

Explicitly teaching year one students how to segment words into onset and rime and modelling analogy will increase students' ability to decode words and increase text level able to be read.

Abstract

The hypothesis of this study is that explicitly teaching year one students how to segment words into onset and rime and modelling analogy will increase students' ability to decode words and increase text level able to be read. The students chosen for this study read using mainly initial letters, familiar words, sounding out letter-by-letter and using meaning information cues. When they administered the onset and rime test it was obvious these students had difficulties decoding some simple words with two letter rimes, even though some were reading level 10 text instructionally. The study consisted of comparing pre-tests and post-tests of two groups. One group of three students were involved with the intervention, while the other group of three students were not involved with the intervention (the control group).

The purpose of the intervention was to get students to find familiar parts in unknown words. The students participated in activities, which focussed on the two letter rimes that are represented in the rime test (Dalheim 2004) used in this study. The English language can be difficult to teach children as letters and letter clusters are not always pronounced the same way. The rimes used in the Dalheim test are dependable ones, which mean that they do not have many different pronunciations.

There are always debates over the way to teach children to read. This study suggests that there is a place for teaching onsets and rimes and modelling analogy in the early years of schooling, however, should not be the only focus. Results and anecdotal evidence show that the intervention did increase students' confidence with decoding unfamiliar words. The next step would be working with longer words, such as words with three and four letter rimes.

Introduction

There have been many debates over the years about the best way to teach children to read. Vousden (2007) began her study with asking the question, "How do we choose what to teach children to learn to read?" (pg 247). Vousden (2007) stated that English speaking children were usually taught a number of reading skills within the early years. She questioned how teachers should choose "whether words, onsets, bodies and graphemes *all* need to be taught, or some combination, and then how do we decide

how many and which particular words, onsets, bodies and graphemes should be explicitly taught?” (pg 247). This current study predicts explicitly teaching year one students how to segment words into onset and rime and modelling analogy will increase students’ ability to decode words and increase text level able to be read. Therefore, this study will investigate whether analogy of rimes are important in the teaching of reading in the early years of primary school.

Goswami (1999) states that there is a need for a balanced approach to teach ‘phonics’. This study is based on using analogy skills to read and reproduce words with the same rimes. However, within the sessions it will be important to remind the students that this could help them when reading books. The students will be given the opportunity to practise this skill with reading books and activities on the computer. This will be done to give the students the opportunity to make as many connections as possible. To show them that the newfound skill could not just be used in the activities they participated in the intervention sessions.

Cassady and Smith (2004) suggested that children are taught in analogous manner throughout many domains in education. An example they put forward was “...in mathematics it is considered reasonable and pedagogical sound to begin children’s instruction on general addition using single-digit numbers rather than three-digit number sets” (pg 269). This is closely related to the reason why this study consists of explicitly teaching just two-letter rimes. This study predicts that the intervention with the simple rimes will enable these children become more confident with the skill of segmenting words into onsets and rimes, before attempting to teach words with longer rimes or not as regular rimes.

This study suggests that children need to be explicitly taught skills in segmenting words into onsets and rimes and model analogy. However, this is not the only skill that needs to be taught during the early years of school. The ‘multiple levels of text processing’ model (Munro, 2007) or also known as the MLOTP model suggests there are multiple levels of reading (Munro, 2007).

Onset and rime fits into the ‘word’ level. However, this study does not suggest educators should only teach at this one skill in the early years. There is a need to

understand all readers use a number of levels when processing text. However, the students chosen in this study seem to have difficulties with working within the ‘word’ level, therefore, the need for this focus.

Goswani (1999) stated there many reasons to believe that focussing on rhyme and analogy play “a valuable role in the acquisition of the spelling system of English” (pg 233). The participants of this current study have participated in at least one and a half years of primary school and have participated in many activities with rhyming words and also have learnt letter names and sounds. If they had not learnt this yet it could be presumed that they would not be as efficient in the analogy sessions. The fact that the students can hear the rhyming parts of the words will assist them with understanding the concept of analogy with onset and rimes.

