

## **ABSTRACT**

The successful application of literacy skills includes the ability to process text at word level and develop fluency when reading. Some students' inability to segment words affects their reading of prose and causes them to labour over words rather than develop word accuracy automatically. Research indicates that the explicit teaching of rime units and segmenting skills enables students to read more accurately and automatically within prose and word lists.

In this study five Year 2 students were identified with reading difficulties. Each child demonstrated an inability to recognize identifiable onset and rime units and displayed low skills of segmenting units at word level.

The students participated in ten teaching sessions where the following hypothesis was investigated:

***The explicit teaching of onset and rime units and segmenting skills with year two students at risk will increase word accuracy when reading word lists and prose.***

The study compared the results of two groups of students: a control group and an intervention group from the Year 2 classrooms. The sessions with the intervention group emphasized teaching the students to segment/blend words containing the targeted rime unit within a list and/or a piece of prose.

The findings of the study supported by current research and literacy teaching programs indicated that the explicit teaching of blending and segmenting using onset and rime increased word accuracy and prose reading. Overall there was an increase in phonological awareness and in particular in the fluency of prose reading. While completing post – testing reading, behaviours observed indicated less pausing and labouring by the students when decoding. Whilst it was not a direct aim of the study, the students' self-efficacy was monitored and there was a definite increase for all students in this area.

Opportunities for this explicit teaching should be part of good teaching practice in whole and small teaching groupings. When students require an intervention program explicit teaching of segmenting skills can target the needs of the specific group of students or student at risk.

## **INTRODUCTION**

Reading is a complex procedure involving processing text at multiple levels. The Multiple Levels of Text Processing Model (MLOTP) as identified by Munro (2007), describes the reader as functioning at the word, sentence, topic/conceptual, dispositional and meta-cognitive level while drawing on the oral language structures. The framework notes that when a person is functioning successfully as a reader the levels are operating simultaneously for the reader to make sense of the text. For readers and in particular children in the early years of schooling integrating these skills can be difficult causing them to struggle with parts of the reading process.

Readers at risk quite often apply a limited range of strategies particularly when faced with unknown words in prose. Difficulties in this area may be demonstrated by children being unable to consistently and confidently manipulate and identify sound patterns. They may be unable to store letter clusters, name clusters and words rapidly, make analogies between known and unknown words, segment or blend. These children are often struggling at word level with limited phonological or phonemic awareness skills, whereas as Munro (1998) states “skilled readers are seen as having access to a phonemic awareness knowledge that comprises representations of individual sounds and sound combinations at the sub-word and word levels.”

Phonological and phonemic knowledge are essential for a reader so as to read and spell words by applying and manipulating the sound units that make up a word. At the same time this knowledge is not learnt or applied in isolation but within the context of prose. Readers need to be able to identify and manipulate many small units of meaning at word level as these can form the building blocks for reading text. Students need to segment words into onset and rime as this a natural sound unit which can be transferred to unknown words to assist in decoding. Research shows that “deficits in early literacy skills such as phonemic awareness and decoding often develop into problems with fluency and comprehension”(Lane, Fletcher, Carter, Dejud, DeLorenzo, 2007) The fluent reader needs to be efficient at all levels of processing text to eliminate difficulties with the overall reading process and the understanding of the text.

Limited phonemic knowledge impacts on word accuracy therefore hindering the flow of the reading as the reader is unable to identify bigger parts of meaning in particular the literal and inferential comprehension. Reading becomes laborious and many children have difficulty with sensing the purpose for reading. Calhoun (2001) states in her research that “when students become proficient readers of single-syllable high frequency words, ceiling effects occur on accuracy.” When reading at word level is more accurate and automatic the reader is more easily able to maintain meaning while understanding the purpose of the text and comprehend the text.

Children in the early years of schooling and particularly readers at risk need explicit teaching in the area of phonemic awareness knowledge and need many opportunities to manipulate, identify and apply the units of knowledge at word level. Pullen, Lane, Lloyd and Nowak (2005) emphasis the importance of the effects of explicit instruction on the success of reading for struggling students. Their investigations noted that “student’s skills in decoding increased with the introduction of instruction incorporating explicit decoding practices.”

If a child does not have a good phonological awareness they will not look for the links between the patterns of sounds and letter clusters. Learners need to apply procedures for linking letter clusters and matching sounds in words to develop retention of phonemic units so as to read with more automaticity and to be aware of sub-set sound units. Pullen (2005) also noted the importance that “beginning readers need repeated opportunities to develop decoding ability.” Students need assistance and need many rehearsals and practices to ensure that knowledge is transferred into long term learning banks. For some students learning is not automatic but requires teacher assistance working from the existing knowledge and understanding.

From early stages of reading, children participate in many activities such as clapping syllables, singing nursery rhymes, listening to stories and other play activities that heighten the children’s awareness of sound patterns. Many researchers note that exposure to this learning can be the beginnings of developing phonological knowledge. Munro(2007) states “prior to learning to read children develop phonological knowledge, use sound patterns in words, play with rhyme, predict words and segment spoken words into onset and rime” and that these skills are the building blocks that children use when they process text. However, some children, especially those from a non-English speaking background, have not experienced or learnt how to identify and transfer this knowledge and link it with the orthographic when reading.

