td>
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<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Student EE</td>
<td>7.2</td>
<td>F</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 1- Year 2 Student Participants Profile
Whilst all of the students were initially given a PROBE and Synonyms assessment to determine the effectiveness of the hypothesis, the control group was taken directly from one classroom of Year 2 students, whilst the other classroom of Year 2 students made up the intervention group. Whilst this was not the ideal organisation, the reason such organisation was to enable effective management and ensure minimal disruptions to the regular curriculum programs of both classrooms and the school.

Irrespective of the fact, that 90 percent of the students chosen for this study are competent readers whom are able to accurately decode an age appropriate text, a high level of reading accuracy does not always draw a parallel with comprehension of the text..

Materials

The assessment materials used pre and post intervention included:

- PROBE - Prose Reading Observation Behaviour and Evaluation of Comprehension (Parkin, Parkin & Pool, 2002) The PROBE texts used were the fiction texts; ‘Stormy Night’ – 7 to 8 Years and ‘River Journey’ – 7.5 to 8.5 Years.
- Synonyms Task (Munro, 2005)

The materials used during the intervention program included:
- Big Books:
  The Hungry Monster
  Ella Kazoo Will Not Brush Her Hair (Lee Fox and Cathy Wilcox
  Possum Magic (Mem Fox)
  Wilfred, Gordon, McDonald Partridge Mem Fox
- Guided Reading texts:
  My Brother the Spy
- Dictionaries:
- Thesaurus
- Materials used to record students work
  Flashcards
  Poster paper
  Individual exercise books

PROCEDURE

To facilitate a more comprehensive picture of each student’s vocabulary knowledge and reading ability, all students were individually assessed pre and post intervention. To assess their reading accuracy and comprehension levels, students completed an age appropriate, PROBE assessment. To assess their vocabulary knowledge and ability to generate synonyms, the students were given the synonyms task to complete.

The reading assessment tasks were administered using an informal reading inventory where the student first of all read the text silently and then aloud. As the student read aloud, a running record of their reading accuracy was recorded.
After reading aloud, the student was then asked comprehension questions written for each passage. In PROBE, six types of comprehension questions are used, literal, reorganisation, vocabulary, evaluation, reaction and inference.

The second pre-assessment task required the students to complete the synonyms task as a group. In this task the students were read a word, they then had to list as many synonyms for that word. In total the students were given 29 words.

The teaching procedures used in this program were a combination of ideas taken from John Munro (2007). The emphasis of this program was to teach students to identify synonyms for key content words to assist with the comprehension of the text. Students in the intervention group were taught a series of lessons in their own classroom during the literacy block. Ten, consecutive, 45 minute lessons were planned over a two week period. Unfortunately due to unforeseen circumstances these 10 lessons were taught over a two month period. Students in the control group continued to participate in their own regular classroom literacy program.

To focus the students into the intervention program the students were given a definition of the term ‘synonym’ (Refer Appendix 1). Then to stimulate their interest, students took part in a five minute synonyms game. The purpose of the game was to enable the students to generate synonyms for common words of interest and enable them to have fun while attempting to generate synonyms for these words. This game then became part of the program due to the student’s positive response.

After the game, the students added new words into their personal dictionaries and synonyms word wall, time was also allowed for students to share their synonyms. Prior to shared reading the students shared the strategies they can use to assist them with identifying synonyms for key content words and any other strategies they use to gain meaning of the text. A discussion similar to this and a review of the previous lesson also became part of the program. (Refer Appendix 1-4)

During the first six sessions of the intervention program, the teacher and students participated in shared reading sessions. Big books were used in these sessions to enable all of the students to see the text and allow the teacher to explicitly teach and model strategies. Prior to reading, the teacher would select possible unknown vocabulary to teach and model management strategies using self talk:

Teacher: To help me understand what I am reading today I am going to:
- Think about the story as I read
- Think about the words in the sentence and try to get a picture in my head.
- If I do not know what a word means I am going re-read to clarify meaning or read on
- Try and think of a synonym for the unknown word.