Vousden (2007) explained that a problem that occurs with teaching children how to read in English is the inconsistency of pronunciations, meaning that letters or letter clusters do not always make the same sound. Some of the students in this current study took a long time to recognise letter names and sounds, therefore, asking them to remember to learn analogy with letter clusters that are not always pronounced the same way, seems unlikely at this stage of their learning. This study takes this into account and will focus the intervention on the dependable rimes presented in Dahleim’s rime test (2004). These rimes do not have many variations of how they are pronounced, therefore, will be less confusing for the participants to study and learn how to use analogy in the simplest form.

Method

Design

This study uses a OXO design which compares the pre and post tests of two groups of students. Three of these students participated in intervention sessions, while the three others did not.

The intervention sessions involved students being explicitly taught how to use onset and rimes to assist them when reading. They participated in a number of activities that focussed on the students learning two letter dependable rimes from Dalheim’s rime

test (2004). These sessions were administered mainly in the classroom with their classroom teacher, with the exception of a couple of times out of the classroom with an integration aide. They were held over a period of two weeks.

After the intervention had concluded, all six students were tested once again to observe and compare results between participants in both groups.

Participants

Students chosen to participate in the study were in year one, with ages ranging between 6 years, 6 months- 7 years, 4 months. Students were chosen by the Literacy pre-testing for 2008 and by conversations with classroom teachers. The students chosen for this study were children that their classroom teachers thought would benefit from such an intervention, because of the need to increase their reading ability.

All students in the intervention group are currently in the same year one and two classroom. The control group are from other grade one and two classrooms from the same school.

Table 1- Participant's details

Student	Intervention/ Control Group	Age	Reading Recovery	ESL	Integration Funded	Gender
A1	Intervention	7 years, 4 months	No	No	Yes	Male
B1	Intervention	6 years, 8 months	No	No	No	Female
C1	Intervention	7 years, 1 month	No	No	No	Female
A2	Control	7 years, 4 months	No	No	Yes	Male
B2	Control	6 years, 6 months	Yes	No	No	Female
C2	Control	6 years, 7 months	No	No	No	Female

This study attempted to compare students with like capabilities from the intervention and control groups. Above is a table that displays details about students that are involved in this study.

Students A1 and A2 were chosen because they are both twins with similar reading and learning difficulties. These students have language difficulties, which they have been granted funding for integration.

The other students were reading at approximately the same text level for the pre-tests, as can be seen in the results displayed in the table below.

Table 2- Participants' Pre-testing results

Student	Intervention/ Control Group	Reading Recovery	BURT Pre- test	Dalheim Rime Pre-test	Reading level pre-test
A1	Intervention	No	13	13	4
B1	Intervention	No	23	13	10
C1	Intervention	No	23	13	7
A2	Control	No	10	2	5
B2	Control	Yes	28	25	10
C2	Control	No	19	6	7

In Tables 1 and 2 above, it can be observed that one student had been involved in the Reading Recovery intervention. This could be seen to help explain any growth in the students' results. At the time of choosing participants for this study none of the students were involved in the Reading Recovery intervention, but Student B2 had started the Reading Recovery sessions between choosing participants for this study and beginning the pre-testing. This will affect results concerning the control group. The students were chosen into the intervention group, as they did not seem to have the confidence to attempt to read unfamiliar words and would appeal quickly by asking for assistance or simply 'giving up'.

Materials

The sessions included students making their own flashcards with rimes on them after using magnetic letters and small whiteboards to practise spelling these words. The words chosen were twelve of the dependable rimes that consisted of two letters (Dahleim rime test, 2004).

After this, the teacher would use a Word document on the computer to type in the students' sentences using the words revised in the session. The idea of doing this was so the students could revise the rime learnt in the session but also assisted making a rime book in a Word document.

