

## **Explicit teaching of onset and rime and blending enhances prose reading for year one at risk.**

### **ABSTRACT**

Current Research has shown that phonological awareness is very closely linked to the success in learning to read. Children with poor phonological awareness skills such as the abilities to manipulate sounds into words, break words into syllables, segment and blend words impacts on the student's ability to read unfamiliar words. The research indicates that students that have explicit instruction in phonological skills should become more competent with word solving and improve their reading accuracy. The concept of onset and rime is one of the important components of phonological awareness. The present study examines the effectiveness of explicit instruction of onset and rime patterns and blending words with consonant-vowel-consonant (CVC) sound patterns. The study looked at four grade one students considered being at risk by the classroom teacher.

The hypothesis tested was;

**“Explicit teaching of onset and rime and blending enhances prose reading for year one at risk”.**

The method used involved introducing onset and rime made up of three letter words (CVC). The students were taught to recognize each letter individually and then to blend it with the rime to make the word. For example a says a in at and once we add the letter c we blend it all together and we have the word c/a/t. Once the three letters are placed together we have the word *cat* the rime in the word is at and it will always say (at) whatever consonant it has in front of the at. The children were then introduced to initial consonants that could be placed in front of the *at* rime so that they could make up the other words in the list, such as; fat, rat, pat, mat.

In order to assist the children to remember the components of the words they made up short silly sentences with the word.

Word reading accuracy and segmenting and blending skills were tested prior to and after the intervention. Data collected was based on words with consonant-vowel-consonant sound patterns and included some pseudo words. The Sutherland Phonological Awareness Test was administered prior to and after the teaching session to assist in the profiling of the students phonological awareness skills. Results indicated that there were some deficiencies with some phonological awareness skills. Pre-test results indicate difficulties, which include segmentation of words, breaking them up into separate sounds. Blends were another part of the test that they had difficulty with that is; the deletion of the first phoneme and the deletion of the second phoneme. Also noted were difficulties with rhyming words and manipulating sounds in words.

Post-test results showed an improvement in the phonological skills targeted in this study and a marked improvement in the recognition of unfamiliar words read accurately by the students.

The implications of these findings are that the teaching of onset and rime to beginning readers should be explicit. This study supports the research that states beginning readers find it easier to decode words when they are taught to segment them into onset and rime units. However, this learning cannot take place in isolation. Reading development is based on oral language and draws on listening and speaking skills. Beginning readers also use their writing and spelling skills to read words. Therefore, all these components need to be part of a balanced reading program to ensure that all students` needs are met.

## **Introduction:**

Many students go through their primary schooling without having acquired the strategies and the skills to become fluent readers. Research shows that many children learn decoding but remain unable to read fluently. As a result they may become frustrated and may not want to read (Wolf M., Miller L. and Donnelly K. 2000). These students display difficulties at the Word Level in recognizing letter clusters, segmenting words into functional units, converting letter clusters to sounds, blending, segmenting and re-coding.

Phonological awareness skills are the key to many students ability to read. Love and Reilly (1998) emphasis that phonological awareness is not a reading instruction program but an important pre-requisite for reading preparation. It is an awareness of the sound structure of our language. The research on word recognition is clear and widely accepted that word reading difficulties are due to deficits in phonological skills.

Oral language is the foundation for learning to read and phonological awareness enables the reader to analyze and manipulate language, especially at word and syllable level. Many of our students come to school as beginning readers with at least some phonological awareness in that they should be able to identify a known/familiar word in a sentence or written on a chart. It does not, however, mean that they are able to identify a syllable in a word, which is far more challenging for them. Language acquisition may be one of the most difficult tasks that children face during development. They have to segment words from fluent speech, figure out the meaning of these words, and discover the syntactic constraints for joining them together into meaningful sentences. (Onnis, Luca; Christiansen, Morlen H. 2008)

Another key aspect of oral language development is phonemic awareness. This is the awareness of the smaller units of speech sounds in words (phonemes). It is knowledge of individual words and syllables as distinct units that can be analyzed and manipulated. With phonemic awareness, readers are able to develop phonic knowledge because they are able to identify the individual sounds in syllables and words. Readers are able to map individual sounds to a letter or letters and then can map a letter or letters to their corresponding sounds.