During the lesson the teacher explicitly taught their meaning (Appendix 1) and synonyms were listed. Students would then be asked to think about another word they could use in the sentence that means the same. Each session ended with a review of the lesson and a discussion of what the students learnt and the strategies they used to assist them with their reading.

By the end of the second session, the students with teacher direction, a set of made cards to display in the classroom to assist them with managing their reading and their reading comprehension. The cards read:
Think about the story as you read
Visualise the words in the sentence
Re-read or read on to help you understand unknown words
Think of synonyms for unknown words

These cards were most useful as towards the end of the study you could hear the students verbalising these strategies to each other.

The last four sessions followed a similar format but the students were given individual copies of the same text. Prior to reading in session four, the students were asked to refer back to the strategy cards they made at the end of session two and this time another strategy was added.

Think about the story as you read
Visualise the words in the sentence
Re-read or read on to help you understand unknown words
Think of synonyms for unknown words
Say the sentence another way

Like guided reading, the teacher listened to each student read and observed their reading accuracy, comprehension and how they were using the synonyms strategy and gave them instructional feedback to further their understandings and develop their reading. The same type of vocabulary discussion followed as in lessons one to six. (Refer to Appendix)

Following the two weeks of teaching to the intervention group, all students were assessed again using the same materials and procedures used pre intervention. (Refer Appendix 2).
RESULTS

PROBE AND SYNONYMS PRE AND POST TEST DATA

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre test 11/6/07</th>
<th>Post test 26/7/07</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age in years</td>
<td>Reading Accuracy %</td>
</tr>
<tr>
<td>Intervention Student A</td>
<td>8.3</td>
<td>95</td>
</tr>
<tr>
<td>Intervention Student B</td>
<td>7.11</td>
<td>99</td>
</tr>
<tr>
<td>Intervention Student C</td>
<td>8.3</td>
<td>96</td>
</tr>
<tr>
<td>Intervention Student D</td>
<td>7.6</td>
<td>96</td>
</tr>
<tr>
<td>Intervention Student E</td>
<td>7.6</td>
<td>95</td>
</tr>
<tr>
<td>Control Student AA</td>
<td>8.3</td>
<td>98</td>
</tr>
<tr>
<td>Control Student BB</td>
<td>7.4</td>
<td>100</td>
</tr>
<tr>
<td>Control Student CC</td>
<td>8.3</td>
<td>99</td>
</tr>
<tr>
<td>Control Student DD</td>
<td>7.11</td>
<td>99</td>
</tr>
<tr>
<td>Control Student EE</td>
<td>7.9</td>
<td>86</td>
</tr>
</tbody>
</table>

Table 2- Pre and post test results of participating students
## PROBE AND SYNONYMS PRE AND POST TEST AVERAGES

<table>
<thead>
<tr>
<th></th>
<th>PRE INTERVENTION AVERAGES</th>
<th>POST INTERVENTION AVERAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention Group</td>
<td>Control Group</td>
</tr>
<tr>
<td>PROBE Reading Accuracy %</td>
<td>96.2</td>
<td>96.4</td>
</tr>
<tr>
<td>PROBE Comprehension Accuracy %</td>
<td>57.2</td>
<td>49.2</td>
</tr>
<tr>
<td>Synonyms Number of words</td>
<td>12.4</td>
<td>10.8</td>
</tr>
</tbody>
</table>

### Table 3: Pre and Post Intervention Averages

### Pre Intervention Data Analysis

The table above shows that pre intervention, the reading accuracy rates across both groups were similar. The reading accuracy ranged from 86 per cent to 100 per cent. The intervention group had an average reading accuracy rate of 96.2 per cent in comparison to the control group’s average of 96.4 per cent. It is important to note that the reading accuracy of Student EE in the control group would have brought the rate down significantly. The possible reason for this is because she is not reading at an age equivalent level. Whilst this student received extended Reading Recovery, she still encounters difficulties with reading. Overall these results indicate that the students are reading an age equivalent text at an instructional level.