When the students had practised the twelve rimes they were given the opportunity to use their newfound skill of using analogy with rimes with books (such as Dr Seuss' books) and a program on the internet. This program has activities with rimes and then an interactive story with the featured rimes. The program is called Learn To Read and it's internet address is <http://www.starfall.com/n/level-a/learn-to-read/play.htm?f>

Procedure

Pre-testing and Post-testing involved the same tests to observe if and how much progress had occurred. The Dalheim rime test (2004) and BURT reading test was used to test how the students were able to decode words when they were in isolation. This tested how the students decoded words when they were unable to use meaning information cues. In the pre-testing stage, the Dalheim rime test (2004) allowed it to be observed which dependable rimes the students were familiar with and to observe if they use analogy when decoding unknown words in isolation. In the post-testing stage, the Dalheim rime test (2004) was administered once again. This study predicted that the post-testing results of the intervention group would significantly improve as they were being tested on the rimes that they had been studying. However, the BURT reading test involves some rimes, but not with all dependable rimes. The BURT reading test was administered to observe how the students decoded unknown words and if the intervention group would improve in using analogy in the post-test results. The PM Benchmarking kits (2003) were used to administer the pre-tests and post-tests to find the instructional level each student read at. This study predicted that students in the intervention group would improve the text level they could read at an instructional level and that running records would give evidence of students becoming more efficient at using analogy.

The sessions of this intervention took approximately half an hour. As the students became familiar with the routine and began to understand the concept of analogy, the sessions became a little quicker to complete. The sessions were held within a two-week timeline. Since there were twelve sessions, some days had two sessions held. Each session focussed on a dependable two-letter rime that is present in the rime test (Dalheim 2004). The following are the rimes studied in the intervention: **-in, -an, -ay, -aw, -ab, -ug, -ot, -at, -ap, -op, -ip, -it.**

The sessions (except for the first session) would begin with the students practising to read words that had been previously written on flashcards. These words on the flashcards contain the rimes that they would have already studied. After this the teacher would introduce the new rime and model analogy. The students would practise making words with the rime with magnetic letters and writing on whiteboards. After the students had practised using analogy with the new rime, they would write practised words onto blank flashcards. Then they would come up with silly sentences using words on the flashcards and these were typed into a Word document on the computer. This became the group's 'rime' book that they took pride in. At the conclusion of each session, the students were asked to reflect and articulate what they had learnt and practised within the session and how this would help them to read on other occasions.

Analysing Data

This case study follows a OXO design, therefore, has a test before intervention is performed and then afterwards.

All students' involved in this study participated in pre-tests and post-tests. The tests administered were the BURT reading test, the Dalheim rime test (2004) and the instructional reading level (using PM Benchmarking kit). This study then analysed the data by comparing the average results for both the intervention group and the control group. This study also analysed the trends that were observed and discussed any information that may had affected the results to any testing.

Results

Results indicate support for the hypothesis that explicitly teaching year one students how to segment words into onsets and rimes and modelling analogy will increase students' ability to decode words and increase text level able to be read (Results can be seen in Appendix 2, Table 7). Some people may argue some of the data suggests teaching onset and rimes to the intervention group made little difference in some of the test results. However, in this section of the study, trends observed will be identified and analysed.

Below in Figure 1, the averages of intervention and control group's results with the Dalheim rime test (2004) are displayed in a bar graph. The whole test was not administered to the students. It was evident when administering this test in the pre-testing stage, that the students did not have a firm grasp on simple two letter rimes. Therefore, this study only involves 48 words from the two letter rimes in the test. By observing the results in Figure 1 it is noticeable that the intervention group did improve greatly with the test. The intervention group's average raw score of 13 in the pre-test was fairly close to the control group's average score of 11. There was mass improvement with the intervention group's average raw score of 35 in the post-test results. The intervention group averaged 13 for the post-testing.