Phonological and phonemic awareness over the last two decades have been identified as an influence on literacy acquisition. (Share, 1995; Stall & Murray, 1994) To make sense of any text we read, we need to connect the written words with our spoken knowledge. Our phonological knowledge helps us do this by giving us ways for linking letter clusters with what we know about how the word is said. A person's knowledge of sound patterns provides a foundation for learning the matching letter clusters. Those who have difficulty reading are less likely and less able to perform these processes of onset and rime. (J. Munro, 1998) Torgensen 2000: Tunmer & Chapman 1999 (cited in Westwood, 2001) believe success in reading correlates highly with skill level in the area of phonological awareness. Students who exhibit reading difficulties frequently have poorly developed phonological awareness skills, and this often leads to problems with their reading ability. Some children can segment a three sound word but they cannot do the same for longer words. This suggests that when they read they look at a word they see it as individual letters rather than groups of letters at a time; they detect letters but not clusters.

There has been a lot of research since the late 1960's examining the role of phoneme or speech sound awareness in beginning reading. Researchers (Liberman, Shankweiler, Ficher, & Carter, 1974) proposed that phoneme awareness, or the conscious

attention to individual sounds, in words might be crucial factor in learning to read. Liberman argued that until beginning readers can segment spoken words into phonemes, they would be unable to match letters in printed words to their corresponding sounds.

Research has also shown that it is harder for the beginning reader to sound out a word letter by letter. The present research highlights this fact. As the students are reading they are trying to manipulate the smallest sound unit in a word and find it difficult to say the whole word. By making the reader aware of the onset and rime patterns that make up the word it is more efficient and easier for them to work out the word. Ehri and Robbins (1992) state, “Reading CVC words by analogy requires readers to segment and blend only two constituents, the onset of the new word with the rime of the known word, whereas reading words phonemically require segmenting and blending three phonemic units. A study by Treiman (1985) shows that onset rime units are more easily distinguished by children than phonemic units.” A person’s knowledge of sound patterns provides a foundation for learning the matching letter clusters. In order for the learner to learn letter clusters, they need to recognize them in written words, break up the spoken forms of the words into smaller sounds and link the letter clusters and sounds. This allows the reader to use what they know about some words to read others. Jo Anne Vacca, Richard Vacca and Mary Gove (1995), also support the view that “Phonics instruction needs to include the teaching of onset and rimes.” (p.287). If the student is to be proficient in recognizing letter clusters in the written form, they need to be taught letter clusters and sounds.

Ehri and Robbins (1998) have offered the most comprehensive description of how word knowledge develops in the beginning reader and have proposed four phases of word recognition development.

The first phase is the *pre-alphabetic* phase in which children learn to read words by remembering and linking prominent visual clues in the word with the word's pronunciation and meaning. For example, the child would might see the tail end of *pig* and remember the *ig rime* and the two posts at the end of *pall*.

However, as there is no systematic letter-sound processing at this stage, the child may confuse words that look similar.

The next phase is the *partial alphabetic* phase and here the reader commits printed words to memory by forming connections between one or more letters in a word and the corresponding sound/s detected in the pronunciation of the word. This becomes evident when the student is able to remember the word *back* by connecting the initial and final letters with the corresponding sounds in the spoken word. At this phase, the child is able to make links between some letters and sounds and can segment either the initial or the initial and final sounds in words. With a reliable though restricted system of letter-sound relationships, the reader is able to process new words and store them in memory instead of just trying to remember words via distinctive visual cues.

As readers gain greater phoneme awareness, they eventually progress to a *full alphabetic* phase where they remember how to read words by forming complete connections between letters seen in the written word and phonemes heard in its pronunciation.

Ehri's final phase is the *consolidated alphabetic phase* in which the beginning reader is able to notice the multi-letter sequences that are common to the many words they have stored in memory. For example, the (*ack* sequence in *sack, stack, shack etc.*)

Phonological awareness is needed for the student to begin making sense of the principle that letters map into sounds in written words, or the alphabetic principle (Stahl & Mckenna, 2000). In order for the student to have success in reading, phonological awareness is essential for word recognition as it assists the student to recognize and use the frequently occurring letter clusters to *chunk* or *decode* words.

This study aims to investigate the impact of explicit teaching of onset and rime in three letter CVC words. Furthermore, on the student's ability to identify and use letter clusters in decoding and blending words in isolation and within prose.

