HYPOTHESIS: Teaching year 3 students, who are accurate decoders but have difficulties in comprehension, to use the strategy of 'Repeated Reading', will improve their fluency and comprehension.


#### Abstract

Many students in the middle to late primary level of schooling are experiencing difficulties in comprehension even though they are able to decode text accurately. They are often able to read age appropriate text, with high levels of accuracy, and sometimes even a good rate of fluency but they are unable to demonstrate adequate understanding of what they have read, either orally and/or written.


The hypothesis of this investigation is that Year Three students who are able to decode text accurately but are experiencing difficulties in comprehension, to use fluency, and repeated reading as a means to increase their reading comprehension. Research on the development of comprehension skills suggests that by using the repeated reading strategy while and after reading a text, can assist students to recall facts they have read with greater prosody. In the study the students will be given the opportunity to have repeated readings, and the message that it is beneficial to do so and they will be cued to use a comprehension framework to develop their comprehension.

The study follows the progress of four students using a Time Series Design, and their results indicate support for the hypothesis as the comprehension levels of all students in the intervention group showed some improvement in at least one area of testing. Monitoring of the 'Cued Retelling' responses, during the teaching sessions, along with
the post-test results of students after repeated reading sessions showed significant increases in comprehension of all the students in the intervention group.

The results suggest that using the strategy of repeated reading to develop fluency and cueing the students into comprehension is a successful teaching approach and a powerful tool to assist students to improve their comprehension ability.

## Introduction

Many students in late junior, middle and late primary level who are good decoders of text often experience difficulties in comprehending what they are reading and what they have read. They are even able to read a text at an age appropriate level with $90 \%$ plus accuracy in word recognition. They may have secure automaticity and fluency, however, when they are asked to retell or answer questions they are not able to show understanding of the text. As Moskal \& Blackowicz (2006), Raskinski \& Lems(2006), state "there are readers who comprehend poorly despite apparently fluent reading and high rate/accuracy scores." (p.396) Imagine the impact then on the struggling reader who also experiences difficulties with comprehension, compounded with an inability to decode age appropriate text accurately, and has a low automaticity rate and poor fluency and expression. The level of comprehension gained from reading texts greatly impacts across all their learning.

In order for students to comprehend text, studies have demonstrated that rapid and automatic decoding of words, along with appropriate phrasing and prosody is important
otherwise the lack of these skills can affect reading ability and comprehension skills. (National Institute of Child Health and Human Development, (NICHD) 2000; cited in Peebles, 2007). Furthermore, Kuhn and Stahl (2003; cited in Therrien \& Kubina, 2006) in their study "concluded that teachers should use fluency instruction more often because of its benefits to reading" (p.156) and as Carnine, Silbert, Kame'enui \& Tarver (2004; cited in Therrien et al. 2006) note "fluency serves as a bridge between decoding words and comprehension."(p.56) As Samuels (1997: cited in Moskal \& Blackowicz et al.) "the essence of fluency is...the ability to decode and comprehend text at the same time."(p.395) Many researchers have found that repeated reading as an intervention to assist struggling readers can be effective (NICHD, 2000; cited in Therrien, Gormley, Kubina, 2006; Therrien, 2004; cited in Peebles 2007) to boost both fluency and comprehension.

As Kuhn \& Stahl (2003: cited in Therrien, Gormley, Kubina, 2006) state "reading fluency, the ability to read with speed, accuracy and proper expression is a critical skill for comprehension."(p.23) The slow, word by word reader must concentrate on each and every word read and has little or no resources left to comprehend (Adams, 2000; cited in Therrien et al.) so by introducing repeated reading as a strategy enables the reader to have the opportunity to gain fluency, enjoyment and comprehension on consecutive reads. As the first read by the struggling reader is primarily to decode the text, it should be noted that repeated reading not only assists students with reading difficulties but has been found to assist all students with their reading fluency. (Meyer \& Felton, 1999; cited in Therrien
et al.; Therrien, 2004) However, it is particularly important for struggling readers to have fluency instruction. (Chard, Vaugh, \& Tyler, 2002; cited in Peebles, 2007)

Repeated Reading is recognised as a strategy to improve students' fluency and comprehension. (Chard et al., 2002: NICHD, 2000; Therrien, 2004). An increased reading rate assists comprehension as (Jenkins, Fuchs, van den Broek, Espin \& Deno, 2003, p.32) identified that "individuals skilled in reading comprehension read words faster than individuals with poor reading comprehension." However, Therrien, Gormley, Kubina (2006, p.24) argue that "comprehension difficulties are often not resolved solely by improving students' reading fluency." Often poor readers respond passively to the text and do not actively engaged themselves (Friffey, Zigmond \& Liehardt, 1988; cited in Therrin et al.) and they are unable to use metacognitive skills. (Munro, 2007; Billingsley \& Wildman, 1990; cited in Therrin et al.). Therefore combining the use of repeated reading, not only to improve fluency rate but largely as a tool to develop comprehension is an important consideration in the investigation.

It is a common assumption that repeated reading opportunities increase comprehension even though some theorists say that to improve comprehension students need to be explicitly taught, as comprehension doesn't automatically follow. (O'Connor, White, Swanson, 2007) Good readers read as O'Connor, White, Swanson (2007, p.33) note "two to ten times as many words in print as poor readers". The students that need the most practice spend the least amount of time reading at school and often avoid reading where possible. Increasing the practice time for these readers is critical and one method is
to use the strategy of repeated reading. (O,Connor, White, Swanson, 2007) Research shows that the 'at risk' reader doesn't engage in re-reading spontaneously and often doesn't use the 'repeated reading' approach to assist in overall comprehension.