This great difference between the two group's results in the post-testing was predicted, as the intervention group was taught the rimes that are displayed in the Dalheim rime test (2004). Students in the control group made little difference between the pre-test or post-test. This was predicted before commencing the intervention.

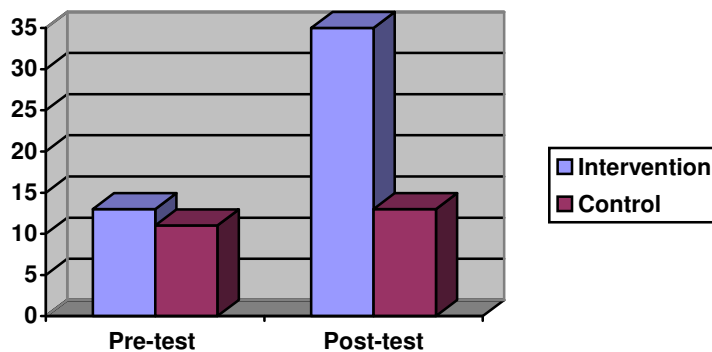


Figure 1 - Dalheim rime test (altered) averages

No students were taught towards the BURT reading test, so the averages between the groups were closer, compared with results from the Dalheim rime test (2004), however, there is still a difference between the two groups. The intervention group improved their average BURT reading test raw score by 3 scores. The control group improved their average in the post-testing by one raw score. This can be observed in the bar graphs in Figure 2.

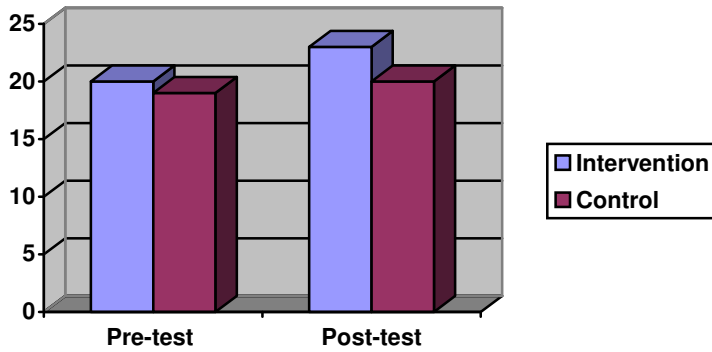


Figure 2- BURT reading test average raw scores

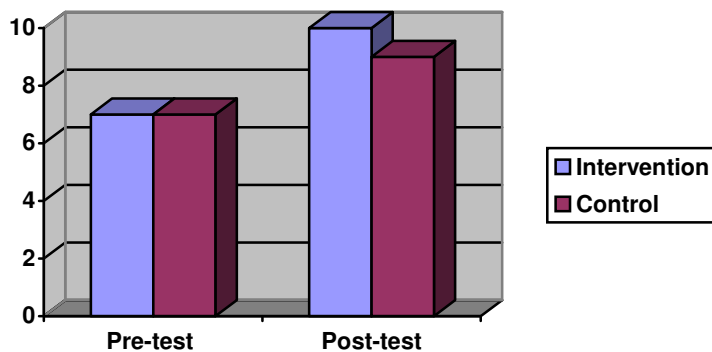


Figure 3- Reading level averages

Above in Figure 3, the averages of the instructional reading levels of both groups within pre-test and post-test results are represented. This study rounded any averages to the nearest whole number. Both the control and intervention group averaged a reading level of seven during the pre-test. In the post-testing all students improved their reading level by at least two reading levels. The average reading level for the intervention group in the post-test results is ten whereas the control group's average is level nine. By looking at this data it can be seen as explicitly teaching how to segment words by using onsets and rimes and analogy makes little difference. However, it is interesting to observe students' individual results. It was written before in this study that Student C2 had been involved with the Reading Recovery intervention while this study was carried out. Student C2's results increased the

averages for the control group's results. She had been participating in reading intervention. This miscommunication with this student's classroom teacher most likely affected the results in this case study, as in the post-testing she was reading level 13 texts instructionally.