Onset and rime plays an important role in reading development. As a child learns to read, he/she begins to use one to one mapping of sounds and slowly moves forward into blending and segmenting words into letter clusters and useful sound units. Some young children do not develop this strategy orally as they are not exposed to good English models and therefore do not experience multiple practices. Early readers at risk need to learn strategies to identify these units orally and visually so as to be more successful readers of text. Therefore they will need explicit teaching of how to segment words using such parts as onset and rime. Research has shown that onset and rime activities encourage blending and segmenting of words leading to improved word accuracy and literal comprehension. Readers can learn dependable rime units and apply them in their attempt to read unknown words. Successful readers make analogies from rime units to successfully predict and read unfamiliar texts.

Pullen et al state that “early intervention appropriately designed to target areas of efficiency can help students become proficient readers” Thus the present study has identified a specific group of students with deficiency in the segmenting of words in particularly in the area of onset and rime. The investigation aims to apply a teaching process to improve the students’ phonological awareness skills. These students need explicit instruction to make the associations between phonological units of meaning.

The study will attempt to demonstrate how the emphasis on developing phonological awareness will increase reading efficiency. This will assist the students to manipulate longer words rather than guess from one or two sound units in the word. The present investigation aims to prove that explicit teaching of onset and rime segmentation with year 2 students at risk will increase word accuracy when reading lists and prose.

## **METHOD**

### **Design**

This study uses a case study OXO design, in which the gain is in segmenting and blending words, following explicit teaching in reading words containing dependable rime units in word lists and prose. The study compares two groups of students experiencing reading difficulties: a control group and an intervention group. The students do not demonstrate the ability to segment words using onset and rime and the blending of single sounds into one phoneme. These students are able to manipulate words with fewer sounds or words that follow the cvc pattern e.g. cat, mug but have difficulty with identifying words with ccvc pattern e.g. play, trip

### **Participants:**

All students are currently in Year 2 and are from a Non English Speaking Background and attend a primary school identified with a low-socio economic index rating. The intervention was implemented with a group of 5 students from one year 2 class; the control group came from the adjoining year 2 class

The following table provides information regarding the participants

**Table 1-**  
*Information re participants*

<b><i>Student</i></b>	<b><i>group</i></b>	<b><i>Age in mths</i></b>	<b><i>ESL</i></b>	<b><i>Earlier Intervention</i></b>	<b><i>EMA</i></b>
<b><i>Student A</i></b>	Teaching	90	Yes	None	n/a
<b><i>Student B</i></b>	Teaching	91	Yes	None	n/a
<b><i>Student C</i></b>	Teaching	91	Yes	Reading Recovery	yes
<b><i>Student D</i></b>	Teaching	84	Yes	Reading Recovery	yes
<b><i>Student E</i></b>	Teaching	92	Yes	Reading Recovery	yes
<b><i>Student AA</i></b>	Control	94	Yes	Reading Recovery	n/a
<b><i>Student BB</i></b>	Control	86	Yes	New Arrivals	yes
<b><i>Student CC</i></b>	Control	94	Yes	Reading Recovery	n/a
<b><i>Student DD</i></b>	Control	93	Yes	Reading Recovery	yes
<b><i>Student EE</i></b>	Control	93	Yes	None	yes

## Procedure

The students chosen for the two groups have been identified by the classroom teachers and literacy co-ordinator from pre-testing results as having difficulties in reading particularly at word level.

All students were administered the following tests ( pre and post):

- Rime units test
- SPAT –Sutherland Phonological Awareness Test
- Burt word Test
- Running Record Using Alpha Assess Levelled Benchmark Texts

**Table 2**

*The following table indicates the pre-test information for participants*

<b>PRE-TEST</b>	<b>SPAT</b>	<b>Rime Unit Test</b>	<b>Reading Instructional level</b>	<b>BURT</b>
<b>STUDENT A</b>	46/58 = <b>79%</b>	128/147 = <b>87%</b>	19	43
<b>STUDENT B</b>	30/58 = <b>52%</b>	105/147 = <b>71%</b>	16	36
<b>STUDENT C</b>	30/58 = <b>52%</b>	48/147 = <b>32%</b>	14	29
<b>STUDENT D</b>	30/58 = <b>52%</b>	86/147 = <b>58%</b>	16	31
<b>STUDENT E</b>	28/58 = <b>48%</b>	61/147 = <b>41%</b>	13	26
<b>STUDENT AA</b>	33/58 = <b>57%</b>	53/147 = <b>36%</b>	13	25
<b>STUDENT BB</b>	35/58 = <b>60%</b>	79/147 = <b>54%</b>	11	35
<b>STUDENT CC</b>	36/58 = <b>62%</b>	57/147 = <b>39%</b>	12	25
<b>STUDENT DD</b>	50/58 = <b>86%</b>	123/147 = <b>84%</b>	17	35
<b>STUDENT EE</b>	32/58 = <b>55%</b>	57/147 = <b>36%</b>	12	28

The assessment tasks were administered to all students with students A, B, C, D, and E forming the intervention group the others forming the control group.