### Hypothesis:

**“Explicit teaching of onset and rime and blending enhances prose reading for year one at risk”.**

### Method

#### Design:

The study uses a case study XOX (test, teach, test) design in which the ability to read CVC words in isolation and prose following explicit teaching of rime units is monitored for beginning readers.

#### Participants:

The participants are four Grade 1 students. Three are currently half way through their Reading Recovery program. The other student did not make it into the program but is also at risk and experiencing difficulty with their overall literacy. The four students find the demands of the literacy tasks presented very challenging. Two of the students are still at the stage of sounding letters when they encounter a new word. They will look at the word and sound out each letter, i.e. *f/a/r/m/*. All four students have difficulty at the word level often guessing the word by the initial letter of the word. Pre test results show that all students need help with their word level strategies.

The Sutherland Phonological Awareness Test (Nielson, 2000) diagnostic tool was used to assess phonological knowledge. It includes a range of tasks with increasing levels of difficulty; it is a good indicator of student's level of ability. The students were tested on Items 1 to 13 and results are shown in the table below. The Rime Unit Test (Munro, 2000) was also administered to observe where the group of four children was at with their rimes. The ages and results from tasks in the Clay Observation Survey are shown in the following table as are the results from the above mentioned tests administered. These are their entry level results as shown in Table 1.

**Table 1**

Pre-test	Date of Birth	Age	BURT Word Pre-Test	Word Id. 15 words	Reading Level	Rime Unit Test	SPAT
Student 1	19/03/01	6yrs 10mths	15	8	1	35	32
Student 2	31/08/01	6yrs 5mths	4	2	1	12	26
Student 3	11/09/01	6yrs 4mths	2	0	0	0	32
Student 4	18/10/01	6yrs 3mths	6	4	3	3	26



**Table 2**

Intervention Group	Student 1	Student 2	Student 3	Student 4
Sex	Male	Male	Female	Female
Age	19/03/01	31/08/01	11/09/01	18/10/01
Background Information	One of five siblings. He has been diagnosed with dyslexia and ADHD. Is currently half way through Reading Recovery Program. Has a private tutor to aid his learning.	Eldest of three siblings. He has auditory processing problems. Is currently half way through Reading Recovery Program.	Second child in a family of four. Is half way through the Reading Recovery Program.	The eldest of two siblings. Just missed out on Reading Recovery.

*The above table gives a very brief history of the children involved in the testing.*

### ***Materials***

Materials used include the following.

#### Assessment Tools for pre and post testing.

- *Burt Word Test*
- *PM Benchmark Texts*
- *Word Test (Clay Observation Survey) 15 words*
- *The Sutherland Phonological Awareness Test (Nielson, 2000)*
- *The Rime Unit Test (Munro, J. 2000)*
- *Teacher made Prose and Word Reading Test*
- *Teacher made flashcards of whole words*
- *Teacher made flashcards of words segmented into onset and rime units*
- *Teacher made sentence strips of prose*

## Sutherland Phonological Awareness Test

This test requires the student to complete the following tasks; syllable counting, rhyme detection, rhyme production, identification of the initial and final sound, word segmentation and blending, deletion of initial and second phoneme and finally nonsense word reading and writing.

## Clay Observation Survey

These tests are conducted at the beginning of every year and again at the end of the year to establish where the child is at and what they have achieved in the meantime.

## Teaching Session Requirements

- *Bingo cards (teacher produced)*
- *Rime words written on cards*
- *Word slides*
- *Magnetic letters*
- *Dice game. Teacher prepared.... one die having onsets on all sides and the other die having the rime.*
- *Teacher made flipbooks containing targeted rime units.*
- *White boards and markers for children.*
- *Prepared flashcards containing rimes.*
- *Teacher prepared passages of prose containing targeted rime units.*
- *Concentration cards to play Snap/Fish*
- *Computer activities on Blends and Rimes*

## **Procedure:**

The tests were administered to all four students in the following order:

- Text Level
- Burt Word Test
- Fifteen Word Test
- Sutherland Phonological Awareness Test
- Rime Unit Test (Munro, 2000)

Pre-testing before and during session one. This was followed by eight explicit teaching sessions. During session five testing of the first six rime units took place and during sessions nine and ten, post-testing occurred involving all rime units taught.