The present investigation aims to discover whether giving a small group of students in year three the opportunity to complete 'repeated readings' of the same text and to guide their understanding of what they have read, through direct questioning, will improve their reading fluency, word recognition rate and overall comprehension. They will be assisted to improve fluency by receiving feedback on word errors and they will be guided through question-prompts to learn what to look for when comprehending the text. These students are able to decode text at $90 \%$ or above accuracy on age appropriate text but their comprehension levels are at least a level below their chronological age and they experience difficulties with fluency and comprehension tasks. Even though three of the students have had Reading Recovery and other literacy intervention they do not demonstrate an ability to use a range of strategies to aid their overall comprehension, often continuing reading, even when they have lost meaning of the text. High frequency words are also often confused. One student in the group of four, however, has not had any intervention, reads with accuracy and fluency but has a low level of comprehension. Her selection in the group was to gauge whether 'repeated reading' does assist students who have already mastered fluency, as some researchers state that comprehension has to be explicitly taught and doesn't necessary follow from 'repeated reading'.

The hypothesis is that teaching year 3 students, who are accurate decoders but have difficulties in comprehension, to use the strategy of 'Repeated Reading', will improve their fluency and comprehension.

## Method

## Design

The case study uses a Time Series Case 00X00 Study Design, in which the gain in comprehending ability and reading fluency, following the use of the repeated reading strategy, is monitored for middle school students who are experiencing reading difficulties. The study follows the growth of four students, with only one of them having a high fluency rate and a low comprehension level.

## Participants

All students selected to participate in the study are currently attending a Catholic primary school, completing their first year in middle school, Year 3, with ages ranging from 8-9 years. Three of the four students have a history of reading difficulties. The students were chosen based on their scores attained on the PROBE reading test and the PAT test administered at the beginning of the current school year to all students within the regular classroom. In the PROBE test students were required to read a text, once silently and on the second read aloud and then answer orally a series of reading comprehension questions on the text read. The PAT test was administered as a whole class, students had to read passages and then complete a written test by reading questions and answers. The students selected were all operating at a comprehension level lower than their chronological age.

They were identified as readers 'at risk' and could all benefit from literacy intervention. (See Table 1)

Table 1 Selection Criteria for Intervention Group

| student | Gender | Age | Reading <br> Age <br> according <br> To PROBE | ESL <br> y-yes <br> n-no | No. of <br> years at <br> current <br> school | Reading <br> Recovery <br> y-yes <br> n-no | Bridges <br> y-yes <br> n-no | Other literacy <br> intervention <br> y-yes <br> n-no | PAT <br> score <br> $/ 38$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | F | 8.0 | $5.5-6.5$ <br> yrs | n | 2 | y | y | y | 18 |
| B | F | 8.6 | $7.5-$ <br> 8.5 yrs | n | 3 | n | n | n | 10 |
| C | M | 8.10 | $6-7 \mathrm{yrs}$ | y | 2 | y | y | y | 14 |
| D | M | 8.8 | $6-7 \mathrm{yrs}$ | n | 2 | y | y | y | 18 |

## Materials

In pre-testing for this study, students were assessed using two formal assessment measures, the PROBE (Prose Reading Observation, Behaviour, and Evaluation of Comprehension) and the Neale Analysis of Reading Ability. The Neale Analysis Test gives a reading aloud fluency rate reading age (Neale, 1999) as well as an accuracy and comprehension reading age. The Neale was administered to also gain a student's fluency rate before and after the intervention and is recognised as both a "standardised attainment test and a diagnostic test." ( Neale, 1999, p.6)

Students completed the PROBE by reading a passage and a running record was taken, they were then asked a series of comprehension questions written for each passage. Six types of questions are used, literal, vocabulary, inference, evaluation, reorganization and reaction. This gave a reading comprehension age with $75 \%$ or above accuracy.

The Neale Analysis Reading Ability test was also administered and a standardised score for accuracy, comprehension and reading rate was ascertained and a reading age for each area determined. The students had to read a passage aloud once, maintaining accuracy and then answer a series of questions based on their level of understanding.

Table 2 Pre-test Scores of all Students

| student | Age <br> $(1 / 02 / 08)$ | PROBE <br> Reading Age | NEALE <br> Reading <br> Age | NEALE <br> Reading Age | NEALE <br> Reading <br> Age |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | (Yrs.Mnths) | Comprehension | Accuracy | Comprehension | Rate |
| A | $\mathbf{8 . 1}$ | $\mathbf{5 . 5 - 6 . 5}$ | $\mathbf{7 . 0}$ | $\mathbf{7 . 1 0}$ | $\mathbf{6 . 9}$ |
| B | $\mathbf{8 . 7}$ | $\mathbf{7 . 5 - 8 . 5}$ | $\mathbf{8 . 6}$ | $\mathbf{7 . 3}$ | $\mathbf{9 . 6}$ |
| C | $\mathbf{8 . 1 1}$ | $\mathbf{6 - 7}$ | $\mathbf{8 . 6}$ | $\mathbf{8 . 3}$ | $\mathbf{7 . 7}$ |
| D | $\mathbf{8 . 9}$ | $\mathbf{6 - 7}$ | $\mathbf{6 . 8}$ | $\mathbf{6 . 5}$ | $\mathbf{7 . 8}$ |
|  |  |  |  |  |  |

All the students chosen for the intervention group show low comprehension reading ages compared to their chronological age ranging from 3 months to 27 months difference in the Neale and 2 months to 30 months difference in the PROBE.

