

Action Research

Hypothesis

Explicit teaching of two letter dependable rime units improves the student's ability to read prose fluently.

Abstract

Research on students at risk for learning disability suggests that early explicit instruction in phonological and decoding skills can help these students stay on track to successful reading acquisition.

A few studies have shown that such instruction may be critical to teach in the early years of school before students develop long-term problems in learning to read.

The teaching of phonics, the relationship of sounds to letters in an alphabetic language like English, is certainly vitally important for success in learning to read competently.

The present study examines how the explicit teaching of two letter rimes can improve word reading and prose reading fluency.

Two grade one children who had previously been identified as having reading difficulties, were explicitly taught two letter rimes using word lists games and prose over a period of 10 sessions that lasted 20-25 minutes.

A series of tests were administered before the intervention and at the conclusion of the intervention in order to determine the competence level of the students.

The results from the study indicated that explicit teaching of rimes positively influences prose reading ability and fluency. After explicit teaching sessions the students were more able to break words into two letter rime segments instead of letter segments and translate this strategy into prose reading. This made their prose reading and word reading more fluent.

The implications for wider teaching methods are that teachers need to be more explicit in teaching rimes, and that rimes, as a unit may need to be taught in conjunction with letter/sound units.

Introduction

It has been shown through several studies, that phonemic awareness influences reading ability.

Phonemic awareness, or the awareness of the sound structure of words, is a metalinguistics skill important to the successful acquisition of reading and writing.

Ukrainetz, Cooney, Dyer, Kysar & Harris (2000)

It is essential for children to be able to understand the relationship of letters to each other, how they interact and build words in order to be able to read fluently and competently.

The majority of students learn the relationship of sound and structure without a great deal of difficulty but some students have difficulty learning or deciphering these links. These students fail to progress in their reading and writing ability and because they find it hard to decipher text often have low self- esteem when it comes to literacy.

Students who have poor phonemic awareness can find it difficult to segment words into onset and rime, have poor oral language skills, are poor at blending letters or have poor RAN of letters and words (Munro 2002).

The explicit teaching of phonological skills is an important point. It is widely suggested as the most suitable approach to teaching phonological skills to students at risk

One study, the Effects of Tutoring in Phonological and Early Reading skills on Students at Risk for Reading Disabilities suggests that:

...early, explicit instruction in phonological and decoding skills can help students stay on track to successful reading acquisition.

Vadasy, Jenkins & Pool 2000

The researchers also stress the point that it is critical for children in the early years of school to receive explicit instruction before they develop long- term problems in learning to read.

They also suggest that phonological instruction should influence the way we teach students to read and write.

In their study they showed that explicitly teaching phonological skills to students at risk improved the students phonological awareness and language skills.

Phonological awareness should be part of the every day classroom instruction and lessons. To some extent the ClaSS model of teaching addresses this but is often not specific enough for some children or staff do not have a full awareness of what phonological awareness is or how to effectively teach it to their students. Time is also a factor in the effective teaching of phonological awareness skills. Many teachers do not have enough time to dedicate to students who need explicit teaching of phonological skills.

Studies indicate that phonological awareness can be taught through many strategies. One such strategy is using word boxes and word sorts. The practise of using word boxes to segment a

word into its individual sound segments is widely used in Marie Clay's Reading Recovery program.

The article *Facilitating word recognition and spelling using word boxes and word sort phonic procedures* Joseph (2002), investigated using word boxes and word sorts to develop phonological awareness in students. The research found that using a focused, explicit method of teaching phonics, helped the children in their study break down words into sound segments.

Although the use of text boxes and word sorts will not be used in this study, Joseph shows that explicit teaching of phonological skills can improve word reading ability.

The strategies to be used in this study focus on the teaching of rimes.

The rime has been described by Stahl, Osborn & Lehr (1990) as, a natural sound unit. Rimes can also be called graphemic bases and phonograms. They are syllables beginning with a vowel and usually containing one or more consonants.

Stahl, Osborn & Lehr also report, that based on Marilyn Jager Adams (1990) findings, that rimes are highly consistent in how they are pronounced in different words.

These researchers reported that nearly 500 words typically found in primary grade reading material could be made from the 37 dependable rimes.

