Explicit teaching of paraphrasing and synonyms will improve comprehension skills of students in years 2/3

### **ABSTRACT**

Reading comprehension is a problem for many primary school students from Years 2 to 6. This seems to be the case even if the students have had a reading intervention program such as Reading Recovery. Reading is a major focus in schools and teachers make a point of explicitly teaching orthographic and phonological strategies for decoding in the early years. However comprehension strategies such as visualizing, summarizing and predicting seem to be lacking. Students do not use these strategies unless they have been explicitly taught them and they see the value in using these strategies to make sense of texts.

Teaching decoding through orthographic and phonological awareness is important and fundamental to successful reading, however Williams notes that this assumes that when students become proficient in decoding skills, they automatically become proficient in comprehension skills. (Williams cited in Hagaman and Reid). Research shows that this is not the case. Students need to be taught techniques and steps on how to make sense of text. Strategies such as visualizing, predicting, summarizing and paraphrasing need to be explicitly taught.

Munro's multiple levels of text processing (MLOTP) model suggests that students learn on a number of levels: word, sentence, conceptual, topic and dispositional. Munro (2008). It appears that students who have difficulty with comprehension have not acquired the needed strategies at the sentence and topic levels. They have not been explicitly taught the strategies to help them comprehend and make sense of information. This is because teachers assume that if students are good at decoding they also understand the text. Obviously this is not the case otherwise children reading correctly could easily retell the information given in a text.

The hypothesis of this study is that the explicit teaching of paraphrasing and synonyms to Year 2/3 students will improve comprehension. The study will endeavor to develop students' understanding of synonyms to extend vocabulary and consequently to be able to use their own words to recall facts in the text and finally to paraphrase.

The present study compares two pairs of students: control and intervention. The intervention pair is explicitly taught the use of synonyms and paraphrasing to improve comprehension skills. They are exposed to ten sessions over two weeks. The teacher uses the Collins Model to design the focus sessions, coaching, scaffolding and eventually fading support. The results support the hypothesis that explicit teaching of synonyms and paraphrasing to students improves their comprehension level.

### Introduction

Many primary school students learn to read and decode texts in the early years however it is later found that they have difficulty understanding the text. Their comprehension skills don't always match their reading level. They are not able to retell or answer questions correctly. This has an impact on their learning as they move through school because they are not able to understand information thus build knowledge in other subjects. Research confirms that being proficient in decoding does not necessarily follow that students are skilled in comprehension. (Hagaman & Reid)

The Year 2/3 teachers at this particular school have been concerned that students do not understand texts even if they can decode correctly. They may read a text that is age appropriate but when asked to retell or answer questions they do not demonstrate a good understanding of the text. If we look at Munro's MLOTP model we see that students are confidently using their word knowledge but are not as self-confident when it comes to the sentence level. They do not know how to use the strategies necessary to help them with comprehension, such as paraphrasing.

Once students are decoding correctly and "reading" it is assumed that they also understand what they are reading. Explicit teaching of strategies at a sentence level such as rereading, visualizing, paraphrasing to name a few will help students gain proficiency in comprehension.

Research suggests that in the first three years of a student's schooling they are explicitly taught reading strategies needed to decode texts however teachers often neglect to explicitly teach students to think about what they are reading. Hagaman (2008) states that just because a student is proficient in decoding skills it does not mean that they have comprehension skills to match. Paraphrasing is not as complicated as summarizing or predicting. Paraphrasing encourages students to make connections with what they already know about a topic and use words that are part of their vocabulary. (Kletzien). Consequently paraphrasing can be taught at the junior levels of primary school.

Explicitly teaching students how to use synonyms and paraphrase will increase their understanding of the text. Research suggests that students who are explicitly taught comprehension strategies such as paraphrasing will gain a greater understanding of the text. (Fisk and Hurst)

This present investigation aims to confirm that the explicit teaching of paraphrasing and synonyms will improve comprehension skills of students in years 2/3.

This study compares two groups of students; a control group and an intervention group. The intervention group was explicitly taught how to use synonyms and paraphrasing. The control group continued normal literacy classes with their classroom teacher.