In the usual course of evidence a minimum of 70 per cent success rate in comprehension would indicate that a student has understood the main points of the text. The comprehension rates ranged from 25 per cent to 87 per cent. More than half of the intervention student’s comprehension rate was below the standard. The average comprehension rate in the intervention group was 57.2 per cent in comparison to 49.2 per cent for the control group. These results indicate that the students were not comprehending, an age equivalent text and were reading the text at word level.

The results of the synonyms test were relative. The students in the intervention group scored a slightly higher average of 12.4 words compared to 10.8 words in the control group. All of the students had difficulty generating synonyms. Most students could identify a synonym for common words that were familiar to them and a part of their daily written and spoken vocabulary but added suffixes to the unknown word.
Post Intervention Data Analysis

Post intervention results show relative gains in reading accuracy and comprehension ability across both groups. Both groups showed an increase in reading accuracy and reading comprehension abilities by 0.2 and 0.5 per cent respectively. The average increase was more significant in comprehension. Both groups recorded just over a 10 per cent increase in comprehension ability. However the magnitude of gains is more significant in the intervention group in relation to the synonyms task. The students post intervention almost doubled the amount of synonyms they could generate in comparison to the control group who showed an average increase of one word.

Whilst on average gains were made in all areas across both groups, the gains were more considerable in the intervention group thus suggesting that explicitly teaching synonyms can foster the development of vocabulary knowledge and reading comprehension in Year 2 students.

Individual Student Analysis

Student A

<table>
<thead>
<tr>
<th></th>
<th>Student A - Teaching Group</th>
<th>Student AA - Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROBE reading accuracy</td>
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<td>98</td>
</tr>
<tr>
<td></td>
<td>97</td>
<td>99</td>
</tr>
<tr>
<td>PROBE comp PC pre</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>PROBE comp PC post</td>
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<td>62</td>
</tr>
<tr>
<td>Synonym test PRE</td>
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<td>11</td>
</tr>
<tr>
<td>Synonym test POST</td>
<td>24</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 4: PROBE and Synonyms Test Pre and Post Test Results of Student A and Student AA

Student A had the lowest pre test scores in the intervention group however, post intervention he had the second highest scores. He showed significant improvement in reading comprehension and his ability to generate synonyms. Pre intervention he showed 95 per cent reading accuracy and 25 per reading comprehension ability of the same text. Post intervention he showed 97 per cent reading accuracy of an age equivalent text and 75 per cent comprehension accuracy. He also doubled the amount of synonyms he could generate.

To enable comparison and an assessment of the intervention program, Student A was matched up with Student AA of the control group. They were matched because of their age and initial low comprehension ability. Student AA also made gains in
reading accuracy and comprehension ability but they were not as significant as Student A. He only showed a slight increase in his ability to generate synonyms.

Student A worked consistently hard during the intervention program, despite some of the difficulties he encountered at the beginning of the program. Pre intervention he was reading at word level. Towards the end of the program Student A was beginning to read at sentence and topic level. Student A also began to substitute common words in his spoken vocabulary for more interesting synonyms and was beginning to make more accurate attempts at paraphrasing sentences. (Refer Appendix).

The results of Student A indicate that teaching synonyms explicitly has fostered his development of vocabulary knowledge and reading comprehension.