Many students, including the students participating in this study, experience difficulty in the early years of school, remembering rimes and using their knowledge of rimes to decipher words in text. They often do not RAN rimes and so have difficulty interpreting even the simplest of text. As the 37 rimes make up a high percentage of words found in early text, an inability to recognise and recall these rimes can lead to many reading and writing problems as well as poor self esteem.

It has been suggested that instruction in developing orthographic coding skills for word families may help some children develop word recognition skills, in particular once they have already developed letter-sound analysis skills. (Adams 1990)

Few early intervention programs target directly the explicit teaching of rime units, two letter rimes or larger rime units. The present study will examine the effect of teaching two letter dependable rimes on word reading ability and fluency. Two letter rimes were chosen as a starting point, so that the participants were not overwhelmed with too many segments or letters to deal with, as they presently have only a 1 letter sound load, it seemed natural to progress onto a two letter sound load next.

In this study the dependable nature of these rimes will be exploited. Students will be taught two letter dependable rimes so that they can recognise the majority of words in which those rimes appear when reading prose.

They will be taught in a variety of ways, but will always have a prose focus.

Method

DESIGN:

This study uses a case study OOXO design. The study focuses on the gain in reading words in prose that contain two letter dependable rime units for students in year one who have been experiencing prose reading difficulties.

The two participants in the study were chosen from a range of grade one students experiencing difficulties in reading.

PARTICIPANTS:

Student 1 comes from a family with a history of learning difficulties. He is also 7 years old and in a 1&2 class. He has experienced severe literacy difficulties and has been assessed by the CEO this year. Student B has been on the Reading Recovery Program for 8 weeks. He entered the program on text level 2 and at the conclusion of intervention testing was on text level 10. Copies of Student B's CLaSS testing and text level test are contained in the Appendix item 1.

Student 1 also receives some assistance during the literacy block in class. This is provided by an Integration Aide two mornings per week for 45 minutes.

When reading prose he relied on distinctive visual features and the initial letters of words, and often guessed a word or only pronounced the beginning of the word. He also has low self-esteem.

Student 2 is 7 years old and is currently in a grade 1&2. His family does not have a history of learning difficulties but there is a history of speech difficulties.

He has experienced severe speech problems since he began speaking. For the past three years he has been attending speech therapy to improve his speech. He had difficulty interpreting

words when reading and writing, as he is often unable to reproduce the sounds correctly or accurately, when reading and writing.

The Cued Articulation program undertaken in his prep year helped greatly with his speech difficulties. He can be understood by his peers and teachers, but still has very slushy speech.

Losing his two front teeth in the last month has not helped his articulation of words.

Student 2 is part of the Reading Recovery program and has been part of the program for 6 weeks. He entered the program on level 3 and at the completion of intervention testing was on level 12 text. A copy of his CLaSS testing and text assessment can be seen in the Appendix item 2.

He relied on distinctive visual features or letter -by- letter sounding out when reading prose, and so was not always successful in putting the parts of a word together or lost the beginning of the word by the time he reached the end of the word when sounding out.

MATERIALS:

Materials used in the study are as follows:

Two letter Rime reading task

Word reading task – words that contain dependable two letter rimes

Prose reading task – PM Benchmark texts

Analysis of prose reading ability – Marie Clay

Two letter rime recognition checklist

Rime Bingo cards

Word slides

Rime words written on card

Whiteboard & markers

A variety of group texts

PROCEDURE:

The students were tested using the above tests in session 1 and session 2 which were 5 school days apart, in order to gain a baseline for both students.

The tests were administered one after the other and a different unseen text was used for each observation session. The texts were at the same level each time.

Then the intervention began. The students worked together and were withdrawn from their classroom during the CLaSS literacy block between 9 and 11 am each morning. Each session ran for approximately 20 –25 minutes.

At each session, two dependable two letter rimes were focused on. 2 new rimes were introduced every two days. Sessions consisted of revision of the previous sessions rimes and either work on those rimes or the introduction of the new rime units.

Then the students read a familiar text that contained the rime units that were being focused on. The students could read together, independently or follow as the teacher read.

The students then focused on rime units by using word slides, playing rime bingo, brainstorming rime unit words or searching for and counting rime units contained within texts. Copies of the lesson resources used can be found in the appendix, Items 3,4,and 5. Students then read prose and broke words into their rime units. Words written on the whiteboard were also broken into rime units.

An outline of the lesson format can be found in the Appendix, Item 6.

