Hypothesis:
Learning to paraphrase and generate questions from factual texts will improve a middle year’s student’s reading comprehension of exposition texts.

Abstract
Many students in the middle years of school have a problem with the explicit use of comprehension strategies to help them understand expository text. This study hypothesizes that if we train students to use the paraphrasing and self-questioning strategies when reading factual texts there will be a measurable improvement in their comprehension, connection of ideas and recall of facts.

This study observed a student in Year 8 who had experienced reading difficulties throughout his schooling. He was taught to firstly use the paraphrasing strategy for each sentence read then taught to generate questions for the facts contained within the text. He was consequently provided with a metacognitive routine for answering his own questions.

The strategies proved to be successful. The implication of these strategies is that when reading expository text the reader who generates their own questions of the material read will display a significant improvement in their comprehension. Research by Yopp (1988) indicated that when students learn to generate questions for text, their overall comprehension improves. Through this model of giving a student ever-increasing responsibility for the question generation, we are also able to help students develop a sense of efficacy and confidence in their ability to differentiate strategies in both responding to and generating their own questions for text.

Hypothesis:
Learning to paraphrase and generate questions from factual texts will improve a middle year’s student’s reading comprehension of exposition texts.

Introduction: (The Broad Topic)
Students in middle year’s classrooms have to learn large amounts of expository material across all KLA areas. In order to do so they need to be taught not only course content, but strategies for learning the material so that they can become better independent learners. The cognitive demands on readers depend on the purpose for reading. Fiction is often read simply for enjoyment whereas factual material is read to find information. Students are required to access much of their information in all subject areas through reading written material. They are expected to interact with the text, make connections between prior knowledge and current information and display, through various tasks, their understanding of the text.
A leading challenge for teachers today is to make sure that students understand fully the information that they read particularly in expository texts. Struggling students may become ‘inactive learners’ when given difficult expository texts to read. These less-skilled students may not apply many comprehension strategies to text and thus obtain only a limited grasp of its content.

This study investigates the effect that ‘focused teaching of paraphrasing and the generation of question (self-questioning)’ will have on a student’s ability to comprehend the information contained in expository texts.

Both paraphrasing and self-questioning are learning strategies that enable the student to be a self-directed learner. For a student to acquire knowledge and retain it, they require certain cognitive and metacognitive functions. Metacognitive strategies assist students in concentrating their attention, understanding content, integrating new information with existing knowledge and encoding and storing this information in a way that will facilitate memory and retrieval. Metacognitive skills are taught through direct instruction and teacher modeling of the strategies. Students in turn must also have ample opportunities to practice the strategies in order to internalize them.

It is believed that through paraphrasing and self-questioning, a student will be able to demonstrate their comprehension of an expository text. Paraphrasing and self-questioning forces the reader to focus on deep learning and understanding as well as on literal facts. Paraphrasing and self-questioning is one way that learner can direct their own reading. Paraphrasing helps the reader who has difficulties comprehending on both a word and sentence level while thinking about information in a topic area. It enables the reader to explain the facts in their own words before having to move on. It allows them the time they need to make the connections between what they already know to what they are finding out about. They work on manageable pieces of information at a time.

Self-questioning will enable the student to improve awareness and control of their thinking. Self-questioning strategies are used by students to: engage their prior knowledge of the topic; ensure that students are actively processing the information they read; increase awareness of their thinking processes and their level of understanding; and, to help students monitor their progress in the reading task.

(Related Research)
Over the years there has been a lot of research done on the problems facing many middle years’ students who have reading difficulties. These students become disengaged learners because of their inability to access information that is presented to them in written text. Due to the large amounts of written material that is presented to students during the middle years and beyond, the problems for these students are overwhelming. In the early years the emphasis is placed on decoding text and reading fluency whilst as the student move through the levels of schooling the emphasis gradually shifts to the reading comprehension. With the increasing interest shown in understanding the problems facing students in the middle years there has also been research into how best to help those who still have comprehension difficulties.
Dole, Duffy, Roehler, and Pearson (1991) have shown through their research that teaching students to restate what they read in their own words is another strategy to improve their overall comprehension of text.

Hartman (2002) has shown through research that the way a learner obtains information is based on the way they think and arrange their thoughts and information. They need to develop and internalize metacognitive strategies through direct instruction, modeling and practice to promote awareness and understanding.

Because of this research, many new learning strategies have been created which focus on developing students’ cognitive and metacognitive skills. One of the new learning strategies that have been developed as a result of this research is that of the notion of self-questioning.

Self-questioning is a learning strategy that focuses on concept comprehension by making use of questions that are generated directly from the student. Although most studies focus on the benefits of self-questioning in the subject of reading, this strategy can be used just as effectively in all areas of learning such as science, math, and social studies. Hartman explains that by student generated questions, what is meant is that during the planning, monitoring, and evaluating of a task students are covertly asking themselves questions that they have formulating by themselves. When used correctly, the strategy of self questioning has proven to be very effective for metacognition because in order to formulate the appropriate questions for the planning, monitoring, and evaluating of a task, one must be very conscious and aware of the task at hand. Self questioning has also been said to improve the long term retention of knowledge and skills (Hartman, 2001).