The intervention program was conducted for ten sessions over a three week period with each session being forty minutes in duration. The small group instruction was carried out in a learning setting away from the class allowing for minimal distraction. Anecdotal notes were kept to assess student's progress as well as some running records when reading prose pieces.

The aim of the sessions were to allow students to produce and identify words that rhyme, segment one syllable words into onset and rime and then to extend to two syllable words. The instruction was aimed to have children identify the two segments of the word onset and rime and to accurately say the word in lists and prose.

In sessions 1-5 the use of appropriate text highlighting the onset and rime patterns taught in the session were included. The stories were constructed by the teacher using high and low frequency words from a rime family. The students worked with a set of rime units determined by the pre-testing as rimes unknown or confused by the students. Students were given a series of concrete materials to manipulate to promote segmentation of words into onset and rime. The sequence of words manipulated began with the cvc (consonant, vowel, consonant) pattern to ccvc and then to ccvcc ( lay play plays ). At the end of the session students were required to read the small section of prose so that the teacher could monitor the progress of each child and note which student needed re-teaching with the particular rime unit.

At the end of the fifth session the teacher administered a two minute timing and running record of student's reading of prose (away from the teaching session) to assess children's reading accuracy and automaticity. The texts used for the prose reading in sessions 6-10 were chosen from the guided reading material in the school at much lower levels than the children's instructional level as the aim was to have children easily identify and practise the rime family we were manipulating. The texts contained simple sentences, supported by colourful illustrations based on the use of high frequency words and decodable words with a common onset and rime pattern.

Students in the control group continued to participate in the regular classroom activities. Following the three week period all students were re-assessed using the same materials and procedures as for pre-testing.

### Materials

Materials used include :

- To assist in the phonological teaching tasks : use of teacher made flip books, magnetic letters, cards with three/four box sequence for segmenting and counters, and rhyming picture cards
- To assist in generating words : reading lists made with varying levels of complexity with the children using the rime pattern we were working with at that session
- To assist in reading of prose : Five texts written by the teacher containing a rime unit and five commercially produced reading material texts
- Other stationery materials as required e.g. markers, whiteboards, paper

## RESULTS

Trends for the group indicate support for the hypothesis that teaching year 2 students at risk to apply segmenting of onset and rime will increase word accuracy in lists and prose.

The post-test scores indicate improvement in all areas of testing for all members of the intervention group compared to the students in the control group. The table below ( table 3) indicates that the degree of gains made by the intervention students were greater in comparison to the control group. The SPAT average score for the intervention group at pre-test was 56.6% accuracy this increased at post-testing to 77.2% accuracy. The control group's SPAT pre-testing average performance of 64% which was at a higher level to begin with showed an insignificant growth to 67.2 % in the post-testing.

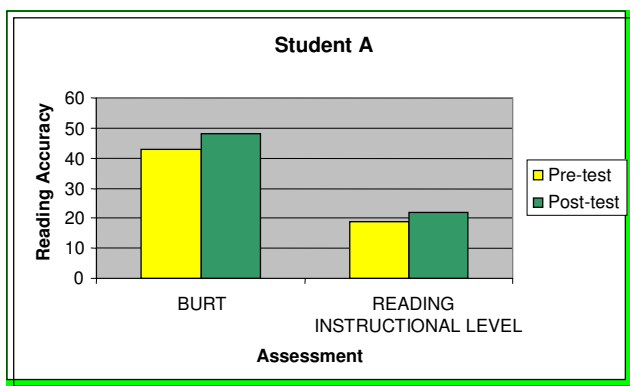
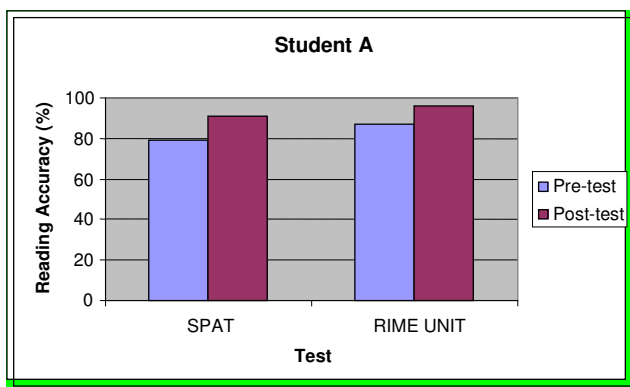
The results from the RIME test were also conclusive to support the present study's hypotheses. For the intervention group the pre-testing average rime unit result was 57.8% and this grew to 77.4 % at post-testing, whereas the control group went from an average of 49.8% to 53%. There was a marked improvement at word level and at reading of prose level with students increasing at least two levels in reading instructional level over a three week period. The intervention group relied on identifying rime segments to a greater degree than their peers in the running record assessments.