Table 3- Student A1's pre-test and post-test results

Student	Intervention/ Control Group	Reading Recovery	BURT Pre- test	BURT Post- test	Dalheim Rime Pre-test	Dalheim Rime Post- test	Reading level pre-test	Reading Level post- test
A1	Intervention	No	13	20	13	34	4	6

Above in Table 3, Student A1's testing results are displayed. During the pre-testing phase he was reading unseen level four texts at an instructional level. After the intervention sessions he was reading books at text level six. This may not seem like a large increase, however, one should be reminded that the intervention occurred over only a couple of weeks and this student has language and learning difficulties. When considering these factors, the intervention seemed to have had a positive outcome for this student.

Results in the BURT reading raw scores between pre-test and post-test are also appealing. It seems the intervention sessions provided to this student for a couple of weeks assisted him in decoding unknown words, using his knowledge of onset and rimes and analogy. In the post-test Student A1 seemed much more confident in attempting to read unknown words. In the pre-test of the BURT reading test, he did not seem as confident and depended on just initial letters of unknown words to decode these.

As stated above, Student A1 has language and learning difficulties. He has a very short attention span and can be easily distracted. It was pleasing to observe that he seemed to enjoy working in the small group. He was not just copying others or being passive as he has been within the past when working in a group, he was an active member of the group. This observation alone is a great achievement.

Table 4- Student B1's pre-test and post-test results

Student	Intervention/ Control Group	Reading Recovery	BURT Pre- test	BURT Post- test	Dalheim Rime Pre-test	Dalheim Rime Post- test	Reading level pre-test	Reading Level post- test
B1	Intervention	No	23	26	13	36	10	12

Above in Table 4, Student B1's testing results are displayed. In the pre-test she was reading level 10 texts. Just like Student A1, she improved by two reading levels by the end of the intervention sessions. When reading books or isolated she would often 'give up' and not try to decode unknown words. She knew enough high frequency words to get her to read level 10 texts and depended on sounding out words letter-by-letter. This would confuse her when attempting to read longer words, as by the time she finished sounding out the word she only have isolated sounds. However, there is evidence in post-test records that she has become more confident with attempting unknown words with simple rimes.

Student B1's test raw scores in the BURT reading test did not improve as much as Student A1's. However, Student A1 seemed to 'catch up' more with Student B1's and C1's raw score in the post-test. This may be because of the use of rimes in the BURT reading test. The level of analogy taught to these students may get them only so far in the BURT reading test. To gain a better raw score in this test they will need to learn more complex rimes.

Student B1, like all members of the intervention group significantly improved her raw score in the Dalheim rime test (2004).

Table 5- Student C1's pre-test and post-test results

Student	Intervention/ Control Group	Reading Recovery	BURT Pre- test	BURT Post- test	Dalheim Rime Pre-test	Dalheim Rime Post- test	Reading level pre-test	Reading Level post- test
C1	Intervention	No	23	23	13	35	7	12

Above in Table 5, Student C1’s testing results are displayed. Her reading level seemed to improve the greatest amongst all other participants in this study. She went from reading a level 7 text at a instructional level in the pre-test to reading a level 12. In the pre-testing Student C1 found the level 8 text in the Benchmarking kit difficult to read. In class she had been reading as high as level 10 texts with her classroom teacher in guided reading lessons. However, in this instance she simply ‘gave up’ when faced with some unknown words. It could suggest that the intervention sessions encouraged her to acquire analogy skills needed to read more confidently and independently.

Student C1 had made improvements in all areas instead of gaining the same raw score in the BURT reading test for the pre-test and post-test. As stated before, this may be a result because of the use of rimes in the BURT reading test. The level of analogy taught in the intervention sessions may assist the students only so far in the BURT reading test.

