Abstract:

The extent to which training in high frequency word recognition influences early reading acquisition has attracted little interest in the past. The present study examines its relationship for emergent readers in an educationally disadvantaged context.

Four prep students who entered school with little literacy knowledge were exposed to a kinaesthetic approach that facilitated the acquisition of high frequency words. Their prose reading pre and post the intervention was assessed and the findings indicated that 3 out of the 4 children displayed substantial gains in prose reading accuracy. The possible causes for the slower acquisition of the fourth student are attributed to on-task attention and selective attention difficulty.

Introduction:

Learning to read in the first several years of school is essential to success in later grades and in life. (Hiebert et al. 1998) It is true that all children have the right to be taught to learn to read. To be able to read is not a privilege but a necessity and teachers have the responsibility to teach all children to read. For too long, educators have dismissed some children as unwilling or unable to read. In Australia there are many programs in place – Reading Recovery, Corrective Reading and Individual Learning Plans to name a few, but still it appears some children are leaving primary school having attained only low reading levels.

The purpose of this study examines one way to support early readers in attaining higher reading levels. Research suggests by teaching high frequency words in isolation students can transfer this knowledge to prose reading.

High frequency words are "words that occur in the speaking and writing of a linguistic culture far more than most words; for practical purposes, the 1000 most frequently used words in a given language, which provide one with about 75 per cent of the language normally used." (May, 1994, p.576).

This research paper supports the notion that through teaching high frequency words students can transfer their word knowledge to prose reading. Children with a high number of high frequency words in their knowledge bank spend less time on decoding these words and can attend to meaning, thus increasing fluency. In support of this research May suggests "High frequency words are common in a child's speaking vocabulary. They are words that children come across in their reading. Furthermore, they are words that children will want to use when they write." (May, 1994). "When a child is reading and is familiar with these high frequency words, they will be able to decode the words more quickly. This will lead to an increase in fluency, which will allow the child to comprehend the whole piece of literature quicker."

Hennenfent (2000), through her intervention program found that "early acquisition of a number of sight words allowed the students to read from books at an early point in the intervention. The teacher used a circular effect of teaching sight words in isolated sentence form and then transferring this knowledge into book form." In this research paper the findings are similar. The students in the study after acquiring the first six – eight words began to read unfamiliar books. They used their knowledge of sight words and this translated into their prose reading.

With the continued acquisition of high frequency sight words these students will become fluent, confident readers at an early age. They will have highly developed comprehension skills due to the fact that they are not relying solely on decoding.

"Proficient readers recognise the vast majority of words in texts quickly, allowing them to focus on the meaning of the text. Since approximately 300 words account of 65 % of the words in texts, rapid recognition of these words during the primary grades forms the foundation of fluent reading." (Hiebert et al 2000). It must follow then that to have quick recall of high frequency words benefits and assists readers to attain higher level reading skills.

In her research paper Hennenfent (2001) cites Stanovich in supporting her argument for direct teaching of high frequency words. "Stanovich has researched the lack of comprehension skills that are affecting our reading programs. He states clearly that sight word acquisition is a vital component of reading success. He also believes that comprehension is tied into the student's ability to decode words in a relatively quick fashion. His research concluded that the ability to comprehend what is being read can be predicted by the student's ability to decode at a sufficient rate of speed." (p.34) Better readers are more able to rapidly decode words and rely less on contextual

Better readers are more able to rapidly decode words and rely less on contextual information. Hennenfent (2001) found that through direct teaching of high frequency words the reading levels of those in the intervention had improved. The students were pre and post tested on 132 high frequency words and 64 % of the students could read all one hundred and thirty two words. Of the remaining 36 % although not 100 % accuracy occurred the improvements were considerable.

The research by Hennefent (2001) showed not only an increase in reading ability but that students had developed an enthusiasm for reading that was lacking prior to the intervention.

"At the end of the action research, data concluded that all of the kindergarten students could read and were reading at the first grade level, could identify at least 206 of the expected high frequency word list of first grade and could transfer graphonic cues to reading." (p.34)

Further comments suggest that the students moving from kindergarten to year 1 are well prepared for their transition and will be advanced beyond those who were taught a letter of the week with decontextualized phonics.