### **METHOD**

#### **Design**

This study uses two students as a control group and two students in the intervention group. Both groups of students are from the same class. The two students in the intervention group are taken out of class for ten 30minute sessions and are explicitly taught how to use synonyms and paraphrasing to gain meaning in text. The format of the ten lessons is adapted from Munro's Comprehension Intervention Strategies: Paraphrasing. The teacher uses the Collins Model to coach, scaffold and fade support so that students learn to use the strategy independently.

Both groups of students are assessed prior to the ten intervention sessions and then again at the end of all the sessions. The tests used were Munro's Paraphrasing and synonyms tests and the Neale Analysis test for accuracy and comprehension. The teacher also gives the focus group an evaluation sheet to complete on how they feel about paraphrasing. Students are asked to complete this at the end of the fifth and tenth sessions. (Please see lesson plans in Appendix 1).

### **Participants**

The participants are four students in the same class – year 2/3 composite. Three of the students are in their third year of schooling and one in the fourth year. Their ages range from 7-8 years. Students are identified by the classroom teacher as students who could benefit from additional assistance in developing reading and comprehension strategies. Students **YY** in the control group and **AA** in the teaching group have also taken part in the Reading Recovery

program in their second year of schooling. The two students in the control group were at text level 26 in the February testing. The two students in the intervention group were at text level 13 and 10 respectively in February. However student BB in the intervention group progressed to level 20 in the October testing. (See tables 1a and 1b). The February and October tests are routine Literacy tests that the classroom teacher administers each year. The two students in the Intervention group were withdrawn from the classroom during their Literacy block in the mornings. They each attended nine out of the ten sessions, both students were absent for one of the sessions at different times. Each of the ten sessions was approximately of 30minutes duration.

#### **CONTROL GROUP**

Name	Age in months	Gender	Years of Schooling	Earlier Intevention R.R.	Text Level February	Text Level Oct
XX	102	М	3		26	28
YY	102	F	4	R.R.	26	28

Table 1a

#### INTERVENTION GROUP

Name	Age in	Gender	Years of	Earlier	Text	Text
	months		Schooling	Intevention	Level	Level
				R.R.	February	Oct
AA	97	M	3	R.R.	13	15
ВВ	94	F	3		10	20

Table 1b

### **Materials:**

The texts used for the ten lessons were a variety of big books and guided reading books ranging from levels 15 to 17:

- 1. The Lion and the Mouse Aesop fable retold by Mary O'Toole (BIG BOOK)
- 2. The Runaway Pizza by Brenda Parkes (BIG BOOK)
- 3. The Youngest Giraffe by Elizabeth Russell-Arnott
- 4. Last One Picked by Jenny Feely

A thesaurus was used when teaching synonyms.

Synonym Test (Munro, 2009) to assess ability to generate synonyms.

Paraphrasing Test (Munro 2009) to assess ability to paraphrase.

Intervention Sessions in Paraphrasing and synonyms adapted from Munro's

Intervention Strategies: Paraphrasing.

Neale Analysis of Reading and Comprehension 3<sup>rd</sup> Edition to assess reading accuracy and comprehension.

Bookmark with paraphrasing steps. (See lesson plans in Appendix 1)

Paraphrasing Student Evaluation sheet (See lesson plans in Appendix 1)

#### **Procedure:**

The intervention sessions were administered to two students. The procedure was adapted from Munro's Literacy Intervention Strategies on Paraphrasing. The teacher designed the lessons using the Collins Model: modelling, coaching, scaffolding and eventually fading. The teacher gave the students the opportunity to watch and listen to the modeling of paraphrasing, to articulate their understanding and eventually to use the strategy independently.

The aim of the intervention was to explicitly teach synonyms and paraphrasing strategies at a sentence level in order to improve comprehension competency.

The intervention was designed for small group instruction. The students were withdrawn from their classroom during the literacy block for ten 30minute sessions.

Assessment of both control and intervention groups took place at the commencement and the conclusion of the ten sessions. Students in the control group continued to participate in the regular classroom program.

All of the ten lessons had an oral component where the students listened to the story and listened to the teacher giving examples of paraphrasing. The students were then encouraged to find synonyms and paraphrase orally before being asked to write.

After the first session where the teacher introduces the strategy, the format for the rest of the sessions was as follows:

- 1: Review strategy from previous session.
- 2. Teacher models and cues student activity.
- 3. Students pick out synonyms and paraphrase orally.
- 4. Students paraphrase written.
- 5. Teacher reviews action.
- 6. Questions.