Daily running records were conducted containing the previous day's rime units. The students in the study were taught within the classroom setting. The sessions were held during the Literacy Block, over a three-week period with an average of 3 to 4 sessions per week lasting about forty minutes each.

The rime units chosen were determined by the pre-testing and consisted of the units that the four students had difficulty with or were unable to say without breaking into sound by sound.

The following rimes were chosen and introduced to the children, two at each session as shown below.

- *in and an*
- *ay and aw*
- *ab and ug*
- *ot and at*
- *ap and op*
- *ip and ig*

Pre-assessment using Rime Unit Test (Munro, 2000) indicated that the four children were more secure with the two letter rime units, although their responses were not given automatically. The only rime they almost knew was “ay”, and even then there were hesitations.

Each session saw the introduction of two rime units. The new rime sets were given at the commencement of lessons. The children were shown the rime unit letters and told the matching sound pattern.

The unit was written on the white board and the children were asked to think of words that had the same rime in them. The rimes were written on a piece of cardboard that could be displayed around the room.

Children used magnetic letters to add the onsets to the rime and make new known words using the rime and experiment with made up words that had the same rime. Children had to explain to the rest of the group whether the words they came up with were “real words” or “made up words”, using the rime. We made up silly sentences using the rimes that we had learnt so that these were re-enforced in a sentence. Children then wrote these sentences and made up one of their own to further re-enforce the concept. For example; jig pig wig ...The big fat pig did a jig wearing his wig.

Play games that help with the consolidation of the rime units both taught and learnt. These games are Dice games with the rime and onset on the dice, Slides with the onset and rime to match. New rime is introduced and the same format is followed with new rime. Concentration game of matching the words that have the same rime. Flipbooks made by the teacher/children re-enforcing rimes that have been taught. The consonants are matched to the rime. These booklets are taken home to learn the rimes.

Computer games using the onset and rime concept were also made available to the children so that they could have another opportunity to re-enforce the onset and rime.

*BBC Words and Pictures.*

*[www.bbc.co.uk/schools/wordsandpictures/links/index.shtml](http://www.bbc.co.uk/schools/wordsandpictures/links/index.shtml)*

*Power point of onset and rime (Delheim notes).*

Children are shown a text and they highlight the rime unit words learnt. (Both rime units are integrated into the text.)

Flashcards are shown to each child individually and read while the other children play one of the games.

The teacher observes how quickly the child can say each of the rime units on the flashcards and takes notes. These words will be read as separate rime units first and then the flashcards will be mixed.

The prose text read at the end of the lesson will be used for assessment at the beginning of the next session. It contains both of the rime units learnt the previous day. Running records will be taken.

## **Results**

The table below shows the results of the five assessment instruments used with the students in the post-test, as the pre-test results have been discussed earlier. It was interesting to note that all four children made some progress having had the intervention program. They felt a sense of achievement at the end that they too could read and decode simple words in text.

**Table 3** Post-test results for “The Clay Observation Survey” and the “Sutherland Phonological Awareness Test”, and the “Munro Rime Test”.

The Clay Observation Survey includes: “The Burt Word Test”, “The Fifteen Word Test” and a “Reading Text Level”.

The “Sutherland Phonological Awareness Test”, was completed to level 13.

	Burt Word Test	Fifteen Word Test	Running Record	Unit Rime Test	SPAT
Student 1	15	10	6	35	32
Student 2	7	5	6	12	32
Student 3	5	5	5	6	33
Student 4	10	6	7	6	28

There has been an overall improvement in all results as the data shows. The students all progressed in word decoding and reading skills. Three of the students made steady gains as a combination of Reading Recovery and the intervention and one as a result of the intervention and perseverance.

Student 1 who has dyslexia and ADHD has made the biggest gains overall. He has made the biggest gains in phonological knowledge. Research has found that children with dyslexia often show phonological processing difficulties, and training in phonological awareness can improve the efficacy of reading instruction (Bradley & Bryant, 1983; Hatcher, Hulme, & Ellis, 1994; Lundberg, Frost, & Peterson, 1988). This is certainly the case with Student 1. With his SPAT post-test he was distracted and wanted to talk about everything else except the test. His Rime Unit Test, he said *skin instead of spin* and *pan instead of plan* so he omitted the *l* in *plan* and replaced *k* with *p* in *spin*. Overall he correctly read the other rime units that have been part of the

intervention program. His recognition of known words has improved, as has his reading text level. He has gone from a Reading Text Level of 1 to level 6. This is due to his reading everyday both at school and at home.