My prediction for this study is that by teaching prep students who have reading difficulties to read high frequency words in isolation will improve their prose reading accuracy.

METHOD.

Design.

The study uses an OXOXO design. The study focuses on the gain in reading high frequency words in isolation for students in Prep who are not yet on text. The four students chosen for the study are from a Prep/One class of 23 students. These children exhibited early reading behaviours, i.e. they had some knowledge of concepts about print and some letter/sound awareness.

Participants:

Student 1: is a 6 year old whose family are educationally disadvantaged. She entered school with some knowledge of letter symbols but could not read any words. Student I was very keen to participate in this project as she told me "I know how to write my name." Her self efficacy is very healthy despite a lifetime of family trauma and crisis.

Student 2 is a 5 year old child. He is the eldest of 2 children and speaks only Vietnamese at home. He had been read to at home in his native language so had some "book knowledge."

Student 2 had some letter knowledge but was unaware of letter/sound awareness and words. Like student 1 he was keen to join this project. I had total support from his mother who is very concerned about her son's education.

<u>Student 3</u> is a 5 year old who has an older sibling. He had been read to at home and like student 2 had some "book knowledge." He knew all letter names but was unaware of corresponding sounds. Student 3 was ready to learn – he was keen to learn and participate in the study and as the results show made significant progress.

<u>Student 4</u> is the youngest of 4 children. He is from a family who have many needs, hence his difficulty in attending to the tasks presented. He was not as keen to participate in the study and at times was distracted. Of the four students selected for the study he made the least progress.

Materials:

Materials used included the following: P

- word reading list containing 25 high frequency words to be taught (listed in appendix item 1)
- levelled texts 1 8
- running record sheets small whiteboards and markers
- play dough
- magnetic letters
- "feely" bags (appendix item 2)
- textas
- sand trays (appendix item 2)
- word wall (appendix item 2)

Procedure:

Baseline date was gathered after the students were pre-tested on the word test. (appendix item 1)

The students were then asked to read 4 texts to ascertain reading levels and running records were taken. (see table p.8)

The intervention began following the pre-test and reading sessions.

The tasks were administered to all four students in the following order; introduction of two words followed by an activity to reinforce the retention of the word. The activities were kinaesthetic in nature and included reading, writing and making the words. The making component included shave cream, sand trays, play dough, feely bag and magnetic letters. (see appendix 2-5).

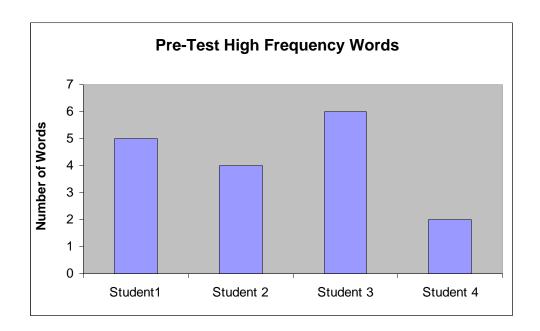
The teaching sessions were conducted daily over ten days. Each session lasted for approximately 15-20 minutes. Each session began with a revision of the previous session. After five sessions the students were tested again on appropriate texts. Results were kept by way of running records to ascertain the validity of the intervention.

Results:

Trends for the group indicated that all four students made significant progress in prose reading. The most notable difference was an increase in prose reading ability by students one and three who were able to read level 9 at the conclusion of the intervention. Student 2 was post tested at level 7, a gain of 6 reading levels and student 4, who made the least progress, was post tested at level 4. The differences in prose-reading ability at the conclusion of the intervention are possibly due to the fact that student student 4 has difficulty maintaining concentration and is often not interested. He does not always attend to the task at hand and can easily be distracted.