It is interesting to observe Student C1’s pre-test and post-test scores when realising that she missed out on three sessions, due to being ill. However, when she returned to school she was introduced to the new rimes in the first task of the activity. Also she had become more confident with the concept of analogy.

Table 6- Control group’s individual pre-test and post-test results

Student	Intervention/ Control Group	Reading Recovery	BURT Pre- test	BURT Post- test	Dalheim Rime Pre-test	Dalheim Rime Post- test	Reading level pre-test	Reading Level post- test
A2	Control	No	10	10	2	4	5	5
B2	Control	Yes	28	31	25	27	10	13
C2	Control	No	19	20	6	8	7	8

As seen above in Table 6, are the pre-test and post-test raw scores of individual participants of the control group.

As discussed beforehand, it is interesting to observe Student B2's raw scores as she had been receiving Reading Recovery intervention. She has made the most progress in all tests. Therefore, has influenced the average scores for the control group.

If we observe the growth and compare A1 and A2 and then C1 and C2, the averages change once again. For example, below in Figure 4 is the average reading levels of Students A and C in both groups compared to each other. In the pre-test the average reading levels were the same in both the intervention and control groups. Then in the post-test results the control group moved to the average of level 7, while the intervention group rose to level 9.

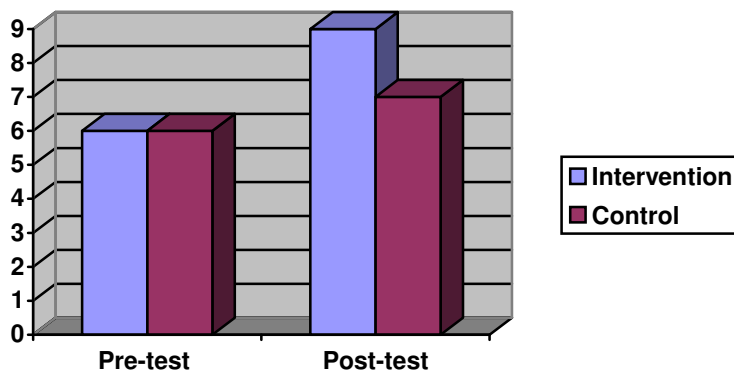


Figure 4- altered reading level averages (using results of Students A1, A2, C1 and C2)

Discussion

In reflecting on the results of this study there is support for the hypothesis that explicitly teaching year one students how to segment words into onsets and rimes and modelling analogy will increase students' ability to decode words and increase text level able to be read. All students in the intervention group showed evidence that they had acquired new analogy skills and were capable of reading higher levelled books, after the intervention sessions.

Some may argue that the testing of the Dalheim rime test (2004) in this particular study was not useful, as the students in the intervention group seemed to be being

taught 'to the test'. However, it was seen as important to observe what the students could do in a testing situation and not in the comfort of the small group of students, who assisted one another when needed or being prompted by the teacher. It was predicted that the intervention group's raw scores for the Dalheim rime test (2004) would improve greatly in the post-test results. The fact that these students had previously only attempted to read 13 of these words in the pre-test because they did not know how to decode even the simplest of rimes to the end product of independently attempting to decode is an achievement.

The entire Dalheim rime test (2004) was not administered to the students. In the post-testing it was obvious that these students had difficulties decoding simple words with two-letter rimes in isolation. All students in the intervention group had read 13 of the 48 words correctly in the pre-test. This suggested there was a need to start at very basic rimes, as they had struggled with the two-letter rimes.

Student B1 and Student B2 were both reading books levelled at 10. Some may assume that such readers would be able to decode words with simple two-letter rimes. But this was not the case. Apparently knowing high frequency words and meaning information cues, such as looking at pictures for meaning is obviously enough for these students to read level 10 texts successfully.