The students were encouraged to practice rime units at home and took home word slides to practice with. As the students also participated in Reading Recovery sessions, the rime units being focused on in the instructional sessions were also concentrated on when reading text. At the completion of ten sessions the students were tested again using the same procedure as at the beginning of the testing phase. Again text at the appropriate level was used and the text was unseen.

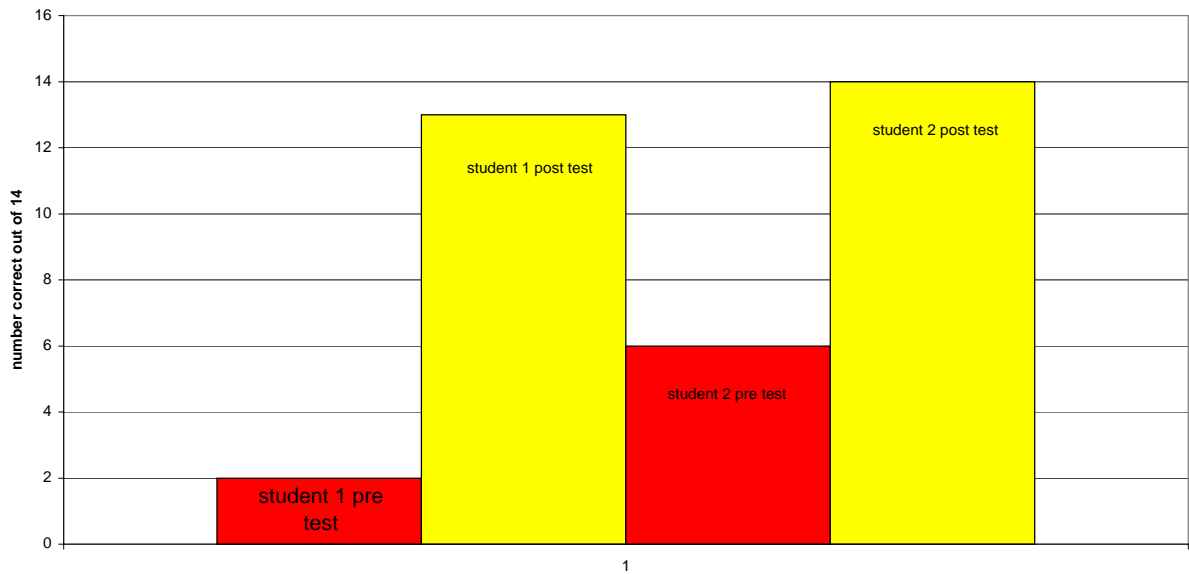
To administer the tests the students were withdrawn from their classroom and were given all tests in one session. The text analysis was administered last. Words that contained two letter rimes were highlighted on the running record and shown to the student to show how learning rimes and units of words impacted on their reading ability.

Results

The extent to which teaching the phonological structure of two words that contain letter rimes improves word reading accuracy and fluency was examined by, examining reading accuracy and strategies used by the reader, before and after instruction.

The pre and post recognition of two letter dependable rimes are shown in graph 1.