Arthur Costa (1984) states that self-questioning is a self-directed learning strategy therefore it aids in the development of the student’s metacognitive skills. Metacognition is our ability to plan a strategy for producing what information is needed, to be conscious of our own steps and strategies during the act of problem solving, and to reflect on and evaluate the productivity of our own thinking.”

He goes on further to indicate that we often find students following instructions or performing tasks without wondering why they are doing what they are doing. They seldom question themselves about their own learning strategies or evaluate the efficiency of their performance. Some children virtually have no idea what they should do when they confront a problem and are unable to explain their strategies of decision making. (Arthur Costa, 1984).

Metacognition training in self-questioning enhances self-regulation and learning, content knowledge and self-efficacy. Because self questioning requires students to make up their own questions regarding the materials they are using, this learning strategy forces students to pay closer attention to what they are doing, and incorporate existing knowledge with newly retained information (King, 1992).

In her 1985 comprehensive review of self questioning, researcher Bernice Wong concluded that the development of self questioning rested on the foundation of three separate theories: 1. the active processing theory, 2. the schema theory, and 3. the
metacognitive theory. According to the active processing theory, the idea of asking questions about a text raises the quality of the questions and promotes greater comprehension. The schema theory assumes that the ability to integrate prior knowledge with new knowledge leads to a reconstruction of schema and once again, leads to greater comprehension. Lastly, the metacognition theory demands a learner’s awareness of both the task and themselves, and also of the strategies involved. According to Wong, all three of these theories, when combined, result in the formation of the successful learning strategy that is self-questioning.

One of the most detailed studies on question-generation was carried out by Raphael in the mid-1980s (Raphael & McKinney, 1983; Raphael & Pearson, 1985; Raphael & Wonacutt, 1985). Using a technique called QARs (Question-answer-relationships), Raphael and her colleagues modeled and engaged students in the process of differentiating the types of questions they could ask of text. Through a model of giving students ever-increasing responsibility for the question generation, Raphael and her colleagues were able to help students develop a sense of efficacy and confidence in their ability to differentiate strategies in both responding to and generating their own questions for text. Later research by Yopp (1988) also indicated that when students learn to generate questions for text, their overall comprehension improves.

Finally, children's writer, Madeline L'Engle says, "Readers sometimes grossly underestimate their own importance." This is particularly true of less experienced readers. As developing readers realize their inner conversation and begin to focus on their own thoughts and questions, reading takes on new importance. When readers interact with the text by thinking about their questions, writing them down, and pondering answers, they comprehend at a much deeper level.

**Prediction**
Explicit teaching of how to paraphrase and say questions that the text answers as a comprehension strategy will lead to an improvement in comprehension of non-fiction text for middle year’s students.
Method
Design…
This action research uses a study model of OXO (Assessment, teaching, assessment) design. Gains in reading comprehension and knowledge were monitored following the explicit teaching of paraphrasing and self-questioning strategies to a middle year’s student with reading comprehension difficulties. Students with LD in reading are often hampered by limitations with decoding and the consequent lack of reading speed and as a result demonstrate difficulty with comprehension.

Participant

The subject, a fourteen year old, male adolescent student, on the Woodcock Analysis (Table 1), displays many of the necessary skills to become a successful reader. While he is able to recognize visual features of words, along with an ability to decode text, generally these skills fall within the low average range. On the Neal Analysis, he showed himself to be approximately three years behind the expected level in ‘Rate of Reading’ and ‘Accuracy’. This lack of fluency and increasing complexity of materials and concepts at the secondary level of schooling has lead to this student finding reading quite an arduous task.

Table 1 (Woodcock Analysis)

<table>
<thead>
<tr>
<th></th>
<th>Age Equivalent</th>
<th>Percentile Rank</th>
<th>Stanine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter Word Identification</td>
<td>11.7</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Word Attack</td>
<td>13.2</td>
<td>44</td>
<td>5</td>
</tr>
<tr>
<td>Passage Comprehension</td>
<td>10.1</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Oral Vocabulary</td>
<td>12.10</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>Listening Comprehension</td>
<td>29.95</td>
<td>99</td>
<td>9</td>
</tr>
</tbody>
</table>

These results suggest that his understanding of language when listening to text being read orally is at a very high level however when reading the text himself his understanding is at a much lower level. It would seem that his comprehension of written material is hampered by his limited skills in dealing with written text.

Teaching a student with problems of a dyslexic nature to paraphrase then ask himself questions about the ideas presented will help to improve his reading comprehension.