Student 2, has also made great improvements overall. Considering that this student had no gains in his first year at school he is now able to read simple text and read some of the rimes that have been taught throughout the intervention. This student has gone from a text level of 1 to a text level of 6. He is able to recognize the rimes in his reading or when the class is reading a “shared story”. His writing has also improved with his awareness of phonological knowledge. There was a marked improvement in his “Sutherland Phonological Awareness Test”, as the Speech Pathologist commented on the marked improvement in the student’s achievements.

Student 3 has also made great overall improvements. This student made no gains in her first year of school. She has improved in all areas of the testing that was carried out throughout the intervention. Her phonological knowledge has improved and her confidence has been extensively boosted, since achieving pleasing results all around. She is now reading text level 5 and she started off on 0 text level. She is now able to decode some of the words using known strategies. It was noted in the “Sutherland Phonological Awareness Test”, that she is able to do: ‘Onset Identification’, ‘Final Phoneme Identification’, and ‘Segmentation 1’. Her main difficulty was with ccvc Blends; Deletion of First Phoneme, and Deletion of First Phoneme. In the Non-word Reading she knew the first letter in all words and the final letters in five of the words and mixed up the *p* and the *b* as the final letter.

Student 4 has not made as much progress as anticipated in both pre-test and post-test. She has made some gains in her phonological knowledge, as prior to the intervention there was no

rime recognition whatsoever. She now recognizes known rimes that she has been exposed to and will look for the known rimes in text that is read. Student 4 is slowly reading text level 7. She has gained confidence in that now she is willing to read simple picture storybooks to the rest of the class. She is so excited as she can now read short sentences on her own. She is now more confident in reading words that she has come across throughout the intervention and she will try and decode the words on her own.

When tested on the rimes that we had looked at throughout the intervention all students were able to write and read the words accurately and use them in their own made up sentences. All the students were able to recognize the rime words in context in the teacher made Running Records.

## **Discussion**

The results obtained from the intervention confirm my hypothesis that explicit teaching of onset and rime and blending enhances prose reading for year one at risk students. All students in the research proved that the intervention did enhance their awareness of rimes and blends. By the end of the intervention these four students were able to put into practice strategies that had been taught throughout the ten weeks of lessons.

As a result of the intervention that taught onset and rime awareness, the students phonological awareness increased and with it their ability to decode words in isolation and in texts. As noted in their pre-test and post-test, results were not extreme but one has to note that the intervention took place within the confines of a classroom with twenty-four other students during the Literacy Block. So one has to ask whether results would have improved further if they were withdrawn from the classroom environment. However, having said this, the students are now able to decode some unfamiliar words and do automatically recognize some of the



rimes that were taught throughout the intervention. It has to be noted that this group were non-readers at the start of the year and close to when the intervention started. One of the students came in as a reader reading words with great difficulty there was no recognition of letter clusters or blends, they were reading a word here or there. This group has made progress with their overall reading, they are having success with their take home readers as is pointed out by parents that are listening to them read every night. The reading accuracy in their running records now showed that this group of students was not just looking at the initial letter as previous but they were applying strategies and thinking about their word decoding. The reading overall improved greatly as all went up in levels of reading and they were recognizing words in context, even displaying automaticity with their word recognition. This is supported by Vellutino and Scanlon`s assertion that “the acquisition of skill in beginning reading depends more heavily on the components of language.” (Vellutino, Scanlon 1998) It also supports Lane`s studies as she writes “Deficits in phonological awareness are usually associated with deficits in reading.” (Lane H. et al 2002).

In the current study it has been noted that once the students became aware of the re-occurring rime unit it was easier for them to read other words with the same rime in them in their reading of texts. This is supported by Munro`s studies as he states “Onset and rime segmentation indicates the explicit awareness of sub word sound units. An awareness of the initial sound in spoken words indicates the awareness of particular consonants. The link between the phonemes in a rime at this time is based on their co-occurrence in particular words.” (Munro J. 2000)

Having seen the results attained in the intervention lessons in such a short time, it leads me to believe that if the phonological components of language were addressed at an earlier stage in their schooling, it could aid many struggling readers with recognition of

familiar rimes. Thus allowing for further intervention or expansion depending on the individual students needs.