Two letter rime recognition

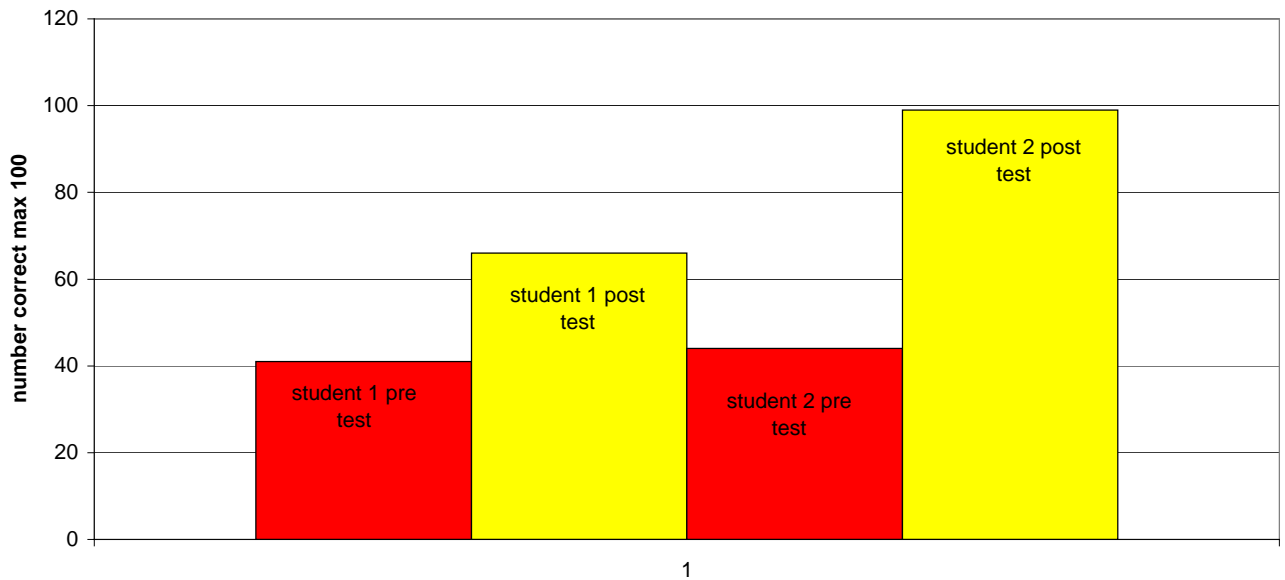


As graph one illustrates, student 1 had a very poor knowledge of the two letter dependable rimes before the intervention. This student was only able to recognise the **at** and **it** rime and sounded the other rimes out by each of their letter sounds. Student two was able to recognise 6 of the rimes prior to intervention but did not have a go at some of the rimes (**aw**, **ay**, **th**) or sounded the rimes out letter by letter.

In the post- test, both students improved their RAN of two letter rimes. Student 1 improved RAN of two letter rimes by 78% and student 2 improved RAN of two letter rimes by 58%. A great improvement by student 1.

The pre and post recognition of two letter rime words is shown in graph 2.

Recognition of words that contain two letter rimes



The data presented in graph 2 shows the pre and post results of two letter rime word reading ability. To test this the students were given a table that contained the 11 two letter dependable rimes and three two letter blends. The blends were included as they are common blends often used in conjunction with rimes and are expected to be known by the end of the prep year of school.

The students were asked to read the rimes aloud and how they broke up the rimes, if they passed on a rime or gave an incorrect response we noted.

Again both students improved their score, but the students achieved quite different results. Student 1 in the initial test knew only 41 of 100 words presented. This student was unsure of the longer words and made no attempt to try the longer words. Student 1 attempted 70 of the 100 words presented. Student 1 improved their score by 22% reading 63 of the 70 words he was presented with correctly.

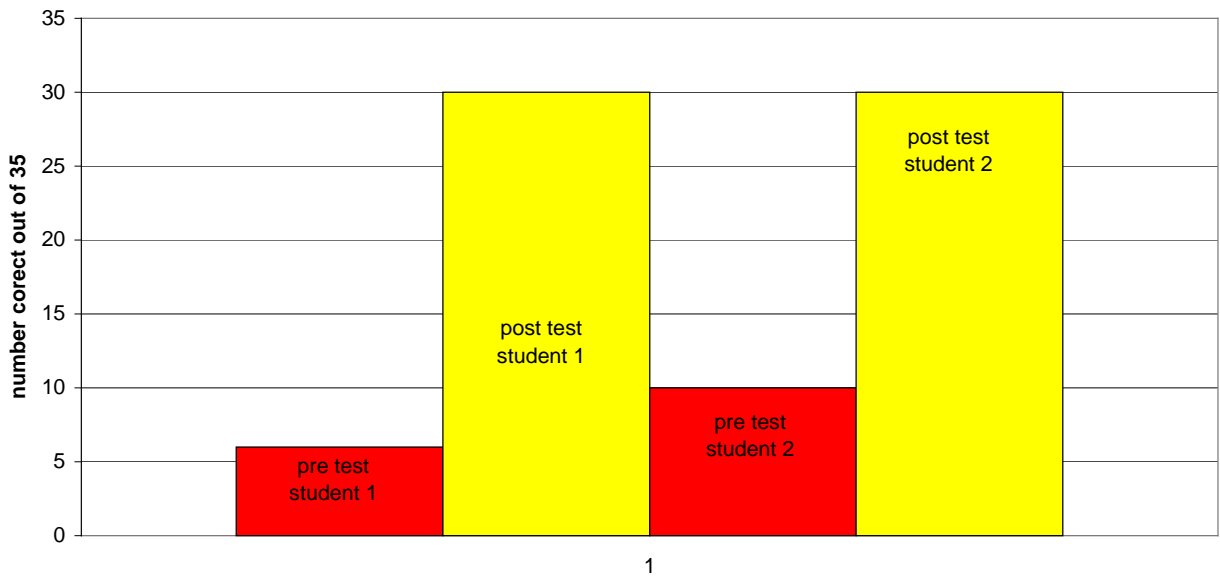
Student 2 made considerable progress. In the pre test, Student 2 achieved a score of 42 out of 100 words. This student was more willing to attempt words than student 1 and attempted the majority of the 100 words presented. When deciphering words on the word list, he relied on letter by letter segmenting and distinctive visual features.