RESULTS

# **Control Group – Pre Testing**

Student	Age in months	Gender 0=Male 1= Female	Paraphrase Test PRE /32	Synony ms Test PRE /120	Neale Analysis accuracy raw score- PRE	Neale Accuracy Percentile Rank	Neale Comprehen sion – PRE	Neale Comprehens ion Percentile Rank
XX	102	0	14	32	36	68	10	53
YY	102	1	9	48	43	52	14	46

Table 2a

# Control Group – Post Testing

Student	Age in months	Gender 0=Male 1= Female	Paraphrase test POST /32	Synonym s - POST /120	Neale accuracy - POST	Neale Accuracy Percentile Rank	Neale Comprehe nsion- POST	Neale Comprehen sion Percentile Rank
XX	102	0	15	29	34	65	13	74
YY	102	1	10	45	44	54	15	52

Table 2b

### **Intervention Group – Pre Testing**

Student	Age in months	Gender 0=Male 1= Female	Paraphrase Test PRE /32	Synony ms Test PRE /120	Neale Analysis accuracy raw score- PRE	Neale Accuracy Percentile Rank	Neale Comprehen sion – PRE	Neale Comprehens ion Percentile Rank
AA	97	1	15	20	15	26	3	11
ВВ	94	0	10	27	27	55	5	31

Table 2c

## **Intervention Group – Post Testing**

Student	Age in months	Gender 0=Male 1= Female	Paraphrase test POST /32	Synonym s - POST /120	Neale accuracy - POST	Neale Accuracy Percentile Rank	Neale Comprehe nsion- POST	Neale Comprehen sion Percentile Rank
AA	97	1	23	65	17	35	8	40
ВВ	94	0	22	56	34	65	13	74

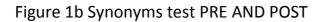
Table 2d

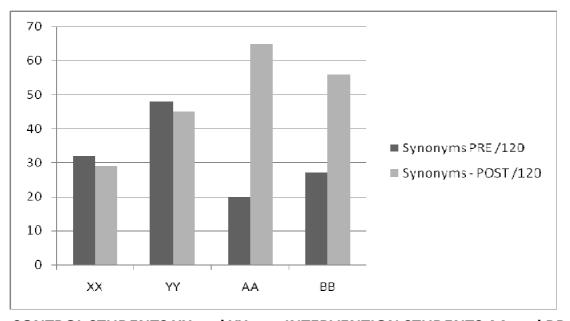
Data analyzed in the tables above (2a, 2b, 2c, 2d) indicate an improved performance with both students in the Intervention group in the areas of synonyms, paraphrasing and Neale Reading Accuracy and Comprehension. Both students in the intervention group showed a big increase in the synonyms test in particular. The students in the control group showed very little improvement in the number of comprehension questions answered correctly and in the ability to paraphrase. They actually showed a slight decrease in the synonyms test.

25
20
15
10
Para - PRE /32
Para-POST/32

XX
YY
AA
BB

Figure 1a Paraphrasing test PRE and POST





**CONTROL STUDENTS XX and YY** 

**INTERVENTION STUDENTS AA and BB** 

In figure 1a students AA and BB in the intervention group show a bigger increase in their ability to paraphrase than students XX and YY in the control group.

In figure 1b the two students AA and BB in the Intervention group show a big increase in the synonyms test compared to students XX and YY in the control group who have actually gone down slightly.

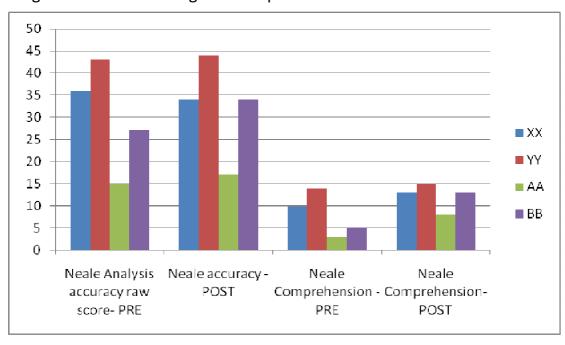


Figure 2 Neale Reading and Comprehension PRE and POST

In figure 2 above student XX shows a slight decrease in reading accuracy and a slight increase in comprehension. Student YY shows very little change in both reading accuracy and comprehension. However the two students in the intervention group AA and BB who were explicitly taught paraphrasing have made a greater change for the better.