We as educators cannot simply assume students will develop such skills without being explicitly taught analogy and how to segment words into onset and rimes. Within the Reading Recovery intervention programme consists of the concept of analogy which involves the making and breaking of words with magnetic letters (Clay, 1993). This study supports this understanding of learning analogy through magnetic letters. The children in this study seem to learn best when tasks are 'hands on' activities.

The BURT reading test presented some interesting results in this study. Student A1 improved his raw score from 13 in the pre-test to 20 in the post-test. Student B1 improved by 3 and Student C1 did not improve her score in the post-test results. Student A1 made quite a progress with improving by 7 in the post-test. This raw score of 20 allowed Student A1 seem to 'catch up' with the other students score in the intervention group. This may suggest that the students would need to learn more

sophisticated rimes to gain a better score in the BURT reading test. The students seemed more confident to use analogy skills learnt in the intervention sessions. However, when faced with more complex words written in smaller print (such as **carry, nurse**) the students simply appealed and said they did not know the words. The students had realised these words were not familiar rimes and more complex, so did not attempt to decode the words.

The intervention sessions kept the students busy at all times and they stayed on task. A couple of the students often have difficulties with staying on task, but they seemed engaged in the sessions as they seemed to 'roll into' one task to the next. The students seemed to enjoy the sessions and often asked if they were going to work in the rime sessions. The students assisted each other equally, which was pleasing to observe. In particular Student A1 is usually more passive when working in groups, but became an active member of the group. The students responded well to how the sessions followed a routine, which became familiar to the students.

The students seemed impressed with their rime book. It was the students who suggested that grade preps could use it to learn about rimes. It was pleasing to observe confidence in these children that they could teach others, as beforehand they did not have the same confidence. The students seemed to enjoy creating the silly sentences made with the words with the rimes studied. This was also a good oral language experience for Student A1. He has language difficulties and does not always speak grammatically correct sentences.

In all post- test results the intervention group's scores were higher than the control group's, even if the growth was a little more than the others. Student B2 had affected the average scores as discussed in the results section of this study, as she had been partaking Reading Recovery sessions and had been making some progress. Ideally this would not have happened in the intervention study. However, the intervention group's results were higher and more consistent overall.

Students in the intervention group moved text levels of at least two levels in the post-test results. This may not seem that much progress, however, these students were chosen to be participants in this study because of reading difficulties. These

achievements may seem like little 'steps' in their learning, but nevertheless should be achievements that are celebrated. It should also be remembered that the intervention was held over two weeks.

The students in the intervention group were shown and explained the results of their post-test compared to their pre-tests. Munro (2007) identified the importance of self-efficacy. This means the importance for these children to observe themselves as a learner and truly believe it. By sharing how much the students have learnt allows them to acknowledge that they can be successful learners.

Now that these students have become more confident with using two letter rimes it may be seen sequential to teach these children more complex rimes. Most likely dependable rimes featured in Dalheim's rime test (2004) would be ideal, simply because they are dependable rimes and do not have many different ways of pronouncing them. It would be ideal for this to happen in guided reading activities, where they can practise their newfound analogy skills not just in isolation.

There have been many debates about how to teach children to read in the early years of primary school. The results of this study suggest support for the hypothesis that explicitly teaching year one students how to segment words into onsets and rimes and modelling analogy will increase students' ability to decode words and increase text level able to be read. This study suggests that teaching children to use analogy is an important skill in the early years of learning to read. However, this does not mean that teaching should be restricted to only these skills.

The concept of analogy is important skill even adults use it to decode difficult unknown words. Recent research suggests the ideal method to introduce the concept of analogy, are by using the dependable rimes (as in the Dalheim rime test, 2004). This will solve the difficulty with teaching children to read English that Vousden (2007) identified that there is an inconsistency of pronunciations, meaning that letters or letter clusters do not always make the same sound.