In the post test student 2 achieved a score of 99 out of 100. This is an improvement of 57%.

The one error that Student 2 made, he confused a p and b. A common error.

The recognition of two letter rimes in sentences is contained in graph 3.

Reading of rime words in prose



In this test each of the students read 11 rime sentences which overall contained 35 rime units within words in the sentence. Only the rime words were scored as the intervention was only concerned with words that contained two letter rime segments.

As shown in graph 3, both students improved their ability to read rime units contained in sentences.

Student 1 improved the most, going from 17% accuracy to 85% accuracy. An increase of 68%. Student 2 also improved, from a score of 33% accuracy to 85% accuracy. An increase of 52%.

The pre and post results of prose reading ability when that prose contains two letter rimes, is shown in table 1.

| Student | Pre test level | Pre test accuracy | Post test level | Post test accuracy | Pre test self corrections | Post test self corrections | Pre test number of rime words | Post test number of rime words |
|-----------|----------------|-------------------|-----------------|--------------------|---------------------------|----------------------------|-------------------------------|--------------------------------|
| Student 1 | 5 | 83% | 10 | 93% | 1:0 | 1:8 | 21 | 22 |
| Student 2 | 5 | 87.5% | 12 | 91% | 1:0 | 1:6 | 21 | 25 |

Both participants were given text at an instructional/hard level as established through reading recovery sessions. Text given to the students was levelled through Reading Recovery.

Both students prior to intervention were on level 5 text. Both students did not self correct at all when reading during the pre tests.

Student 1 at the conclusion of the intervention read a level 10 text with an accuracy rate of 93%. This is an increase of 5 text levels. The student read all rime words contained within the text accurately and when breaking up rime words did not resort to letter –by –letter

segmenting, but broke a word into its rime segments, eg **s-aw, s-ay**. This strategy was also used on other words which did not contain rime segments. In the post test Student 1 self corrected at a ratio of 1:6. The overall fluency was improved as the student did not have to work out each word and when using a strategy to decipher a word, did not take as long because they were not segmenting into letters but rimes.

Student 2 progressed further than student 1 when reading prose. Student 2 started at text level 5 prior to intervention, and at the conclusion of intervention was reading text level 12 at an instructional level. This is an increase of 7 reading recovery levels. Student 2 did not self correct during the pre tests but had a self correction rate of 1:6 in the post intervention prose reading test. During the prose pre- test, student 2 broke words into letter segments in order to decipher a word. During the post prose test, student 2 broke words into rime segments if they were experiencing difficulty. As with student 1, student 2 also carried this strategy to other words that did not contain the rimes taught in the intervention.

Discussion

Instruction in developing orthographic coding skills for word families may help some children develop word recognition skills, in particular once they have already developed letter-sound analysis skills. Vadasy, Joseph, Jenkins & Pool 2000

This study explored how explicitly teaching students with prose reading difficulties, two letter dependable rimes would affect the prose reading ability and fluency of those students.

The results of the study show that the explicit teaching of two letter rimes to the chosen students did improve their prose reading ability and fluency.

Both students that took part in the study, made considerable gains in word and prose reading ability and fluency, and used the strategies of breaking words into onsets and rimes when reading prose and word lists.

As illustrated in the post- test prose reading, both students also transferred this strategy to words in text that did not contain the rimes or onsets that were explicitly taught during the intervention. This was not evident in their pre tests.

As stated by Vadasy, Jenkins & Pool 2000

...early, explicit instruction in phonological and decoding skills can help students stay on track to successful reading acquisition.