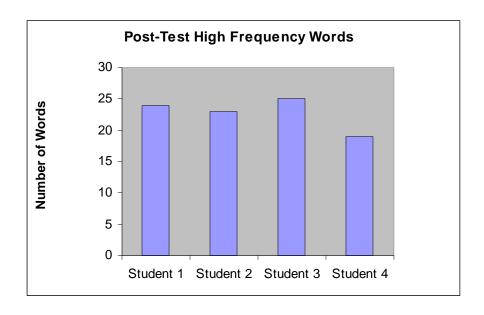
The results of the intervention support the prediction in that all four students were able to transfer their knowledge of high frequency words to prose reading. All four students made progress in their reading and all four appeared more confident when reading texts during the post-test sessions.

Graph 1 shows the results of the pre-test of 25 high frequency words.



The above graph shows that all four students had some knowledge of words, having learnt them by osmosis since beginning school. There had not been any direct teaching of these 25 words prior to the intervention.

Graph 2 shows the results of the post-test of the 25 high frequency words.

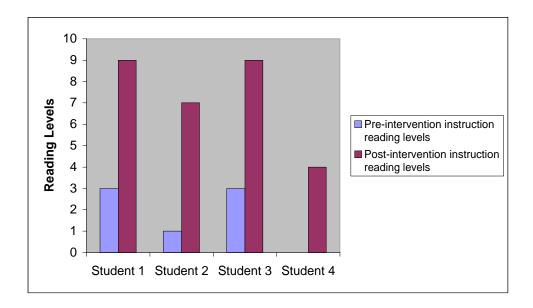


Graph 2 quite clearly shows the results were significant. All four students increased their high frequency word reading.

Student 1	increased her word bank by 19
Student 2	increased his word bank by 19
Student 3	increased his word bank by 19
Student 4	increased his word bank by 17

The results of the prose reading were equally, if not more significant. The method used to gain these results was by measuring prose reading accuracy of texts levelled by the reading recovery program. The number of mistakes made by the student determines which text levels the student is reading at independently, instructionally and texts that are too difficult where readers are frustrated and no learning occurs. At the independent level the student can read the text or similar levelled texts by themselves. The instructional level is a level where a student can read with assistance. This is the level of text a student should be reading at to improve reading skills and fluency. The hard level is a text that is too difficult for a student to read on their own. The goal is that students read independently texts that are suitable to their grade level. The benchmark for year Prep is level 5 by the end of the school year. Following the intervention three of the four students were reading independently above level 5. The fourth student reached instructional level 4 and should continue to make progress if the teaching of high frequency words continues for the remainder of the year.

Graph 3 shows the comparison of prose reading accuracy pre and post the intervention. All post intervention levels are instructional –



The graph clearly shows improvements in prose reading accuracy which is directly linked to the acquisition of a bank of high frequency words.

The table shown below illustrates comparative gains made by all four students.

Student	Pre	pre test	post	post test	pre test	post test	pre test	post test
	test	accuracy	test	accuracy	self	self	no.of	no.of
	level		level		corrections	corrections	high	high
							frequency	frequency
							words	words
1	3	66%	9	93%	1:0	1:8	5	24
2	1	50%	7	91%	1:0	1:6	4	23
3	3	83%	9	93%	1:0	1:6	6	25
4	0	-	4	90%	-	1:8	2	19

Discussion:

"Proficient readers recognise the vast majority of words in texts quickly, allowing them to focus on the meaning of the text. Since approximately 300 words account for 65% of the words in texts, rapid recognition of these words during the primary grades forms the foundation of fluent reading." Hiebers et al. (2000) p.30.

The purpose of this study was to set about finding if prose reading was affected by the acquisition of twenty five high frequency words.

The results clearly illustrate that the 3 students who acquired over 90% of the words moved through 6 reading levels and thus transferred their knowledge from words learnt in isolation to prose reading. The fourth student who acquired 75% of the words in isolation moved through 4 levels – from being not on text to level 4 which is a substantial gain in reading ability. Had the intervention continued for another ten days one would expect the progress of each student to be more significant. The success of the intervention lies in the fact that the targetted group was small (four students) and that direct, explicit teaching occurred on a daily basis. The sessions were quick (15 – 20 minutes) and consisted of revision activities at the beginning of each lesson. All sessions involved the students manipulating objects eg., magnetic letters, play dough, sand trays. Each day the students would chant and write the words to become familiar with them and memorize the spellings of the words. After the words were written, the words were outlined by each student to help them recognize the shapes of the words.