The students also completed an informal assessment measure during the ten intervention lessons which was an oral response based on the (Munro, 2007) ComprehensionSpontaneous and Cued Retelling proforma. (Appendix 1) This informal assessment was designed and implemented to gather data on whether the student was showing a growth in comprehension after repeated readings of the same text in each of the teaching sessions.

## Procedure

A sequence of ten repeated reading teaching sessions were designed for the intervention, (Appendix 2) and the reading passages used were selected from the Reading Scheme
'Stars and Cars' level B. (Appendix 3) The 'Cars and Stars’ reading material was chosen at the student's instructional level, as determined by administering a running record, prior to the teaching sessions. The passages were approximately two hundred to five hundred words long and did not have any picture cues. The 'Stars and Cars' passages matched the PROBE testing format which was considered an advantage in the sessions, as any improvement in comprehension levels could be accurately matched when gathering data for the post-testing. One session was spent on each text, and the students had to read the passage aloud up to a maximum of four times and focus on their level of fluency when reading, and answer orally a series of ten comprehension questions. The students answered comprehension questions based on (Munro, 2007) ‘ComprehensionSpontaneous and Cued Retelling', after one read and re-visited the same questions after the three more consecutive reads. (Appendix 1)

The 'Repeated Reading Teaching Sequence' (Appendix 2) was based on Munro's (2007) 'Spontaneous and Cued Retelling Analysis Sheet' teaching strategy with emphasis on fluency and repeated readings of the same text. The ten lesson sequence provides a scaffolding effect that starts in the first session when the teacher models fluent reading of the text, identifies any tricky words with the students, completes orally with the students the adapted 'Spontaneous and Cued Retelling Analysis Sheet'(Appendix 1) then completes three repeated readings of the text, followed by an evaluation of initial responses to the 'Spontaneous and Cued Retelling Analysis Sheet'.(Appendix 1). To finally in the last session, the students work individually reading orally the first read of the text and then silently in repeated readings and answer individually the cued analysis
questions orally to demonstrate their comprehension levels. The students work through a series of ten sessions where scaffolding is given and then slowly taken away so the skill being taught becomes automatised. The teacher acts as a scribe during all ten lessons recording each student's oral responses to the comprehension questions.

Students in the intervention group were taught in the regular classroom setting, during literacy lessons, for thirty to forty minutes. The teaching sessions were conducted over a three week period.

## Results

Results indicate support for the hypothesis that teaching Year 3 students who are good decoders but have difficulties in comprehension, to use fluency and the repeated reading strategy does increase their levels of comprehension. The comprehension scores of all students in the intervention group indicate improvement in at least one area of testing. (Appendix 4, Table 2) Comprehension gains were made by all students in all of the posttests administered.


Figure 1

The Probe Post-testing scores show an increase of six months in reading comprehension by Students B, C, D and a twenty-four month gain in reading comprehension for Student A following the ten intervention sessions.


Figure 2
The Neale Analysis Test accuracy score shows improvement in reading accuracy for Student, A, C, and D and Student B showed no changes. Student B was selected based on low comprehension rates, and was able to read with fluency and accuracy prior to the ten intervention sessions so the result was not unexpected. Student C and D made significant growth in reading accuracy improving by twelve months in reading accuracy age from the comparison of the pre and post testing scores.


Figure 3
All students made gains in their comprehension rate when comparing the pre and post testing scores of the Neale Analysis Test. Student D made the most significant growth improving their comprehension rate by fourteen months compared to Student C who only improved by two months. Student A and Student B made significant improvement respectively with an eight month increase in comprehension levels made by Student A and a six month growth by Student B. Student C was the most forthcoming with sharing accurate knowledge of the text during the ten intervention lessons and a higher result was anticipated for the student.


Figure 4

The Neale Analysis Test showed interesting results when comparing the pre and posttesting scores for reading rate. Student $\mathrm{A}, \mathrm{B}$, and C made significant changes in their reading rate after the ten intervention sessions; however, Student D's overall reading rate had decreased. Student D became unwell later in the day and sickness may have impacted on his reading rate score. His illness is an uncontrolled variable in the study. Student B had an above average reading rate prior to the lessons and a further increase in reading rate was not expected from the intervention but a significant increase of 29 months was achieved comparing the pre and post scores, unfortunately though no improvement in comprehension resulted. Student A and Student C also improved their fluency rate, by twelve months for Student A and 27 months for Student C. Student D's fluency rate had decreased by nine months but comprehension and accuracy scores had improved significantly.


Figure 5 Number of correct responses to the ten comprehension questions

In the 'Cued Retelling', informal assessment results, student A (Figure 5) showed that after repeated readings of the same text there was an increase in the number of correct responses between the first read and after the four reads. (Appendix 5) Sometimes there were significant differences in results as in lesson three, when an $800 \%$ improvement was made with correct responses between the first and the final reads. By lesson four Student A was gaining in self-confidence and responding to the cued retelling questions by saying, "I need to read the text again to answer that question." During the group discussions Student A wanted to change initial responses even before being cued into the question by the teacher, for example, "I now know I have given a wrong response after repeated reading, as it said in the text..." As the lessons progressed Student A was cueing into the comprehension of the text and was gaining higher results after one read. Student A made the most significant progress in all testing scores compared to the other students in the intervention group. After lesson five, Student A stated that by reading the text up to four times it 'helped with learning more things as I read.'