All the students in the intervention group were beginning to learn that one sound can be linked to other sounds and that words have segments of sound units. They began to apply some of this new word knowledge to word lists and prose as indicated in the increase in the BURT scores as well as the reading levels. After 10 lessons, the gap between words read accurately and inaccurately with the intervention and control groups was more noticeable and substantial.

Table 3 Pre-and post-testing comparisons for intervention(Students A,B,C,D,E,) and control group(Students AA,BB,CC,DD,EE)

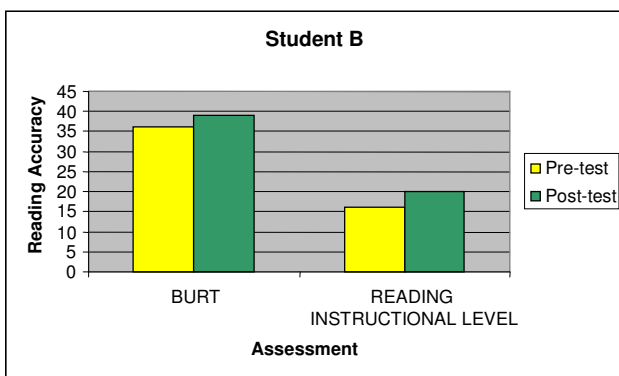
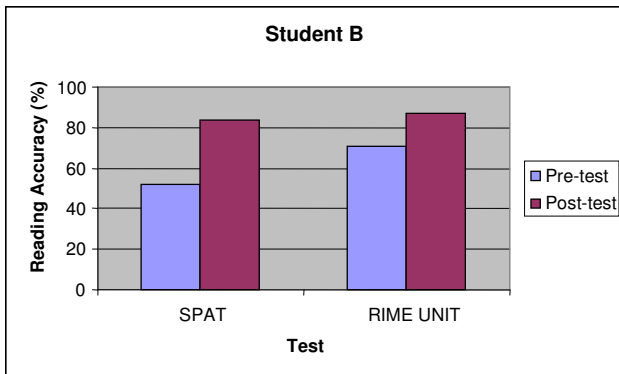
<b>PRE-TEST</b>	<b>SPAT pre</b>	<b>SPAT post</b>	<b>Pre RIME</b>	<b>POST RIME</b>	<b>Pre Reading instructional level</b>	<b>Post Reading Instructional level</b>	<b>BURT PRE</b>	<b>BURT POST</b>
STUDENT A	46/58 <b>79%</b>	= 53/58= <b>91%</b>	128/147 = <b>87%</b>	141/147 = <b>96%</b>	19	22	43	48
STUDENT B	30/58 <b>52%</b>	= 49/58 <b>=84%</b>	105/147 = <b>71%</b>	128/147 <b>=87%</b>	16	20	36	39
STUDENT C	30/58 <b>52%</b>	= 47/58 <b>=81%</b>	48/147 <b>=32%</b>	87/147 <b>=59%</b>	14	15	29	33
STUDENT D	30/58 <b>52%</b>	= 43/58= <b>74%</b>	86/147 <b>=58%</b>	125/147 <b>=85%</b>	16	20	31	37
STUDENT E	28/58 <b>48%</b>	= 33/58= <b>56%</b>	61/147 <b>41%</b>	88/147= <b>60%</b>	13	14	26	27
STUDENT AA	33/58 <b>57%</b>	= 35/58= <b>60%</b>	53/147 <b>=36%</b>	68/147 <b>46%</b>	13	14	25	28
STUDENT BB	35/58 <b>60%</b>	= 42/58 <b>= 72%</b>	79/147 <b>=54%</b>	85/147 <b>= 58%</b>	11	13	35	37
STUDENT CC	36/58 <b>62%</b>	= 36/58 <b>= 62%</b>	57/147 <b>39%</b>	53/147 <b>=36%</b>	12	14	25	26
STUDENT DD	50/58 <b>86%</b>	= 50/58= <b>86%</b>	123/147 <b>=84%</b>	133/147 <b>=90%</b>	17	19	35	38
STUDENT EE	32/58 <b>55%</b>	= 33/58 <b>56%</b>	57/147= <b>36%</b>	52/147 <b>=35%</b>	12	12	28	31

Some students miscued less often after the intervention. Many began to substitute real words for unknown rather than a combination of irrelevant single sound units. Overall the students found it easier to segment words of three sounds and most developed knowledge of being able to segment four sounds. However, 5 sounds became difficult and for some students sounds containing long vowels became gradually easier although this presents a problem for all students. Using the units learnt they can gradually increase the links they make when reading prose and the students seem to have more elaborated phonological awareness skills.