Velasco (2001) in her research on the implementation of a reading fluency program entitled "working with words" found significant increases in the reading levels of Grade 2 students. The Working With Words program came out of the program Four Blocks of Literacy developed in America in 1989 by Patricia M Cunningham, Dorothy P.Hall and Margaret Defee. The Four Blocks of Literacy was borne out of a need to intervene in student's learning and prevent reading difficulties from occurring. The US Secretary of Education Richard W.Riley (1998) stated that "Effective prevention and early intervention programs can increase the reading skills of 85 % to 90% of poor readers to average levels." (from Velasco 2001 p.33) It is well understood that if children are given opportunities to develop key language skills the struggle to overcome difficulties will be prevented.

The Four Blocks of Literacy is a "multilevel program, meaning that instruction is not targeted to one reading level – it provides many different opportunities for all students to learn how to read and write." (from Velasco 2001 p.35) The program has similarities to the Literacy Block operating in many Victorian Schools, with one major focus being

Working With Words.

"In this block, students learn to read and spell high frequency words and spelling patterns that allow them to decode and spell many other words." (Velasco 2001 p.39) In the Working With Words block, the high frequency words are practiced through word wall activities. These include practicing five high frequency words a week. "The students see

the words, say the words, and then write the words each day. Also a variety of review activities are done to provide enough practice so that the words can be read and spelled automatically." (Cunningham, 1999 from Velasco 2001). Cunningham goes on to say "the practicing of these words improves their reading abilities and transfers over to their writing. The words are displayed on the word wall where all students can see and use them." (p.40)

After the first five months the "Working With Words" program was evaluated in order to assess the effects on reading ability. Improvement was seen on all levels – reading of word lists and running records. "The word analysis skills taught during Working With Words lessons appear to have transferred to the students' word analysis skills. The number of students reading independently at or above grade level increased for both the second and third graders on both assessments. Observations of these whole class activities led the teacher/researcher to conclude that students were transferring word analysis skills learned during Working With Words lessons to other areas of learning." (Velasco p.65)

Appendix – Item 1

Spelling Pretest High Frequency Words In Isolation. These words occur most often in early reading materials, levels 1 0 8. Use this list to pre-rest knowledge. Test is administered individually. Students read all the words they know. A tick depicts correct answer, a cross depicts an error.

am	had	for
was	at	like
of	he	one
that	she	here
big	you	have
why	has	can
down	are	
by	look	
as	go	
come		

Word Walls

Words learnt are presented on a word wall. The words learnt at each session are added to a list on the wall. They may be presented alphabetically although for the purpose of this study the words were added as they were taught. There was a daily warm-up where the students practiced previously taught words by saying and writing them quickly. The word wall becomes a focal point in the classroom as students refer to the words in independent reading and writing.

Feely Bags

Feely bags are small cotton bags sewn with a drawstring top. The magnetic letters that make up a word are placed inside the bag and the drawstring tightened. The student places their hand inside the bag and must draw out letters in correct order to spell a specific word. This tactile approach allows students to feel the shape of the letters.

Sand Trays

I use biscuit or slice tray, simply fill with sand and have students write in this. This is also a tactile activity giving students the opportunity to feel the shape of the letters as they say them.

Appendix.

Description of Teaching Unit

<u>Outcome:</u> Improved prose reading accuracy by teaching 25 high frequency words in isolation. Lessons run for 20 minutes approximately by way of a focussed "take out" group. The lessons are conducted daily for ten days.

Below is an outline of the individual sessions.