PERCENTILE RANK OF CONTROL GROUP XX and YY AND INTERVENTION GROUP AA and BB – PRE AND POST

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Figure 3 Neale Analysis Percentile Rank graphs

# **Intervention Group**:

Student **AA** showed a percentile growth of **9** in reading accuracy and **29** in comprehension. Student **BB** showed a percentile growth of **10** in reading accuracy and **43** in comprehension.

## **Control Group:**

Student **XX** showed a decrease in percentile growth in reading accuracy of **3** and a growth of **21** in comprehension.

Student YY showed a slight growth of 2 in reading accuracy and 6 in comprehension.

#### DISCUSSION

The results suggest that explicitly teaching paraphrasing and the use of synonyms is a successful strategy to help students with comprehension. Both students in the intervention group showed an improvement in comprehension, paraphrasing and in the use of synonyms. The data shows the greatest gains in the use of synonyms. In comparison the students in the control group did not show much improvement.

The students in the intervention group showed a greater percentile growth in the Neale reading accuracy and comprehension compared to the students in the control group. Student AA showed a growth of 9 in reading accuracy and 29 in comprehension. Student BB showed a percentile growth of 10 in reading accuracy and 43 in comprehension. On the other hand the control student XX showed a decrease in percentile growth in reading accuracy of 3 and a growth of 21 in comprehension and Student YY showed a slight growth of 2 in reading accuracy and 6 in comprehension. This data confirms that explicitly teaching synonyms and paraphrasing to students does increase their comprehension levels.

At the end of each teaching session, students in the Intervention group articulated what paraphrasing is and how it can help them with comprehension. They went through the three steps covered in the lessons and then put on a bookmark i.e. **Step 1: Read the sentence. Step 2: Change as many words as you can while keeping the meaning the same. Step 3: Say the sentence again in your own words.** Although the students found it challenging at the beginning they became more confident with each lesson, especially paraphrasing orally. These students said that they were starting to use a thesaurus sometimes in class to help them think of words with similar meanings. This shows that teaching children strategies for reading is beneficial to them in other areas of schooling. The present investigation and research supports that the learning of strategies are techniques and routines that students can learn to use to complete tasks independently. (Katims & Harris 1997). As well as being taught these techniques, students need to be able to articulate the steps and make them part of their routine for learning.

Research has found that explicitly teaching students strategies in comprehension helps them overcome problems of understanding the text and gaining knowledge about the text. (Graham & Bellert; Pressley & McCormick, cited in Hagaman & Reid). In this study students showed improvement in comprehension and were able to articulate the strategy to use when paraphrasing. This project supports the hypothesis that teaching paraphrasing and synonyms

will increase comprehension skills. The students were more confident in the use of synonyms and with more practice would have been able to transfer this knowledge more successfully when paraphrasing. The students were able to articulate the steps to take when paraphrasing; however they still found it difficult to work independently on the written tasks. Orally the students performed confidently articulating and following each step. Student AA in particular had difficulty reading the text accurately and consequently found the writing tasks of paraphrasing difficult as well. The evaluation sheets given at the end of sessions 5 and 10 show that student AA has self-esteem issues when thinking of himself as a competent reader. He gave himself the same score in the middle of the sessions as at the end. (See table 3a and 3b below). This student would benefit from positive self-talk and further instruction in the word level.

### Paraphrasing SCALE end of lesson 5

	bad	unsure	ОК	good	great
AA					
ВВ					

Table 3a

# Paraphrasing SCALE end of lesson 10

	bad	unsure	ОК	good	great
AA					
ВВ					

Table 3b

Student BB showed better results in the post testing and was more confident about paraphrasing both orally and written. The above evaluations also show that she feels "great" about using paraphrasing. This particular student was a more confident decoder to start off with.

There are a number of factors to be considered for future research. Students chosen need to be good decoders so that reading the text does not slow down the aim of the lessons which is to paraphrase each sentence read. If the students cannot decode confidently and successfully as with student AA, the paraphrasing could only be done successfully on an oral level. This particular student needed more coaching and scaffolding before being able to independently feel confident in paraphrasing successfully. Dewitz suggests that the success of strategy teaching depends on whether the students are ready. The strategy taught needs to match the student need. (Dewitz cited in Munro). Marie Clay the founder of the Reading Recovery program also emphasizes this finding, she states that teachers need to teach at the level where the student is at, challenging the student just enough so that success is attainable for the student. (Marie Clay).