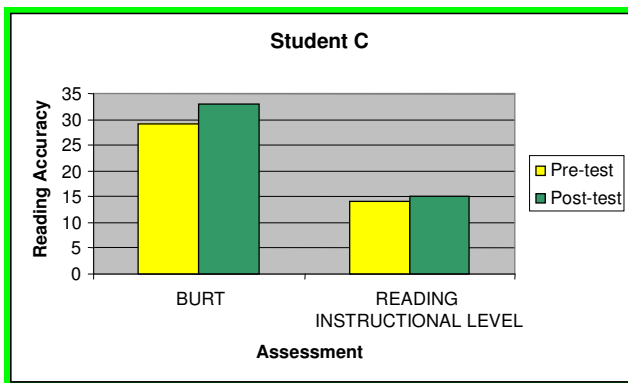
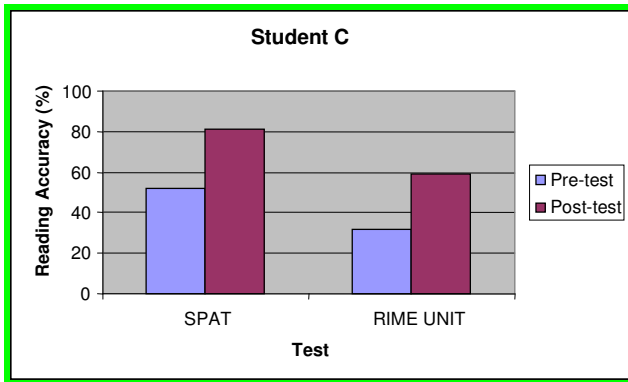


At pre-testing, although recording 87% accuracy in the rime unit test, Student A substituted sounds in responses and inserted or added sounds when faced with an unfamiliar word. Although her reading level was higher compared to the other students she was making errors with simple dependable onset and rime patterns. She successfully tuned into the instruction and was more successfully with rime units with 'ccvvc' patterns. She was able to transfer this knowledge to prose and successfully applied her skills to level 23 unseen reading texts. Whereas, at pre-testing she seemed to be decoding somewhat successfully she laboured over each sound unit when faced with a word list, post-testing behaviour demonstrated that she was now saying words in lists more automatically and with less pausing between each segment.

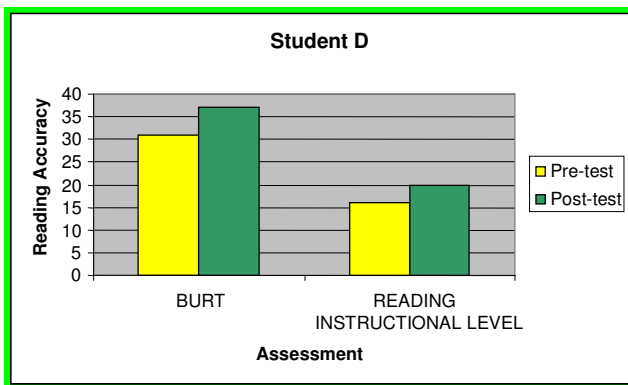
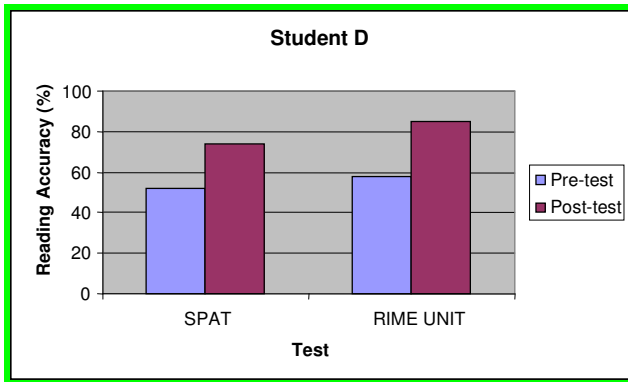




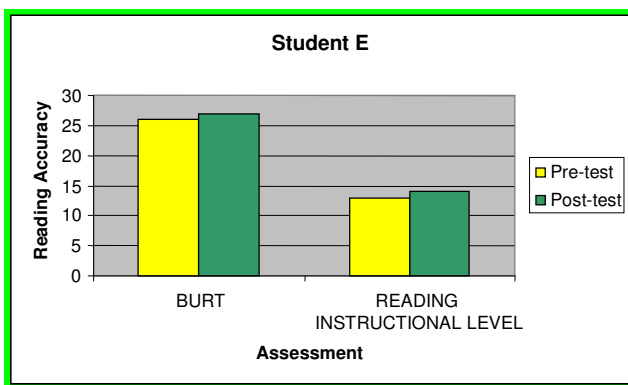
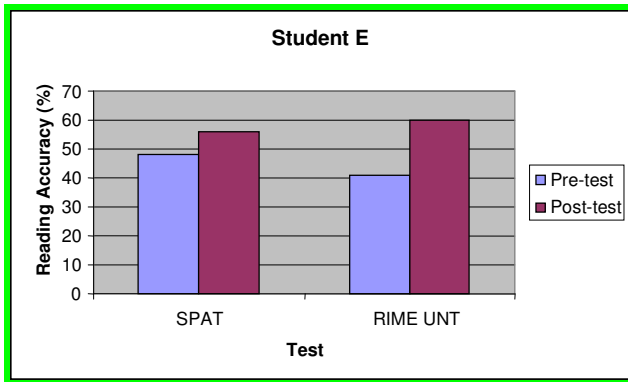
Student B constantly substituted sounds in responses and inserted or added sounds and words when reading. He became quite distressed at pre-testing stage as he was aware he was reading the text inaccurately and was not maintaining meaning. His pre-testing SPAT results also indicated that complex words containing blends and clusters were causing him difficulties at word level. He was able to segment words of 3-sound length into onset and rime (rime test results indicated 71% accuracy), however any word of more than this length caused him to pause and make approximations that were inaccurate or had little orthographic connection with the required word or text. However, after intervention he became successful with segmenting words with more than 3-letter sounds within prose and word lists. The student seemed to become aware of all the sounds in the words and had less difficulty articulating the words. Student B demonstrated a high level of self-efficacy towards the end of the program which was not evident at the pre-testing stage.