Figure 6 Number of correct responses to the ten comprehension questions

Again the results of Student B (Figure 6) as for Student A (Figure 5) in the 'Cued Retelling' scores showed an increase of correct responses after the four reads. This was the same result for Student C (Figure 7) and Student D (Figure 8, Appendix 5) Student B started cueing in to the comprehension of the text with the largest increase in comprehension happening at lesson four when $166 \%$ increase was achieved between correct responses between the first and final reads. (Figure 6, Appendix 5)


Figure 7 Number of correct responses to the ten comprehension questions

Student C's number of correct responses from the first read increased as the sessions progressed over the three weeks.(Figure 7) The reading comprehension rate after the first read increased over the ten sessions except for lesson two. The difference between the first read and the fourth read in comprehension rate decreased over the ten sessions. This trend is evident for the other three students. (Figure 5, Figure 6, Figure 8) (Appendix 5) As the intervention lessons progressed, (Figure 9) shows the overall improvement of the group to give accurate responses, after the first read, compared to the first few intervention sessions. When asked whether 'repeated readings' of the same text improved understanding, Student $C$ stated "that the repeated readings of the same text helped to understand the meaning of individual words in context", for example, helped to understand the meaning of the word 'barked' in text.


Figure 8 Number of correct responses to the ten comprehension questions

Student D was not a confident participator in the group and could not keep up with the group's reading rate. (Figure 4) After being a silent member of the group in the first three sessions, confidence was gained and ideas and understandings shared. It wasn't
until the fifth lesson that a $100 \%$ improvement was gained between the first and final reads, which was a later improvement compared to the rest of the group. (Figure 8, Appendix 5) When asked about the value of repeated reading Student $D$ responded with it 'helps to sequence and understand the story.'


Figure 9 Number of correct responses to the ten comprehension questions

The results of the 'Cued Retelling' for all students showed how repeated reading does not only improve comprehension (Figure 1, Figure 3, Figure 5, Figure, 6, Figure 7, Figure 8 and Figure 9) but increases fluency rate (Figure 4) and accuracy rate (figure 2). The interesting discovery of the results was that by cueing students into comprehension by using the 'Cued Retelling' proforma showed that over the ten sessions all the students began to gain higher correct responses to the questions/cues after the first read.

## Discussion

The results of the study show that there is support for the hypothesis and the research, which suggests that repeated reading, as a reading strategy, seems to improve comprehension and fluency. Results show that repeated reading can be used as an intervention strategy as "it can improve students" ability to fluently read and understand a particular passage."(Therrin, W.J. 2004 p.259) All of the four students improved in their overall comprehension levels and accuracy rates following the intervention, (Appendix 4) but "to determine the impact of repeated reading on students' reading achievement in general requires conducting studies of longer duration."(Therrien, W.J, 2004, p.259).

In each intervention session, a noticeable increase in fluency was noted, following each consecutive read of a text. It follows then that Fuchs, Fuchs \& Hosp, (2001; cited in Therrien \& Kubina, 2006) "oral reading fluency has been shown to predict comprehension better than such direct measures of reading comprehension as questioning, retelling and cloze." (p.156) Due to time restrictions, the students' reading rate was not taken when reading a text aloud, instead it was decided to use the Neale Analysis as a way of gaining a pre and post fluency rate to determine any overall improvement in fluency. Three of the four students in the intervention group showed considerable increases in their fluency rate in the Neale Analysis post-test. (Figure 4) It should be noted in the test the students read the unseen text once only. This finding supports the research by Kuhn \& Melanie (2005) that repeated readings "are effective because, rather than continually encountering new text, readers have the opportunity to repeatedly read a given text until they have mastered it and can read it fluently."(p.131)

Student D's fluency rate decreased from the pre-test, however, accuracy and comprehension rates had increased markedly. Also even though Student D's repeated readings became more fluent on repeated reads these gains did not always translate to new readings (Therrin, Wickstrom, Jones, 2006).

The results of the study highlighted another interesting finding that was not anticipated. Not only was there an improvement in the students' comprehension and fluency, as a result of repeated readings of the same text, but the results show the impact of cueing the students' into comprehension. By using an adapted form of Munro's (2007) ‘Comprehension-Spontaneous and Cued Retelling’ in every lesson, following the same structure (controlled variable), the students started to cue into comprehension independently. The students were explicitly taught the structure of the oral re-telling, half of the responses were the same for each text read, for example, what was the sequence of events in the story?, and the other half were based on a response to the text read. (Appendix 1- Table 1 to 11) The students started to cue into the text independently by the end of the sessions and seemed to understand, the text at a higher level after one read as shown by Figure 9. This finding is supported by researchers Rosenshine, Meister \& Chapman, (1996; cited in Therrien, Gormley \& Kubina, 2006) who claim that "students with procedural prompts to cue question generation were more successful than interventions that provided no prompts." (p.24)