The success of the short focused intervention has significant implications for the teaching practice at our school. The overall results of the four students have encouraged me and other staff members to try this approach with the children at risk in our school and particularly in the infant grades. The intervention program showed that if these children are given explicit instruction in the area of concern they will achieve desired results. Having discussed this intervention program with peers we have decided to adopt some of the explicit teaching strategies for other students. Denton and Hasbrouck state, “Students benefit when instruction is systematic and structured. Reading skills should be introduced in careful order and students must be given a great deal of practice and repetition in each skill.” (Denton, Hasbrouck 2000 pg 7) I believe that if firm foundations in literacy are set in the early years of a child’s education then they can only build on it as they progress through their primary years.

## Appendix 1

### Outline of lessons

- The lesson is conducted as a small group lesson.
- The children remain within the classroom.
- The lesson is conducted between 9-11 each weekday during ClaSS time
- Each lesson runs for approximately 30-40 mins.
- Begin by going through the two letter rimes listed on the whiteboard.
- Read the rimes out loud together.
- Teacher says the rimes and the group repeats it
- The group will read the text that is teacher made using the rimes that they know
- Repeat the rimes that are being focused on the day. Two per day.
- Have a look at the text that the group is reading. Re-read the text that was read the prior day.
- At first read the text together, then each child read the text.
- Ask the children to locate any familiar rime that they have come across and point it out.
- Ask the students to silently work out the rimes containing the rimes that they found.
- Read the text together aloud-paying particular attention to any words that contain the rime that they are learning that day.
- Discuss the new rime for the day. Look at the text and ask the group whether they know the new rimes and how did they work them out? How does this new rime help us with our reading of new words?
- A variety of games and activities are completed in the following session to re-enforce what they have learnt so far.
- These are:

- Word slides-children take a word slide each and practice saying the words on the slide.
- Children then swap their word slides with another student, so that each student has a go on all the slides. (Miw Word Books) for slides and Letterland books have many ideas for these.
- Rime Bingo. Students each get a Bingo Sheet containing two letter rimes and play Rime Bingo led by the teacher.
- Brainstorming words containing rimes.
- E.g. ig rimes.... pig.... dig
- Breaking written words into rime units. E.g. p/ ig d/ ig
- Students to say the words in segments and then the whole word.
- Scan unfamiliar text looking for rimes that are contained within the text.
- Reading familiar text concentrating on the rimes within the group and to the teacher,
- Go through the charts around the room that house all the different rimes that have been taught and learned.
- Discuss with the students why it is important for them to have a good grasp on the onset and rimes. Hopefully they will have realized that it helps them immensely with decoding unfamiliar words.

**Table 4 Bingo Cards for rimes**

cat	fan	clap
top	Kay	flap
big	pig	pay
can	fig	say

*Four letter rimes were placed to see whether the students could say the words and recognize the rime in a four-letter word.*

fat	bay	bag
sat	bat	day
rat	bug	ray
nat	ban	ran

play	snug	hay
fig	bug	lay
gig	dug	pat
jig	mat	sat

## Appendix 2

Rime words that were used throughout the intervention.

ab/ug words	at/ot words	ap/op words	ip/ig words
cab	dot	cap	tip
fab	pot	tap	nip
dab	not	fab	sip
tab	cot	lap	lip
	hot	sap	hip
bug	lot	map	Pip
tug		nap	
dug	cat	zap	jig
hug	mat		big
	sat	hop	fig
	hat	mop	wig
	pat	top	dig
	fat	cop	pig
	rat	pop	
	vat	bop	

### Appendix 3

#### Rimes that were chosen for the four students

<i>in -----three letter rime as “in” in bin, sin,</i>	<i>an-----three letter rime as “an” in can, fan,</i>
bin        b/ in	fan        f/ an
tin        t/ in	can        c/ an
fin        f/ in	Dan        D/ an
win        w/ in	man        m/ an
sin        s/ in	ran        r/ an
pin        p/ in	pan        p/ an
	van        v/ an
	Nan        N/ an
	tan        t/ an