Student C found rimes that were using a ‘cvc’ pattern easier to identify than ‘cvcc’ e.g. up to ump. He had low onset and rime knowledge with a pre-testing result of 32% accuracy. He seemed to pay too much attention on the onset in words and could not identify the rime at all. During the intervention program this student began to successfully separate the letter clusters into sound units more often. He began to make connections when presented with words that had a blend followed by a rime e.g. clap, and this was evidenced in his results in the SPAT test where he improved from a 52% accuracy to 81% accuracy. However, this student does not seem able to transfer this knowledge to prose as indicated by his instructional reading level of 15. He would benefit from more reading of prose with dependable rimes rather than word lists.



This student had the most success from the intervention program . Whereas at pre-testing stage accuracy for SPAT was 52%, she was able to increase her level of accuracy to 74% and this knowledge was transferred from the word lists to reading text with her instructional reading level increasing from 16 to 20 at post—testing stage. Student D was able to confidently segment and blend together onset and rime even when the number of sounds increased. She demonstrated difficulties with the long vowel rimes such as ‘ain in rain’ and ‘eat in meat’ and this was evident in the RIME unit test results with post-test accuracy being 85% as she was not able to name successfully most of the 5-letter words in the list that contained a long vowel.



Student E made the least growth in pre- and post-test results, his SPAT results indicated a growth of 8% and reading text level increased by one level. During the intervention program, although given more teacher assistance and scaffolding compared to the other students he found it increasing difficult to read groups of letters (blends ,onset and rime) as the amount of information that had to be used increased. He made small gains and seemed to have the greatest difficulties when asked to recode and blend the sound units. The student began to slow down when segmenting words into onset and rime when the word was of more than three letters in length. This was noted when reading word lists and prose. The errors became inconsistent with known and unknown patterns and he began to substitute rimes that started with the same vowel but were inaccurate in the text, this became more evident when reading prose.

The effects of the intervention, though beneficial for all seem more gradual for others however some students still display errors consistent with them not being able to blend sounds and maintain onset and rime knowledge when reading prose.

As Munro (2000) states “onset and rime segmentation indicates the explicit awareness of sub-word sound units” this I feel the teaching group are now gradually understanding.

As a whole the intervention group is now more sensitive to word parts and is applying phonological awareness skills. The intervention group demonstrated a significant higher accuracy with word lists at post-testing than the control group who demonstrated a minimal growth therefore suggesting that intervention and explicit teaching will improve performance levels for students at risk.

## **DISCUSSION**

The hypothesis for the present investigation was that *the explicit teaching of onset and rime units and segmenting skills with year two students at risk will increase word accuracy when reading word lists and prose.*

This study was able to examine the development of a student's facility to decode unknown words applying the onset and rime strategy and other segmenting and blending skills. This study and the participants' data indicate that children can acquire phonological awareness knowledge quickly when provided with explicit instruction in a small group setting. Monro (2000) states "the words they find easier to manipulate have sound sequences that match the links they have formed between phonemes". The participants were able to detect the rime pattern in words, apply orthographic and phonological knowledge and then transfer this through analogy to other words in lists or texts.

The control group's post-test data indicated that there was little or no gain when students were in a literacy classroom without explicit teaching in the phonological awareness areas although these students definitely required the teaching as indicated by the pre-test results which were similar in composition to the teaching group. This study was a relatively brief intervention aimed at improving phonemic awareness skills and it did successfully improve some phonological skills in the students in the teaching group whereas the control group's data indicates a slight or no growth in phonological awareness skills. (See table 3) Further work should include more sessions of instruction with more complex texts. It is also suggested that the control group having similar needs as indicated by the assessment results might benefit from experiencing the intervention program. The study demonstrated and supported researchers' views that a student's skills in segmenting and blending phonemes were significantly higher after direct instruction.

Calhoun (2001) stated that "more recent research suggests that the frequency with which readers encounter identical rimes also contributes to readers' word recognition." The students in the intervention group began to notice the patterns of onset and rime more easily and word recognition improved within the small group setting and was noted by the classroom teacher with whole group learning. We began to observe this group of students applying this phonological knowledge to decode many unfamiliar words within text that they were reading and applying this knowledge when spelling words in writing activities. This action by the students was supporting Monro's (2000) statement that "the amount of phonemic knowledge students can manipulate increases such that students can deal with more complex phonological tasks."