The impact of the 'Cued Retelling' in the intervention lessons is significant. Homan, Klesius and Hite (1993, p. 94) states "students cued to 'remember' read with greater
recall than did students cued to 'read fast and accurately,' but those students cued to 'read fast and accurately' read with no greater fluency than did the students cued to remember." As the ten lessons progressed the students showed an improvement in their comprehension levels after the first read, compared to the trend in the beginning lessons, when more correct responses were given after the consecutive reads. (Figure 5, Figure 6, Figure 7, Figure 8) This was particularly evident in the results obtained by Student A. As a result of the Cued Retelling approach the students began to use language from the text, and were able to gain more understanding at the word and sentence level. (Munro, 2007)

To further validate and flow from this study, it would be an interesting investigation to teach the students to formulate their own questions after the first read of the text and then formulate other questions following consecutive reads, in contrast, to being cued in to the text as the approach used in this study. The students' have had the prior experience of being cued into an oral re-tell in ten intervention sessions. Another area that would be of interest to investigate is developing the ability to decode unknown words. In the study following the first read, 'tricky' words were identified, explained and pronounced but time spent was minimal even though it was an important part of each lesson. Furthermore, recent studies show that "improvement in word recognition as well as rate through repeated reading only occurs when students were assisted with their errors during practice (Young, Bowers, \& MacKinnon (1996), cited in O’Connor, White \& Swanson (2007). Trying to give the four students the opportunity to do four repeated readings of the text, discuss any 'tricky words', and give two oral re-tells of the cued re-telling sheet was a challenge in the thirty to forty minutes allocated for each lesson.

The results suggest that teaching the strategy of repeated reading not only develops fluency rates but improves comprehension and it should be taught to assist students to improve their reading comprehension ability. It has been demonstrated that the repeated reading strategy should be modelled, taught and encouraged. Whilst ongoing monitoring was taking place during the sessions, it was challenging to give the students enough feedback on their fluency rate, even though considerable gains were made by the students. The accuracy rate of the student's in the intervention group also made significant increases. As noted by Herman (1985; cited in O’Connor, White \& Swanson, 2007) "found that repeated reading not only increased rate, but also increased accuracy of word recognition due to several opportunities to read the same words." (p.32) The explicit teaching of the adapted Munro’s (2007) ‘Comprehension-Spontaneous and Cued Retelling' as part of each of the ten lessons of intervention cued the students into reading for better understanding. Another interesting field of possible study would be to explicitly teach 'cued retelling' to develop comprehension.

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## Appendix 1

Table 1 Comprehension- Cued Re-telling-lesson proforma

| The main characters are | What is the story about? |
| :--- | :--- |
| What is a good name for the story? |  |
|  |  |
| $\frac{\text { Write the events of the story in }}{\text { order }}$ |  |
| $\frac{1 .}{2}$ |  |
| $\frac{3 .}{4 .}$ |  |
| What will probably happen |  |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 2 Comprehension-Cued Retelling-lesson 1

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | How many animals has Kate counted in her backyard? |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{\frac{1}{3}}{3}} \frac{1}{\frac{4}{5}}$ | Why are the animals in Kate's backyard lucky? |
| What will probably happen next year when the weather is warmer? | You can tell that in the winter, sparrows go to a place that is |
| How often does Kate go to the zoo? | What does 'I'm not pulling your leq' mean? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 3 Comprehension-Cued Retelling-lesson 2

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | Why did the frogs leave the marsh? |
| Write the events of the story in order $\begin{aligned} & \frac{1}{2} \\ & \frac{2}{3} \\ & \frac{4 .}{5} \end{aligned}$ | How was the big frog different from the little frog? |
| What will probably happen next? | How long did the frogs live in the marsh? |
| What does 'always look before you leap' mean? | Describe a marsh. |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 4 Comprehension-Cued Retelling-lesson 3

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | How old is Sarah? |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{\frac{1}{3}}{3}} \begin{aligned} & \frac{4}{5} \end{aligned}$ | How was the big frog different from the little frog? |
| What will probably happen next? | An orchard is a place where |
| Do you think Sarah will return to the country? | What did Sarah do before her dad woke her up? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 5 Comprehension- Cued Retelling-lesson 4

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | Coach Wong thinks that Martin is a great |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{3}{3}} \frac{1}{\frac{3}{5}}$ | What will Martin do next time he hits the ball? |
| What will probably happen next? | What does 'everyone get butterflies in their stomach' mean |
| In the story the word 'barked' means the coach | Why was Martin frozen at the stumps? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 6 Comprehension- Cued Retelling-lesson 5

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | A wood rat is sometimes called a trade rat because |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{3}{3}} \frac{3}{4} .$ | Each time the wood rat took something it left behind |
| A wood rat would probably not take? | What does 'something fishy is going on' mean? |
| Why did the author write the story? | What will the campers to the next time they go camping? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 7 Comprehension- Cued Retelling-lesson 6

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | What did Mrs. Grouch have for breakfast every day? Why? |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{3}{3}} \frac{1}{4}$ | You can tell Mrs. Grouch is grumpy because |
| What will probably happen next? | What do the words 'keep you company' mean? |
| Everyone was afraid of Mrs. Grouch because | How are Pia and Mrs. Grouch alike? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 8 Comprehension- Cued Retelling-lesson 7