**Student B**

<table>
<thead>
<tr>
<th>PROBE reading accuracy PC pre</th>
<th>PROBE reading accuracy PC post</th>
<th>PROBE comp PC pre</th>
<th>PROBE comp PC post</th>
<th>Synonym test PRE</th>
<th>Synonym test POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>100</td>
<td>99</td>
<td>99</td>
<td>62</td>
<td>87</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>16</td>
</tr>
</tbody>
</table>

**Table 5: PROBE and Synonyms Test Pre and Post Test Results of Student B and Student BB**

Student B had the second lowest pre test scores in the intervention group. Pre intervention, despite a 99 per cent reading accuracy of an age equivalent text, she read this with many hesitations at word level and with no monitoring for meaning. These behaviours justify her low initial reading comprehension ability 37 per cent comprehension accuracy of the same text. Pre test, Student B also had difficulty generating synonyms; she was only able to generate 11 synonyms. Post intervention her comprehension ability increased to 62 per cent and her ability to generate synonyms more than doubled to 25. While her reading accuracy did not change, she did not make as many hesitations and clarified meaning of the text by going back and re-reading.

To enable comparison and an assessment of the intervention program, Student B was matched up with Student BB of the control group. They were matched because of their age and family background. Student BB made more significant gains in reading accuracy and reading comprehension but showed only showed a slight increase in her ability to generate synonyms. Student BB is reading at topic level.
She monitors her reading and cross checks information in the text. Unlike Student B, Student BB is able to read and comprehend an age equivalent text.

Student B did not work consistently during the intervention program. She was easily distracted by what was going on in the classroom. She also seemed to switch off rather than seek clarification when she did not understand concepts or instructions. She also had difficulty paraphrasing sentences to enhance reading comprehension. Student B comes from a multi-lingual family and the level of English spoken would be basic.

The results of Student B indicate that explicitly teaching synonyms to develop vocabulary knowledge and reading comprehension has been a successful strategy.

Student C

<table>
<thead>
<tr>
<th>PROBE reading accuracy PC pre</th>
<th>PROBE reading accuracy PC post</th>
<th>PROBE comp PC pre</th>
<th>PROBE comp PC post</th>
<th>Synonym test PRE</th>
<th>Synonym test POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>97</td>
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<td>50</td>
<td>62</td>
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<td>14</td>
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</tbody>
</table>

**Table 6: PROBE and Synonyms Test Pre and Post Test Results of Student C and Student CC**

Student C had average scores in reading accuracy and comprehension abilities pre intervention. She also showed the highest score in her ability to generate synonyms. Post intervention her reading accuracy improved from 96 per cent accuracy to 97 per cent. More significantly though, her level of comprehension increased from 50 per cent accuracy to 87 per cent accuracy. However, it is interesting to note that her ability to generate synonyms only increased by one word.

To enable comparison and an assessment of the intervention program, Student C was matched up with Student CC of the control group. They were matched because of their age, their relationship (they are first cousins) and their initial comprehension scores. Student CC showed high initial scores in reading accuracy and an average score of 50 per cent comprehension accuracy. It is interesting to note that Student CC’s reading accuracy showed regression but his level of comprehension improved. Despite the regression, the results show that Student CC can still accurately decode an age equivalent text but can not comprehend at the same level.

During the program, Student C learnt how to locate synonyms for key content words to promote meaning of the text. Prior to the intervention she just read at word and sentence level, she rarely monitored her reading or cross checked the information to
clarify meaning. This may explain the increase in her comprehension ability post intervention. She is now beginning to read at topic level and is managing her reading more independently. Student C can now read and comprehend an age equivalent text.

The results of Student C’s post test results indicate that explicitly teaching her to locate synonyms for key content words did foster her reading comprehension abilities.

**Student D**

![Student D/ DD Comparison](image)

**Table 7: PROBE and Synonyms Test Pre and Post Test Results of Student D and Student DD**

Student D had the highest reading accuracy and comprehension scores of the intervention students in the pre tests. However, his post test scores show regression in both reading accuracy and comprehension ability, with the most significant deficit in comprehension ability from 87 per cent down to 50 per cent. His ability to generate synonyms on the other hand doubled his pre test score.