<i>ay...three letter rime as in... “ay” as in hay, say, May</i>	<i>Aw...three letter rime as in.... “aw” as in law, saw, paw</i>
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day        d/ ay	jaw        j/ aw
lay        l/ ay	saw        s/ aw
bay        b/ ay	law        l/ aw
May        M/ ay	raw        r/ aw
pay        p/ ay	paw        p/ aw
say        s/ ay	
Gay        G/ ay	
Fay        F/ ay	
way        w/ ay	

<b><i>ab...three letter rime as in... “ab” cab, nab, lab,</i></b>	<b><i>ug...three letter rime as in... “ug” bug, tug,</i></b>
cab          c/ ab	bug          b/ ug
fab          f/ ab	tug          t/ ug
dab          d/ ab	dug          d/ ug
tab          t/ ab	hug          h/ ug

<b><i>at...three letter rime as in... “at” hat, cat,</i></b>	<b><i>ot...three letter rime as in... “ot” hot, cot,</i></b>
cat          c/ at	hot          h/ ot
mat          c/ at	cot          c/ ot
sat          s/ at	not          n/ ot
hat          h/ at	pot          p/ ot
pat          p/ at	dot          d/ ot
fat          f/ at	lot          l/ ot
rat          r/ at	
vat          v/ at	

<b><i>op...three letter rime as in... “op” hop, sop,</i></b>	<b><i>ap...three letter rime as in... “ap” cap, nap,</i></b>
hop          h/ op	cap          c/ ap
mop          m/ op	tap          t/ ap
top          t/ op	nap          n/ ap
cop          c/ op	lap          l/ ap
pop          p/ op	sap          s/ ap
bop          b/ op	



<b>ip...three letter rime as in... “ip” bib, nib,</b>	<b>ig...three letter rime as in... “ig” jig, dig</b>
zip        z/ ip	zig        z/ ig
dip        d/ ip	gig        g/ ig
tip        t/ ip	jig        j/ ig
nip        n/ ip	big        b/ ig
sip        s/ ip	fig        f/ ig
lip        l/ ip	wig        w/ ig
hip        h/ ip	dig        d/ ig
Pip        P/ ip	pig        p/ ig

### Appendix 3

**Prose reading using the rimes that the children had been taught throughout the sessions. These passages were read with the children at the end of the session and then again at the beginning of the next session as a “Running Record”.**

#### **“In” and “an” onset and rime Running Record reading passage....**

In the *bin* we saw a shark`s *fin*.  
The *bin* had a steel *tin*.  
*Dan* the *man* was running to catch the *van*.  
*Nan* ran to the park.  
Can you see the *pan* next to the *fan*?

#### **“Ay” and “aw” onset and rime prose reading passage**

Today is the first *day* of *May*.  
We are going to play in the *hay*.  
*Fay* and *Gay* will *pay* for the *hay*.  
On our *way* we *saw* the cat.  
The cat`s *paw* was sore.

#### **“Ab” and “ug” onset and rime prose reading passage**

The *cab* man had a *tab* at the ponies.  
The *crab* walked into the *cab* to *nab* the *drab* bag.  
The *bug* snuggled into the *rug*.  
The *bug* can *hug*.  
We *dug* the garden and got the *bug*.  
We had a *tug* of war.  
Get the *mug* and *hug* the *bug*.

**“Ot” and “at” onset and rime prose reading passage**

Coco the *fat cat* sat in front of the fire on the *hot mat*.  
She saw a *rat* hiding under the *hat* and tried to *splat* it.  
The *rat* ran as fast as he could inside the *pot*.  
The *hot pot* was *not* a good *spot*.  
The *cat* and the *rat* sat on the *hot mat* in front of the fire.

**“Ap” and “op” onset rime prose reading passage.**

The old man with a blue *cap* had an old *mop* with a *pop-top*.  
He washed the old *mop* under a running *tap*.  
Can you *hop* to the *top* of the box?  
“Yes, I can”, said the old man with the blue *cap* on *top* of his head.

**“Ip” and “ig” onset and rime prose reading passage.**

Did you see the *big pig*?  
He was wearing a pink *wig*.  
He was doing a *jig* in the puddle.  
The *big pig* wearing a *wig* ran away.  
The *pig* pen was *big*.  
She had a bad *hip*.  
She dug deep in the dirt.  
The *big pig* was hot.  
It did a *jig* looking for a *big fig*.

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