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | At first, Katie's friends thought counting was a waste of time? Why? |
| Write the events of the story in order $\begin{aligned} & \frac{1}{2} \\ & \frac{3}{3} \\ & \frac{4}{5} \end{aligned}$ | What is another word for ordinary? |
| You can tell poppies are a kind of | Katie let Carla's words go in one ear and out the other. What does this mean? |
| Will Katie keep on counting? | Why did the author write the story? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 9 Comprehension-Cued Retelling-lesson 8

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | What colour was the duckling when he was born? |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{\frac{1}{3}}{4}} \frac{1}{\frac{4}{5}}$ | How was the duckling different from other ducks? |
| What will probably happen next? | What does the author probably want you to know? |
| When the duckling saw the beautiful birds, his heart was heavy, this means the duckling was? | You can tell when the duckling saw his own reflection he was really seeing |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 10 Comprehension-Cued Retelling-lesson 9

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | What do penguins use their wings for? |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{3}{3}} \frac{3 .}{\frac{4}{5}}$ | How are penguins different to most birds? What will Martin do next time he hits the ball? |
| What will probably happen next? | In the story 'layer' means |
| When it comes to walking penguins are all thumbs. What does that mean? | Why did the author write the story? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

Table 11 Comprehension-Cued Retelling-lesson 10

| The main characters are | What is the story about? |
| :---: | :---: |
| What is a good name for the story? | Bird eggs hatch after |
| Write the events of the story in order $\frac{\frac{1}{2}}{\frac{\frac{1}{3}}{\frac{3}{4}}}$ | A Mother bird sits on her eggs so they won't |
| What will probably happen if a baby bird didn't get the hang of flying? | What does 'a mother bird do before she gives the food to her baby? |
| Why did the author write the story? (purpose) | What is the best meaning of protect? |

Adapted from Munro 2007, Comprehension-'Spontaneous and Cued Retelling

## Appendix 2

## Repeated Reading Teaching Sequence

Introduce the strategy: $I$ am going to share a strategy that may help you with remembering what you have read. It is called 'repeated reading' and this is what you do. After you have read a paragraph, passage or chapter of a story with fluency and have checked word accuracy you go through set questions to help you with your understanding. Then you read the passage again up to four times and then check your level of understanding. Your reading should become more fluent at each repeated read.

| Session | Student activity |
| :---: | :---: |
| 1 | - Teacher reads aloud a short passage (modelling fluency and expression. <br> - Teacher and students identify any 'tricky' words that could be difficult to decode. <br> - Teacher and students discuss and record comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet.(Munro) <br> - Teacher reads aloud story again, then repeats the read two more times. <br> - Teacher discusses and records comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet (Munro, 2005) |
| 2 | - Teacher reads aloud a short passage. (Modelling) <br> - Teacher and students identify any 'tricky' words that could be difficult to decode. <br> - Teacher and students discuss and record comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet. <br> - Teacher/students read aloud story again, then repeats the read two more times. <br> - Students together discuss and teacher records comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet. |
| 3 | - Teacher/students read aloud together a short passage. <br> - Teacher and students identify any 'tricky' words that could be difficult to decode. <br> - Teacher and students discuss and record comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet. <br> - Students read aloud together a short passage and then repeat the read up to four times. <br> - Students together discuss and teacher records comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet |


| 4 | - Teacher/students read aloud together a short passage. <br> - Students identify any 'tricky' words that could be difficult to decode and discuss together. <br> - Students discuss and record comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet. <br> - Students read aloud together a short passage and then repeat the read up to four times. <br> - Students together discuss and record comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet |
| :---: | :---: |
| 5 | - Students read aloud together a short passage. <br> - Students identify any 'tricky' words that could be difficult to decode and discuss together. <br> - Students discuss in pairs and teacher scribes comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet <br> - Students read aloud in pairs a short passage and then repeat the read up to four times. <br> - Student in pairs discuss and teacher records comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet |
| 6 | - Students read aloud together a short passage <br> - Students identify any 'tricky' words that could be difficult to decode and discuss together. <br> - Student in pairs discuss and record comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet <br> - Students read aloud together in pairs a short passage and then repeat the read up to four times. <br> - Student in pairs discuss and teacher records comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet. |
| 7 | - Students read aloud together in pairs a short passage <br> - Students in pairs identify any 'tricky' words that could be difficult to decode and discuss together. <br> - Student in pairs discuss and record comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet <br> - Students read aloud together in pairs a short passage and then repeat the read up to four times. <br> - Student in pairs discuss and teacher records comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet. |
| 8 | - Students read aloud together in pairs a short passage <br> - Students in pairs identify any 'tricky' words that could be difficult to decode and discuss together. <br> - Student individually records comprehension on the 'Spontaneous and Cued Retelling Analysis Sheet <br> - Students read aloud individually a short passage and then repeat the read up to four times. <br> - Student individually orally responds and teacher records comprehension on the adapted 'Spontaneous and Cued Retelling Analysis Sheet. |


| 9 | - | Student reads aloud individually a short passage. |
| :--- | :--- | :--- |
|  | - | Students in pairs identify any 'tricky' words that could be |
| difficult to decode and discuss together. |  |  |

## Appendix 3

## Texts for Intervention Sessions

## Cars and Stars Series B and Series 2 B

| Session | Lesson- <br> all at instructional level- <br> whole text read in each lesson |
| :--- | :--- |
| one | Lesson one (about an imaginary zoo) |
| two | Lesson two (fable) |
| three | Lesson four (journal entry) |
| four | Lesson one Series 2 (camping) |
| five | Lesson three Series 2 (counting cricket) |
| seven | Lesson four Series 2 (traditional fable) |
| eight | Lesson five Series 2 (facts about birds) |
| Nine | Ten |