References:

Cassady, J & Smith, L. (2004) Acquisition of Blending Skills: Comparisons among body-coda, onset-rime and phoneme blending tasks. *Reading Psychology*, Vol 25, Issue 4, pp 261- 272.

Clay, M. (1993, revised 1996). *Reading Recovery: A Guidebook for Teachers in Training*. New Zealand: Heinemann.

Goswami, U. (1999). Casual Connections in Beginning Reading: The Importance of Rhyme. *Journal of Research in Reading*, Vol 22, Issue 3, pp 217- 240.

Munro, J (2007). *Literacy Intervention Strategies Lecture Notes*. Australia: Melbourne University.

Vousden, J. (2008). Units of English Spelling-to-Sound Mapping: A Rational Approach to Reading Instruction. *Applied Cognitive Psychology*, Vol 22, Issue 2, pp 247- 272.

Resources:

BURT Word Reading Test (1981)

Clay, M. (1993, revised 2002). *An Observation Survey: Of Early Literacy Achievement*. New Zealand: Heinemann.

Dalheim, B. (2004). *Dependable Rime Test*.

Dr Seuss books, such as *The Cat In The Hat* and *Green Eggs and Ham*

Learn to Read (website). <http://www.starfall.com/n/level-a/learn-to-read/play.htm?f>

PM Benchmarking Kits 1 and 2 (2003). Nelson.

Appendix 1

Lesson Plans 1- 12

The following lessons took approximately half an hour to administer each time. Each lesson focussed on an individual rime. The 12 rimes that this intervention focussed on are the following: **-in, -an, -ay, -aw, -ab, -ug, -ot, -at, -ap, -op, -ip, -it.**

Materials needed: blank flashcards; magnetic letters; small whiteboards (one for each student); whiteboard markers (one for each student);

Activity	Task Description
Re-read previous words studied	Students read the flashcards previously studied in the intervention (<i>except for first session</i>). This can include students reading the flashcards to each other or play a game, which involves them to call out a word and someone jumps onto it.
Making words with new rime	Teacher introduces the new rime, written on a flashcard to the students. They are explained that when they see these two letters together what sound they make. Students are encouraged to make connections with words the rime reminds them of (eg aw looks a little like saw). The students move magnetic letters to the front of the rime to make some words.
Practising writing words with the new rime	Students are given a small whiteboard each and whiteboard marker. They are asked to write any words they know with the rime being studied today. The teacher asks the students to write certain words containing the studied rime. The students are encouraged to write these as quickly as they can.
Writing new rime flashcards	The teacher instructs which words each student writes onto the blank flashcards. After the children have written down the words, they practise reading the new set of words.
Re-read previous sentences	Students read through silly sentences written in previous sessions (<i>except for the first session</i>).
Creating sentences to make rime book	Students are asked to use some of the words from the new set of flashcards to create a silly sentence. The teacher types in the students' silly sentences into a Word Document. The teacher asks students to help spell certain words. Students have the opportunity to re-read the sentences.
Reflection/Articulation	Students are asked to reflect on what they have learnt in today's session and how it will assist them with reading on another day.

Follow-up sessions: The students were given the opportunity to use their newfound skill of using analogy with rimes with books (such as Dr Seuss' books) and a program on the internet (see resources list). This program has activities with rimes and then an interactive story with the featured rimes.

Appendix 2

Table 7– All participants’ pre-test and post-test results

Student	Intervention/ Control Group	Reading Recovery	BURT Pre- test	BURT Post- test	Dalheim Rime Pre-test	Dalheim Rime Post- test	Reading level pre-test	Reading Level post- test
A1	Intervention	No	13	20	13	34	4	6
B1	Intervention	No	23	26	13	36	10	12
C1	Intervention	No	23	23	13	35	7	12
A2	Control	No	10	10	2	4	5	5
B2	Control	Yes	28	31	25	27	10	13
C2	Control	No	19	20	6	8	7	8