Some of the students in the teaching group required a little more scaffolding and in retrospect more manipulation of materials particularly word segment cards was required. A group of five students in the teaching group proved difficult to manage at times as it was difficult to give each child several practices at pronouncing words, sharing of other words following the rime pattern, and reading of text. As an intervention program maybe

3-4 is a more ideal group size allowing more opportunities for rehearsals and contribution from each student at each point of instruction.

Through incidental discussions with the students, their classroom teacher and their parents it was noted that the participants in the study had demonstrated a more positive attitude to reading during the period of the investigation. Although this was not measured throughout the study it would be an interesting direction to examine in further weeks to examine the self-efficacy levels of all the students. Student A who was very timid about reading aloud to any adult as she was very hesitant and doubted her abilities has made great changes in her attitude and the small group setting has actually allowed the teaching staff to have a better understanding of her skills. It is a consideration whether the fact that she had higher entry skills to her peers in this small group gave her the added confidence to display them whereas in the whole class setting it is very awkward for her to take risks and have a go when faced with unfamiliar words.

More work in the word level area is required with these students. Three of the students will be placed on an intervention program next term. Student C, D, and E are referred for *ERIK - Enhancing Reading Intervention for At Risk Students, Catholic Education Office, Student Services*, possibly following the phonological pathway of instruction. Student D will participate in a small-group classroom support literacy program to further his learning. Student A is now generally working independently in class situations whereas before she was reluctant to continue work without assistance at each phase of reading. Her self-management and self-efficacy skills as well as her reading skills will be monitored to ensure that she makes further gains to apply learning to all work with added confidence. All the students in the teaching group need to be further assisted to develop phonemic awareness for words of increasing number of sounds so that the knowledge can be transferred. Several more components of phonological knowledge are needed (blending, association of letters with sounds) by these students and consequently we should expect that further instruction and learning is needed by all within small and whole class sessions.

Further studies should examine if given more intervention in the area of phonological awareness will the reading fluency and comprehension improve as word accuracy increases. On-going assessment and monitoring of these students and their needs is crucial to determine whether there is long term learning gains by all the students.

Many studies have recognised as this study does, that there is a significant link between children's reading ability and the explicit teaching they receive in the area of phonological awareness. This is true of all students but in particular those students at risk in the language areas.

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## Appendix 1

### Lesson plans

*For each session the following plan was used:*

<i>Activity</i>	<i>Description of the Activity</i>	<i>Time</i>
<b>1. Introduction</b>	Introduce to students rime focus for the day( two rimes worked with per day (see appendix 2)introduce each rime separately steps 1-4 of lesson plan repeated with second rime before reading prose activity	2 mins
<b>2. Reading Target words</b>	Select 8-10 target words using the onset and rime (3 letter and 4 letter words) place on flashcards Read each word selected for the rime unit with/by students several times Discuss the meaning of words/give synonyms of words to clarify that students understand what each word means Write these words on a chart ask students to contribute their suggestions for other words that match the rime ( <i>As the children are asked to think of words that rhyme with the onset and rime pattern be aware of all possibilities that can be produced by children therefore record lists as follows</i> ) Write the chart using three columns: cvc pattern, ccvc pattern , other e.g. cap clap claps or clapping	6-8 mins
<b>3. Segmenting/Blending task</b>	Using segment cards ( see appendix 4) children “ make and break” the targeted words list. Break each word into onset and rime and then slide units back together to say whole word . At this stage keep encouraging students to begin to use analogy to see possibilities of words that can be made. For diversity use magnetic letters or flip books in the same manner.	5-7 mins
<b>4. Writing targeted words</b>	Children are given flashcards made up as a book. Each day a flashcard is completed in this section . The teacher/adult reads the targeted words fro one rime unit and the children write it as it is said . Present the words in random order. If the child makes an error , read the word for the child and write the word <i>Home task the second rime for the day is completed in the same way at home</i>	3-5 mins
<b>5 Reading prose</b>	Read with /by the students the prose containing many of the rime unit words from the targeted list. Children read the prose to one another and the teacher Sessions 1-5 the stories were created by the teacher, sessions 6-10 used commercially-available texts	7-10 mins



<p><b>6. Fun writing</b></p>	<ul style="list-style-type: none"> <li>• This step introduced at session 5</li> <li>• Creating and then writing as pairs/individuals/group a sentence containing the onset and rime manipulated e.g. I was grumpy and down in the dumps because my pillow was lumpy. Or The bug gave the slug a hug.</li> </ul> <p><i>In the present study the students looked forward to this activity never ceasing to complete more and more therefore it became an integral part of the reflection section of the session. It becomes a practical way to articulate my learning. These sentences may put together in a book which is displayed and read in the classroom.</i></p>	<p>3-5 mins</p>
<p><b>7.Reflection</b></p>	<ul style="list-style-type: none"> <li>• Articulating what I learnt today . Each child is to say to their peers something they learnt today by completing the comment : <i>Today I'm happy because I learnt.....</i></li> <li>• After session 5 a running record is taken for each child to see how students are progressing with accuracy and automaticity.</li> </ul>	<p>3-5 mins</p>