The intervention has not cured all the problems of the students, but has given them a good start and shows that explicit instruction in a small group situation did work for these students.

Looking at the results of the project, it could be suggested that further teaching of 3 and 4

letter onsets and rimes to these students will further increase their word and prose reading ability.

The study also provides food for thought about how we teach phonemic awareness in the classroom especially in the crucial early years of school.

We have seen through research and general school observations, that some students do not learn phonemic awareness as easily or the same way as their peers. How can we cater to these students in a normal classroom situation? Is it possible for all teachers to teach these students in the classroom without having to spend extra time planning and preparing.

An explicit program could also benefit a wider range of students. Not necessarily an explicit onset and rime program but over a wide range of phonological skills needed for proficient reading and writing. For example, explicit instruction in the use of analogy when reading could be given to students who have difficulty in that area.

I believe the key to the success of this type of intervention is that the lessons are explicit in their focus and method of instruction. The children knew what the aim was and what needed to be practised. Verbalising this also made it easier for the children to retain the rimes.

I believe that it is possible to provide explicit teaching and learning activities to students at risk in the classroom. As shown by the present study, an intervention does not need to run for a long time. The factor that is important for these students is, how explicit the instruction is. This is a crucial point that is emphasised in current research in phonological awareness such as Vadasy et al 2000.

References/Bibliography

Adams M.J. (1990) *Beginning to Read*, MIT Press, Cambridge, MA.

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

Dwyer Edward J, & Ralston E. (Nov 1999) *Teaching Students to use Phonics Effectively with Emphasis on Rimes and Onsets*
Department of Curriculum and Instruction, East Tennessee State University, Johnson City, ET

Joseph Laurice M. (2002) Facilitating word recognition and spelling using word boxes and word sort phonic procedures.
School Psychology Review; Bethesda: Volume 31 issue 1

Munro J. (2002) *Teaching notes post graduate intervention course*. Melbourne University

Neuman Susan B. Copple C. & Bredekamp S. (2001) Letters and words – the building blocks of print. *Scholoastic Early Childhood Today*; New York Oct 2001 Volume 16 Issue 2

Ukrainetz T.A, Cooney M.H, Dyer S.K, Kysar A. J & Harris T.J. (2000) An investigation into teaching phonemic awareness through shared reading and writing
Early Childhood Research Quarterl,y Volume 15; Issue 3, Autumn 2000, pg 331-355

Vadasy P.F, Joseph R, Jenkins & Pool K (2000) Effects of Tutoring in Phonological and Early Reading Skills on Students at Risk for Reading Disabilities.
Journal of Leanring Disabilities; Nov 2000, Volume 33, issue 6

Two letter dependable rime words checklist

| RIME UNIT | 3 LETTER WORDS | 4 OR MORE LETTER WORDS |
|-----------|---|---|
| In | bin, tin, win, pin, sin, din | Thin, sing, ring, pins, tins, king, begin, |
| Op | Hop, bop, pop, top, lop, cop, mop, | Shop, crop, chop, stop, drop, flop, slop |
| A w | Saw, raw, paw, law, | Claw, lawn |
| Ap | Gap, cap, lap, map, nap, rap, sap, tap, zap | Flap, clap, happy chap, slap trap, wrap |
| At | Cat, fat, sat, mat, bat, hat, pat, | Chat, flat, that, spat, brat |
| Ay | Day, way, say, may, pay bay, gay, hay | Play, stay, clay, away, slay, today |
| It | Sit, hit, pit, bit, kit, lit, nit | Little, spit, grit, |
| Ip | Tip, sip, lip, kip, dip, pip, rip | Whip, ship, clip, flip, chip, grip, slip, trip |
| Ot | Hot, not, lot, pot, cot, rot, jot, dot | Plot, shot, spot, slot, trot |
| An | Fan, man, can, ban, tan, pan, ran, | Clan, plan, fran, sand, panda, brand, |
| Ug | Hug, mug, pug, tug, rug, bug | Plug, slug, chug, |

TWO LETTER DEPENDABLE RIME SENTENCES

The fat cat sat on the mat.

I would like to play with you today.
No go away.

I you hop to the shop with my pop.

I put the thin tin in the bin.

Kip has a pip on his lip.

The little nit bit the pit bull.

Grug had a mug on the rug.

I can clap and tap when I have a nap.

I have got a hot bottle.

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