Session 1: materials words on cards **am was**

whiteboards (individual) whiteboard markers

words on large card (for word wall)

sand tray

<u>Procedure</u>

1. teacher introduces the words, reads them

2. students say the words

- 3. students spell the words, trace with their finger. This kinaesthetic approach assists memory
- 4. students write the words onto whiteboards three times, read the words.
- 5. take turns to write the words in the sand, read the words.
- 6. teacher writes the words on large cardboard for word wall (added to daily) students can refer to this during writing lessons.

Session 2: materials words on cards of that

whiteboards (individual) whiteboard markers

play dough word wall chart

<u>Procedure</u>: All subsequent sessions begin with a quick revision (5 minutes) of the previously taught words. Students read the words and write them onto their whiteboards three times each (encourage students to talk about the words.)

Steps 1-4 as for session 1

Step 5 students make the words with play dough. This kinaesthetic approach will help with retaining the letter shape. Students are encouraged to talk about the words – shape of letters, number of letters etc.,

Step 6 teacher adds new words onto the word wall for student's future reference.

Session 3: materials: words on card big why

whiteboards (individual) whiteboard markers

"feely" bag – (with words spelled out in magnetic letters)

sandtray

magnetic boards (individual)

Procedure:

Steps 1 – 4 as for session 1

Step 5 students take turns to write the words in the sand tray. This tactile approach aids in memory retention as students are using more than sight to assist them in their learning.

Step 6 students use the feely bag to feel the shape of the letters hidden in the bag. Letters are drawn I order and placed on the magnetic board.

Step 7 teacher writes the words onto the word wall chart for students to refer to during writing.

Session 4: materials words on cards down by

shave cream

whiteboards (individual) whiteboard markers

Procedure:

Steps 1-4 as for session 1

Step 5 students write words in shave cream. This tactile approach, as with the sand tray activity, assists in retaining shape of the letters and thus memory.

Step 6 teacher adds the two new words to the word wall.

Session 5: materials words on cards as come

whiteboards (individual)) whiteboard markers magnetic letters magnetic letters magnetic boards

words on large card (for word wall)

Procedure:

Steps 1 to 4 as in session 1

Step 5 students make the words with magnetic letters. Say & spell the words
Step 6 teacher adds the words to the word wall for students to refer to during writing.

At the conclusion of session 5 running records are taken to ascertain validity of the intervention

Sessions 6 – 10 Using the final words repeat sessions 1 - 5. Include an extra word for each session for the purpose of concluding the intervention in 10 days.

References/Bibliography

Birsh, Judith R. (1999) <u>Multisensory teaching of basic language skills</u>. Baltimore. P.H.Brookes Pub.

Clay M.M. (1993) An observation survey of early literacy achievement. New Zealand. Heinmann Education

Collingford, Cedric (1995) <u>The effective teacher.</u> N.Y. Cassell Education.

Fox, Barbara J. (2002) <u>Word Recognition activities: patterns and strategies for developing fluency.</u>

Upper saddle River, N.J. Merrill Prentice Hall.

Fox, Barbara J. (2000) <u>Word Identification Strategies</u>: <u>phonics from a new perspective</u>. Upper Saddle River, N.J. Merrill Prentice Hall.

Hennenfent, Merris: Russell, Janet. (2001)

<u>Increasing Independent Reading Levels Using an Integrated Approach Emphasizing Direct Reading Instruction.</u>

Master of Arts Action Research Project, Saint Xavier University and Skylight Professional Development.

Hiebert, Elfrieda H. Pearson, P David; Taylor, Barbara M; Richardson, Virginia; Paris, Scott G. (2000) <u>Every Child a Reader</u>. <u>Applying Reading Research in the Classroom</u>. Center for the Improvement of Early Reading Achievement, Ann Arbor.

Valdez, Maria. (1994) <u>Improving Reading Skills Through Tactile and Kinesthetic Strategies within a Whole Language Approach</u>. Master of Arts Project, Saint Xavier University.

Velasco, Kelly; Zizak Amanda. (2001) <u>Improving Students' Word Analysis Skills by Implementing "Working With Words" from the Four Blocks of Literacy. Program.</u>
Master of Arts Action Research Project, Saint Xavier University and Skylight Professional Development

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