The ten teaching sessions used an oral- language base where the following strategies were talked about, articulated, practised and applied in talk and discussion at all times:

- Recognition of initial sound
- Onset-rime segmentation
- Repeated reading of familiar predictable text to build fluency and to link word and concept level
- As the stories developed by the teacher and used with the students were very basic the students were encouraged to accurately identify words in prose not just lists
- For Phonological teaching tasks : recognition of the sound shared by words using teacher made flip books, magnetic letters, cards with three/four box sequence for segmenting and counters, and rhyming picture cards
- Word reading lists made with varying levels of complexity with the children

Appendix 2

*The rime unit and the target words:*

<i>Session</i>	<i>Rime</i>		<i>Target words</i>
1	-ab	-an	Cab, dab, grab, slab, drab, blab, Man, can, pan, plan, flan, gran
2	-ot	-ip	Tip, rip, lip, zip, trip, flip, grip, ship, strip, Hot, cot, plot, trot,
3	-ap	-ug	Cap, map , rap, chap, clap, flap, trap Rug, mug, bug, dug, hug, slug, smug, shrug
4	-at	-op	Pat, rat, mat, chat, flat, Hop, top, cop, shop, chop, stop
5	-in	-uck	Bin ,pin, win, tin, chin, thin, spin, grin Duck, luck, tuck, suck, truck, struck
6	-it	-ar	car, bar, far, jar, star, start Sit, hit, kit, spit, split,
7	-ay	-ick	Day, lay, way, away, play, stay, stray, pray, spray Sick, lick, pick, thick, slick, prick
8	-ump	-ide	Lump, dump, slump, grump, plump Ride, hide, side, bride,
9	-eat	-unch	Eat, Meat, heat, seat, treat, cheat, pleat Lunch, punch, munch, crunch, brunch ,
10	-ight	-unk	Light, fight, night, sight, bright, fright Bunk, punk, sunk, dunk, drunk trunk, chunk

### *Appendix 3 :*

#### Texts used for prose section of each session

##### *The five pieces of prose created by teacher used for sessions 1-5*

###### *Ab and an*

###### ***Dan the Cab Driver***

Dan was a cab driver. He was an old man who liked to grab and drink a slab of coke every week. He would often dab his drink on his clothes. It made them look drab. Dan had to plan how to keep his clothes looking fab. Sometimes he would take them to a lab to get cleaned. There was a man there he could blab about his cabs while he had his clothes cleaned.

###### *Ot and ip*

###### ***A Hot Trip***

Tim and his dad went on a trip on a ship. It was a hot day so dad told him to get his hat with the zip and to grip onto the side of the ship. He did not want to flip over. Tim bit his lip as he made a trot for the ship. He sure wanted to know what plot dad would have so that they could have fun on the ship.

###### *Ap and ug*

###### ***The New Cap***

It was a hot sunny day Joe was going to see his friend Jim the chap next door. He had a new cap to give him. When he got to Jim's house he saw Jim was sitting on his rug drinking tea from a gold mug. Joe gave Jim the new cap and a map and got a big hug. Joe looked at the map and they had a long chat about the map. At the window they saw Mary with a new cap as well. They said to her to come onto the rug and together they would look at the map while wearing their new caps.

###### *At and op*

###### ***Pat the Rat***

Pat was an old rat who had a shop. He ran to the shops every day to have a chat. Pat made his shop a place to chat. It was a top shop and many cops would come to chat with the other people. There was a colourful flat mat at the top of the door of the shop that said , "Stop , come in and enjoy a chat with Pat"

###### *In and uck*

###### ***Bad Luck***

One day Eric hit his chin with a pin on the way to the bin. What bad luck! He tried to play with his thin chin and pluck at his chin. He said I bet if I can throw this pin into the bin I would have good luck and win the truck on top of the bin. It lay on the tin at the top of the bin. He tried his luck and tried to tuck the pin under the lid. Wow he said with a grin, "I win!"

*Texts used for sessions 6-10*

*Session 6 \_*

*Cowley, Joy, Crankey Car Sales, Joy Cowley Plays, Mimoso-McGraw-Hill, 2006*

*Session 7 \_*

*Cowley, Joy, The Kick-Lot-Shoes, Storybox, Mimoso-McGraw-Hill, 2006*

*Session 8 \_*

*Cowley, Joy, Grumpy Elephant, Storybox, Mimoso-McGraw-Hill, 2006*

*Session 9 \_*

*Cowley, Joy, The Hungry Giants, Storybox, Mimoso-McGraw-Hill, 2006 Session*

*Session 10 \_*

*King Jerry, Night Lights, Kites,, Mimoso-McGraw-Hill, 2006*

*Appendix 4*

*The segment cards used*


Counters used from classroom supplies to use with segment cards