This project was conducted with only two students; however the results would have been more significant if a larger group was used. Being in a larger group would have given the students the opportunity to listen to a larger variety of alternative attempts at paraphrasing. The teacher could also jumble sentences and paraphrases for the students to match. The students would then hear different ways of saying a sentence and could choose the closest to the original sentence. (Munro). Furthermore the students would benefit from a higher number of teaching sessions.

According to the data this investigation proves that teaching synonyms and paraphrasing to students will improve their comprehension. Explicitly teaching students strategies in reading and comprehension is a major issue. Students need to learn the strategies and articulate the steps before they can successfully use them. Teachers need to focus on teaching strategies as well as knowledge in order to have successful readers who feel good about themselves.

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### **APPENDIX 1**

### LESSON PLANS ON PARAPHRASING AND SYNONYMS

### **SESSION 1:**

**Introduce the strategy:** I am going to teach you something that you can do that will help you to remember what you read. It is called **paraphrasing**.

This is what you do. After you have read a sentence, you say it in your own way/your own words. You try and change as many words as you can.

Let's try it!

# Teacher models paraphrasing and cues student activity:

Look at this sentence. Have sentence already written on whiteboard or butcher's paper. Write the teacher paraphrase after saying it. Then write the students' try.

I will read it and I want you to read it to yourself with me. Then I will try saying it another way. Then I will ask you to try.

Sentence read	Teacher paraphrases	Students paraphrase
A monster wanted to find some food to eat.	This monster went looking for something to eat.	
A big monster met a little sick cat on the road	This enormous monster came across a tiny ill kitten on the path.	

Let's try another sentence together. Let's read it and then try to say it another way. Read second sentence.

**Teacher reviews the action:** Let us look at what we did. We read the sentence and then said it in other ways. See how it helped you to understand what the text said.

Do you have any questions?

# Teacher introduces synonyms.

Did you notice that we changed some words to words that had the same meaning like:  $big \rightarrow enormous$ .

What other words did we change?

Teacher lists on the board. little sick road

These words are called synonyms.

Do you have any questions?

Teacher reviews the action again before finishing off.

Let us look again at what we did. We read the sentence and then we thought of other ways to say the sentence. We changed some words like *big to enormous* and *little to tiny.* These words are called synonyms.

### **SESSION 2:**

# **Review previous lesson:**

In the last lesson we looked at words that had the same meaning – do you remember what they are called? Synonyms.

Teacher models e.g. big, enormous, gigantic, large.

Ask students for synonyms for the following words:

hot, - warm, boiling, burning

little, - small, tiny, minute

loud, - noisy, deafening, shrill

home, - house, address, dwelling

laugh, - chuckle, giggle, snicker

trap, - catch, lock in, ambush

**frightened**, - scared, terrified, upset

begin, - start, commence, activate

**sharp** – pointy, spiky, prickly

What can we use to find out more words that have the same meaning?

Introduce the <u>Thesaur</u>us.

Teacher models looking up the word **hot** in thesaurus, then students practice looking up some/all of the other words.

**Matching game.** Let's see how quickly you can match these synonyms.

**hot** warm

**little** small

**loud** noisy

**home** house

laugh giggle

**trap** catch

**frightened** scared

**begin** start

**sharp** pointy

**Teacher reviews strategy:** Let's look at what we did. We tried to find words that have the same meaning. These words are called synonyms. **Do you have any questions?** 

### **SESSION 3:**

**Review the strategies from Sessions 1 & 2:** In the last two lessons we learnt things you can do to help you understand the story better. We learnt how to paraphrase: saying something in your own words. We learnt that synonyms are words that have the same meaning.

Let's revise what we do when we are paraphrasing.

- 1. We read the sentence.
- 2. We change as many words as we can while keeping the same meaning.
- 3. We reread the sentence in our own words.

**Teacher models and cues student activity:** Let's look at the sentences about the monster that we paraphrased in Lesson 1. Teacher and student read the sentences and look at teacher paraphrase and student paraphrase.