To enable comparison and an assessment of the intervention program, Student D was matched up with Student DD of the control group. Student DD did make gains in both his reading accuracy and comprehension ability however; he was not able to generate more synonyms post intervention.

Although Student D was eager to take part in the lessons, he was easily distracted and at times would disengage from the activity. He did show a good general knowledge of words in the read texts but had difficulty trying to transfer this knowledge to paraphrase sentences. It is also worth noting that when Student D reads, his reading is phrased and fluent when the text is easy. Whenever he was asked to recall parts of the story or summarise what he had read he could only recall one or two ideas, this indicating that he is reading at sentence level.

The results of Student D’s post tests indicate that explicit teaching of synonyms did not increase his reading ability or his comprehension, but it did enhance his ability to
generate synonyms. Student D could benefit from explicit instruction on how to manage his reading more effectively in order to gain meaning.

Student E

![Student E / EE Comparison](image)

Table 8: PROBE and Synonyms Test Pre and Post Test Results of Student E and Student EE

Student E had one of the highest comprehension scores pre test. She had a comprehension accuracy rate of 87 per cent, this indicating that she was able to comprehend an age equivalent text. However her reading accuracy was 96 per cent, indicating that she was able to read an age equivalent text at an instructional level. Her ability to generate synonyms was pre test was low. Post test her reading accuracy remained unchanged but her comprehension ability dropped to 75 per cent. Regardless of this deficit, it stills shows that Student E can comprehend an age equivalent text. Post test, her ability to generate synonyms almost doubled.

To enable comparison and an assessment of the intervention program, Student E was matched up with Student EE of the control group. These students were matched because of their age and family background. While Student EE encounters difficulties with reading in general, her post test scores showed an increased reading accuracy from 86 per cent to 90 per cent but her no difference in comprehension ability. Student EE was not able to generate more synonyms post intervention.

The results of Student E’s post tests indicate that explicit teaching of synonyms did not increase her reading ability or her comprehension, but it did enhance her ability to generate synonyms. Student E could benefit from explicit instruction on how to manage her reading more effectively in order to gain meaning.
DISCUSSION

The objective of this study was to assess the effectiveness of explicit vocabulary instruction on vocabulary knowledge and reading comprehension of students in Year 2. The results of this study are diverse, however, there is enough evidence statistically that lends support to the hypothesis which is; explicitly teaching synonyms will foster the development of vocabulary knowledge and reading comprehension. From an educationalists perspective, it is also important to look beyond the statistics and into the student's learning behaviour and reading management, pre and post intervention.

Overall, the gains and deficits in reading accuracy and reading comprehension between the two groups are relative, with the intervention cohort showing a slightly higher increase in comprehension post test. The deficits in fact are more apparent in two students from the intervention cohort, Student D and Student E. While their level of reading accuracy did not change post intervention, they showed regression in comprehension ability, Student E's regression was more significant.

The reasons for these results are difficult to conclude. One possible reason could be in regards to the environment they had to complete these tasks in. During pre testing, students were withdrawn from the classroom individually to complete the assessment tasks in a quiet space. Post intervention due to management issues on a school level, post assessment tasks had to be completed within the literacy block of a busy, multi age classroom. Another possible reason for these results is lack of self management when reading.

It is worth noting that those students with low pre intervention vocabulary knowledge and reading comprehension made greater gains in vocabulary knowledge and reading comprehension relative to those students who did not receive explicit vocabulary instruction. Conversely, those students with average to high achievement who received explicit vocabulary instruction only showed significant gains in their vocabulary knowledge but not in reading comprehension relative to those students who did not receive explicit vocabulary instruction.

These outcomes seem to be consistent with past research that has been done on vocabulary instruction. Tomensen and Aarnoutse (1998), cited in Nelson and Stage (2007), reported similar findings in their case study. They found that those students who had initial low vocabulary knowledge and reading comprehension ability tended to benefit more from explicit vocabulary instruction relative to those students with average to high initial vocabulary knowledge and reading comprehension ability. While it is not obvious as to why lower performing students tend to benefit more from vocabulary instruction, the reason may be as simple as those students who enter with limited vocabulary knowledge and reading comprehension ability benefit from any explicit instruction on a regular basis in a small group setting.