## Appendix 4

Table 1 Pre-test Scores of all Students

| student | Age <br> $(1 / 02 / 08)$ | PROBE <br> Reading Age | NEALE <br> Reading <br> Age | NEALE <br> Reading Age | NEALE <br> Reading <br> Age |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | (Yrs.Mnths) | Comprehension | Accuracy | Comprehension | Rate |
| A | $\mathbf{8 . 1}$ | $\mathbf{5 . 5 - 6 . 5}$ | $\mathbf{7 . 0}$ | $\mathbf{7 . 1 0}$ | $\mathbf{6 . 9}$ |
| B | $\mathbf{8 . 7}$ | $\mathbf{7 . 5 - 8 . 5}$ | $\mathbf{8 . 6}$ | $\mathbf{7 . 3}$ | $\mathbf{9 . 6}$ |
| C | $\mathbf{8 . 1 1}$ | $\mathbf{6 - 7}$ | $\mathbf{8 . 6}$ | $\mathbf{8 . 3}$ | $\mathbf{7 . 7}$ |
| D | $\mathbf{8 . 9}$ | $\mathbf{6 - 7}$ | $\mathbf{6 . 8}$ | $\mathbf{6 . 5}$ | $\mathbf{7 . 8}$ |
|  |  |  |  |  |  |

Table 2 Pre-test Scores of all Students

| stude nt | Age <br> (1/02/0 <br> 8) | Age <br> (1/05/08 | PROB <br> E <br> pre | PR OB E post | NEAL <br> E <br> Readi <br> ng <br> Age <br> pre | NEAL <br> E <br> Readi <br> ng <br> Age <br> post | NEALE <br> Reading <br> Age <br> pre | NEAL <br> E <br> Readin <br> age <br> post | NEAL <br> E <br> Readin <br> g <br> Age <br> pre | NEAL <br> E <br> Readin <br> g <br> Age <br> post |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yrs.Mnths | Yrs.Mnths | Comp | $\begin{aligned} & \text { Co } \\ & \mathrm{mp} \end{aligned}$ | Accur acy | Accur acy | Comp | comp | Rate | Rate |
| A | 8.1 | 8.3 | $\begin{aligned} & \text { 5.5- } \\ & \mathbf{6 . 5} \end{aligned}$ | $\begin{aligned} & 7.5- \\ & 8.5 \\ & \hline \end{aligned}$ | 7.0 | 7.8 | 7.10 | 7.5 | 6.9 | 7.9 |
| B | 8.7 | 8.9 | $\begin{aligned} & 7.5- \\ & 8.5 \end{aligned}$ | $\begin{aligned} & \hline 7.5- \\ & 8.5 \end{aligned}$ | 8.6 | 8.6 | 7.3 | 7.9 | 9.6 | 11.5 |
| C | 8.11 | 9.1 | 6-7 | $\begin{aligned} & \hline 6.5- \\ & 7.5 \\ & \hline \end{aligned}$ | 8.6 | 8.6 | 8.3 | 7.7 | 7.7 | 9.1 |
| D | 8.9 | 8.11 | 6-7 | $\begin{aligned} & \hline 6.5- \\ & 7.5 \end{aligned}$ | 6.8 | 7.8 | 6.5 | 7.7 | 7.8 | 6.11 |
|  |  |  |  |  |  |  |  |  |  |  |

## Appendix 5

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $\begin{array}{\|l} \hline \text { Total of } \\ \text { correct } \\ \text { responses } \\ \text { after one } \\ \text { read } \end{array}$ | Total of correct responses after 4 reads | Percentage increase <br> by four <br> reads |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | X | X |  | X | 3/10 | 6/10 | 100\% |
| B | $\checkmark$ |  | X | $\checkmark$ | $\checkmark$ | X |  |  |  |  | 3/10 | 5/10 | 60\% |
| C | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | X |  |  | X | 4/10 | 6/10 | 50\% |
| D | $\checkmark$ | $\checkmark$ | X |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | 6/10 | 7/10 | 16\% |

Lesson One Teacher modelled answers with students' responses.
Lesson two
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $\begin{aligned} & \hline \text { Total of } \\ & \text { correct } \\ & \text { responses } \\ & \text { after one } \\ & \text { read } \end{aligned}$ | Total of correct responses atter 4 reads | Percentage increase by four reads |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | X |  | X | X | X | X |  | X | $\checkmark$ | $\checkmark$ | 1/10 | 9/10 | 800\% |
| B | $\checkmark$ | X | $\checkmark$ | X |  | X | $\checkmark$ | X | $\checkmark$ | $\sqrt{ }$ | 5/10 | 8/10 | 60\% |
| C |  | X | $\checkmark$ | X | X | X |  | X | $\checkmark$ | X | 2/10 | 8/10 | 300\% |
| D |  | $\checkmark$ |  | $\checkmark$ | X | X |  | X | $\checkmark$ | $\checkmark$ | 4/10 | 7/10 | 75\% |