We are going to paraphrase the story of "The Lion and the Mouse".

I will read the first two sentences and then I will try saying it another way.

Then I will ask you to try.

I will write down what I say and what you say.

Sentence read	Teacher paraphrases	Students paraphrase
One hot day the lion was	One scorching day the	
asleep in his cave.	lion was snoring in his	
	home.	
A little mouse ran over	A minute mouse	
his paw and up onto his	scampered over his foot	
nose.	and up on his nose.	
The lion woke up with a	The lion awakened and	
roar.	yelled.	
He grabbed the mouse	He snatched the mouse	
with his paw.	with his hand.	
He was just about to eat	He was going to have the	
the mouse when she	mouse for lunch but she	
cried, "Please don't eat	screamed "For goodness	
me"	sake let me go.	
One day I might be able	Some time I could offer	
to help you.	you help.	
The Lion laughed but he		
let the little mouse go.		
A few days later, the lion		
was out hunting in the		
jungle. He got caught in		
a trap made of rope.		

**Teacher reviews the action:** Let us look at what we did here.

First: We read each sentence.

Then: We changed as many words as we could without changing the meaning/while keeping the meaning the same.

And lastly: We said the sentence again in our own words

Do you have any questions?

### **SESSIONS 4 & 5**

**Review the strategy:** We are learning things you can do to help you remember and understand the story better. There are lots of things you can do: you can look at the pictures or make a picture in your head. Today we are going to practice another thing you can do that will help you remember and understand what you have read. It is called **paraphrasing.** 

What are the three steps that you can follow when paraphrasing – let's revise.

Students reflect on previous knowledge and articulate strategy.

# PARAPHRASING: 1.Read the sentence.

- 2. Change as many words as you can while keeping the meaning the same.
  - 3. say the sentence again in your own words.

Give students a bookmark with the steps for paraphrasing.

### <u>PARAPHRASING</u>

- 1. Read the sentence.
- 2. Change as many
  words as you can
  while keeping the
  meaning the same.
- 3. Say the sentence again in your own

**Teacher models paraphrasing and cues student activity:** Let's look at the sentences we paraphrased in "The Lion and The Mouse" to remind as how to paraphrase. Read each page together. Teacher models the first page then students take it in turn to paraphrase.

Up to now teacher has **modelled**, **coached** and **scaffolded**, now teacher is slowly **fading** with less cues to assist students. (Collins Model)

Students are now given the opportunity to take responsibility by transferring the action of paraphrasing into practice: Teacher reads a text called "The Runaway Pizza". Teacher models first page/sentence.

Students work together (a pair) to complete paraphrasing activity then share.

**Students review what they did:** Look at steps on the bookmark.

At the end of Session 5: Discuss how students felt about paraphrasing up to this point. Give students an evaluation sheet. Remind students that when you learn anything new it is difficult and first but it gets easier the more you practice it.

# **Evaluation of Paraphrasing (student sheet had faces)**

How do I feel about Paraphrasing today? (Please colour)									
1.	2.	3.	4.	5.					
bad	unsure	OK	good	great					
bad	unsure	OK	good	great					

### **SESSIONS 6 & 7 & 8:**

**Review the strategy** 

Revise the steps for paraphrasing

**New Text: The Youngest Giraffe:** Teacher reads text.

**Teacher models paraphrasing and cues student activity:** Teacher paraphrases first page then children continue to paraphrase on their own.

Share at the end of each lesson and Review.

### **SESSIONS 9 & 10:**

Review the strategy

Revise the steps for paraphrasing

New Text: The Last One Picked: Teacher reads text.

**Teacher models paraphrasing and cues student activity:** Teacher paraphrases first page then children continue to paraphrase on their own.

At the end of Session 10: Discuss how students felt about paraphrasing up to this point. Give students evaluation sheet.

### **TEXTS USED DURING LESSONS:**

- 1. The Lion and the Mouse Aesop fable retold by Mary O'Toole (BIG BOOK)
- 2. The Runaway Pizza by Brenda Parkes (BIG BOOK)
- 3. The Youngest Giraffe by Elizabeth Russell-Arnott
- 4. Last One Picked by Jenny Feely

All text levels ranged from 15 – 16

Lessons adapted from Literacy Intervention Strategies John Munro 2008