The most noticeable result of this study was the student's ability to generate synonyms. At the end of the study, the students from the intervention group were beginning to regularly use synonyms for key content words to extract meaning when reading. They are also beginning to transfer there knowledge of synonyms into their written and spoken vocabulary. A number of parents made comment throughout the study about the more sophisticated language their child was using at home. As the classroom teacher of a multi age class of Prep, Year 1 and Year 2 students, it is great to see this vocabulary knowledge filter through to the younger students. A Prep student recently substituted the word ‘hungry’ and used the word ‘ravenous’ instead.
The organisation and the management of this study was not ideal and inconsistent due to unforeseen circumstances on a school and personal level. It took almost two months to execute the intervention program. This could explain the gains made by all of the students in the control group.

The intervention program took place in the regular classroom during the literacy block. This particular classroom is made up of students in Prep, Years 1 and 2 with one particular student in Prep who has exceptional special needs behaviourally. If the Integration Aide for this student was absent and if classroom helpers were not available during the execution of the intervention program, there were constant interruptions from other students. Quite often the teacher would have to repeat the same concept over and over again. This repetition may have been successful in getting the concepts across to those students with low initial vocabulary knowledge and reading comprehension but it did not seem to have an impact on those students with high initial vocabulary knowledge and reading comprehension, these students could have ‘switched off’ from monotony.

To compensate for the inconsistencies and improve the overall management, during whole class shared reading all students were explicitly taught how to locate synonyms for key content words in a text. This had an overall positive affect on a whole class level and brought to light the need to make explicit vocabulary instruction a part of the regular classroom literacy program.

Prior to this study, the students from the intervention group were reading at word and sentence level and were not managing their reading independently. They were not aware that words had multiple meanings and that just one unfamiliar word could prevent them from comprehending the text. By the end of this study these same students were beginning to read for meaning at topic level and manage their reading more independently. You can now hear the self talk; “I’m going to read on to see if I can work out what this means” and hear them replace common words such as ‘hungry’ with ‘ravenous’; ‘tired’ with ‘fatigued’. Some during independent reading now sit down with their chosen text and a thesaurus; as the classroom teacher this is a scene to marvel.

This study shows that with time and regular opportunities to practise, explicit vocabulary instruction can foster the development of vocabulary knowledge and reading comprehension. I

IMPLICATIONS

There are some immediate conclusions that can be drawn from this study. First of all with time and regular opportunities, explicitly teaching synonyms to foster the development of vocabulary knowledge and reading comprehension appears to produce positive outcomes. These outcomes appear to be greatest for students with low initial vocabulary knowledge and reading comprehension ability. Secondly, explicit vocabulary instruction can be taught by all classroom teachers and should factor into the daily literacy program, it should not be exclusive to an intervention program.

Finally, the broader picture presents that explicit vocabulary instruction needs to begin in the early years of schooling as all beginning readers need to develop a rich and functional vocabulary. A rich and functional vocabulary promotes comprehension of written and spoken text.
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Biemiller and Slonin, 2001
APPENDIX 1 - Definitions

**Definition:** A synonym is a different word having the same or similar meaning. For example: ‘hungry’ means the same as ravenous, starving, peckish

**Synonym Memory Game:** Make up a set of cards where on one card you have a common word such as skinny and on the other card it’s synonym slender. You can add to this card set at the end of each session and use them for the following sessions game.

**Synonyms Thesaurus Game:** Provide each student with a thesaurus. Teacher calls out a word and students try to see who can find the word with it’s list of synonyms. During this game, the teacher can add words and synonyms to a chart, cards, word wall etc.