Lesson Three
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total of correct responses after one read | Total of correct responses after 4 reads | Percentage increase by four reads |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A |  |  | $\checkmark$ | $\checkmark$ | X | $\checkmark$ | $\checkmark$ | X | X |  | 4/10 | 7/10 | 75\% |
| B |  | X | $\checkmark$ |  | X | $\checkmark$ | X | X | X | $\checkmark$ | 3/10 | 8/10 | 166\% |
| C | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | X | $\checkmark$ |  | X |  | X | 4/10 | 7/10 | 75\% |
| D |  | $\checkmark$ | X | $\checkmark$ | X | $\checkmark$ |  | $\checkmark$ | X |  | 4/10 | 7/10 | 75\% |

Lesson Four
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total of <br> correct <br> responses <br> after <br> read | Total of <br> correct <br> responses <br> atturer 4 <br> reads | Percentage <br> increase <br> by four <br> reads |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | $\sqrt{ }$ |  | X | $\sqrt{ }$ | X | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |  | $\sqrt{ }$ | $6 / 10$ | $8 / 10$ | $33 \%$ |
| B | X |  | $\sqrt{ }$ |  | X | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |  | $\sqrt{ }$ | $5 / 10$ | $7 / 10$ | $40 \%$ |
| C | $\sqrt{ }$ | $\sqrt{ }$ | X | X | X | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |  | X | $5 / 10$ | $9 / 10$ | $80 \%$ |
| D | $\sqrt{ }$ | X | $\sqrt{ }$ | X | X | $\sqrt{ }$ | $\sqrt{ }$ | $\sqrt{ }$ |  | X | $5 / 10$ | $9 / 10$ | $80 \%$ |

Lesson Five
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total of correct responses after one read | Total of correct response after 4 reads | Percentage increase by four reads |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\checkmark$ |  | $\checkmark$ |  | X | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |  | 5/10 | 6/10 | 20\% |
| B | $\checkmark$ |  | $\checkmark$ | X | X | X | $\checkmark$ |  |  |  | 3/10 | 6/10 | 100\% |
| C | $\checkmark$ | $\checkmark$ |  | X | X | X | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | 5/10 | 8/10 | 60\% |
| D | $\checkmark$ | $\checkmark$ | X |  | X |  | $\checkmark$ |  |  | X | 3/10 | 6/10 | 100\% |

Lesson Six
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $\begin{aligned} & \hline \text { Total of } \\ & \text { correct } \\ & \text { responses } \\ & \text { after one } \end{aligned}$ read | Total of correct responses after 4 reads | Percentage increase by four reads |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\checkmark$ |  | X | $\checkmark$ | X |  |  | X |  | X | 2/10 | 5/10 | 150\% |
| B | $\checkmark$ |  |  | $\sqrt{ }$ | X |  | $\checkmark$ | $\checkmark$ |  |  | 4/10 | 5/10 | 25\% |
| C | $\checkmark$ | X |  | X | X | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | 4/10 | 7/10 | 75\% |
| D | X | $\checkmark$ | $\checkmark$ | $\checkmark$ | X | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | X | 7/10 | 10/10 | 42\% |

Lesson Seven
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total of correct responses read | Total of correct responses after 4 reads | $\begin{aligned} & \hline \text { Percentage } \\ & \text { increase } \\ & \text { by four } \\ & \text { reads } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ | X | X | $\checkmark$ |  | X | X | X | 4/10 | 9/10 | 125\% |
| B | $\checkmark$ | $\checkmark$ | X | $\checkmark$ | X | X | $\checkmark$ |  | X | X | 4/10 | 9/10 | 125\% |
| C | $\checkmark$ | X | $\checkmark$ | X | X | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | 5/10 | 8/10 | 60\% |
| D | $\checkmark$ | $\checkmark$ | X | X | X | X | $\checkmark$ |  |  | $\checkmark$ | 5/10 | 9/10 | 80\% |

Lesson eight
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total of correct responses after one read | Total of correct response after 4 reads | Percentage increase by four reads |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | $\checkmark$ | $\checkmark$ | $\sqrt{ }$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | X | $\sqrt{ }$ | 8/10 | 9/10 | 12\% |
| B | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | X | $\checkmark$ | 7/10 | 8/10 | 14\% |
| C | $\checkmark$ | $\checkmark$ | X | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | X | $\checkmark$ | 7/10 | 9/10 | 28\% |
| D | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | X | $\checkmark$ | $\checkmark$ | X | $\checkmark$ | $\checkmark$ | 8/10 | 10/10 | 25\% |

Lesson nine
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

| Question <br> student | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $\begin{aligned} & \hline \text { Total of } \\ & \text { correct } \\ & \text { responses } \\ & \text { after one } \end{aligned}$ read | Total of correct response after 4 reads | Percentage increase by four reads |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A |  | $\checkmark$ | $\checkmark$ | X | $\sqrt{ }$ | $\checkmark$ |  | X | $\checkmark$ | $\sqrt{ }$ | 6/10 | 8/10 | 33\% |
| B |  | X | X | $\checkmark$ | $\sqrt{ }$ | $\sqrt{ }$ | X | X | $\sqrt{ }$ | $\sqrt{ }$ | 5/10 | 9/10 | 80\% |
| C | $\checkmark$ |  | $\checkmark$ |  | $\sqrt{ }$ | $\checkmark$ |  |  | $\checkmark$ | X | 5/10 | 6/10 | 20\% |
| D | X | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | X | $\checkmark$ |  | $\checkmark$ |  | 5/10 | 7/10 | 40\% |

Lesson ten
$\sqrt{ }$ correct response after first read.
X correct response after a total of four reads.