Materials:
Pre-testing and post-testing
- Woodcock Diagnostic Reading Battery (WDRB assesses reading achievement and reading-related abilities to help determine why a reading problem exists.)
- PROBE (Prose Reading Observation, Behaviour and Evaluation of Comprehension) reading and comprehension test.
PROBE is an informal Reading Inventory that combines evaluation of reading accuracy, reading behaviour and in-depth reading comprehension. The term ‘successful’ in relation to the use of PROBE is determined by a scoring rate of 95% in decoding (generally considered an independent reader at this level) and a minimum of 70% scoring rate in comprehension (indicating that the student has grasped the main points and details of the text). I used the non-fiction aspects of this test as we were focusing on expository texts with Student J.

**End of Unit Comprehension Questions (SOSE 2 Text & SCI 2 Text)**

**A diary:**
- Recording of the material read.
- Recording the questions generated from by Student J from the text.
- Recording the level of accuracy when answering the ‘end of unit’ questions.

**SOSE and SCI texts Leveled according to Fry’s Readability Chart.**

- SOSE 2 (Year 8 text)
- SCI 2 (Year 8 text)
- Focus planner sheet
- Teaching sessions
- Teaching focus planner
- Quiet room

**Procedure…**

When teaching a learning strategy, teachers should identify the strategy, explain why it is useful, demonstrate its use, give students practice in applying it to a learning situation, and show them how to evaluate its effectiveness and what to do if it does not work.

Before we commenced the reading it was important to have the student thinking about the nature of the material to be read (get his information ready) and be clear as to the reasons the particular text was to be read. It was imperative to for him know the type of genre he was working with as the demands on the reader vary depending on the purpose for reading. When working with an expository text where you are required to seek out information and remember the facts and it is assumed that the student has the strategies in place to achieve the set task.

Students with reading difficulties are often ‘passive’ learners who use very few strategies to promote their understanding of difficult material. Through explicit teaching of the reading strategies necessary to access the material they are given these students can become active, more confident learners.

Student J was told that there were two strategies that would help him to comprehend and recall the factual material that he had to read for school.

We discussed the reasons for reading a factual text such as his SOSE or Science texts and he indicated that it could be to find out information about a particular topic, study for a test or maybe just to find the answer to something he want to know about. We talked about the types of questions found at the end of a unit in a text book and why it was...
sometimes difficult for him to come up with the answers. He felt that he was better at responding to the questions when the teacher asked them orally.

He was encouraged to think about the following questions before he commenced the reading. These questions (Appendix 4) were provided on a cue card for him to refer to before he commenced reading.

- What is my purpose for reading?
- What do I already know?
- What do I think I will find out?

**General Objectives:**
1. To help the student learn how to acquire and retain information from the reading of factual material.
2. To apply the reading strategies of paraphrasing and self-questioning in the comprehension of factual material.

**Specific Objectives:**
1. To learn to paraphrase sentences within the factual text.
2. To be able to apply their knowledge of synonyms to their paraphrasing of the sentence.
3. To be able to explain what they do when they paraphrase,
4. To introduce self-questioning as an appropriate comprehension strategy.
5. To be able to generate an appropriate question for factual material.
6. To be able to explain what they do when they construct a question from a sentence.

Ten teaching sessions were conducted over a four week period using expository texts that were related to the information covered in his SOSE (Studies of Society and Environment) and SCI (Science) classes. The reading material covered the areas of early explorers, world geography, culture, Ecosystems, food chains, food webs and pollution. The reading material was at instructional level for the student so that he could focus on the comprehension strategies being taught rather than decoding. Each session lasted between 30 – 40 minutes

**The lesson Foci:**
- **Lesson 1**
  Explain to the student that he will be working on expository texts so he needs to find the facts about the subject.
  This first session involved modeling and demonstration of the paraphrasing strategy. The learning strategy (paraphrasing) itself must be learned in order to be used. Paraphrasing is personal and represents the construction of meaning. Understanding is putting the ideas in our own words and not repeating the words of the author verbatim. (Book Bridges – A Family Literacy Program– Book 2 – page 86)
• **Lesson 2**  
Review the function of synonyms in paraphrasing and practice substituting synonyms for the appropriate words.

• **Lesson 3**  
Guided practice in reading a sentence and paraphrasing it.  
The student reads the sentence out loud and stops. He then paraphrases the sentence into his own words.

• **Lesson 4**  
Self directed reading and paraphrasing.

• **Lesson 5**  
Teach about the types of questioning we want to focus on; literal questioning (Use question prompts - Who, What, When, Where, Why, and How.)  
Teach the student how to relate the question directly to the paraphrasing of a piece of factual information.

Teacher models the self-questioning strategy after paraphrasing each sentence.  
‘According to Robert Sternberg, the best way for a teacher to go about teaching her students self questioning is to actually model self questioning explicitly. “The modeling of specific teaching and learning strategies are powerful when it involves thinking aloud” (Sternberg, 1996, p.57).’

• **Lesson 6**  
Guided practice in reading, paraphrasing and self-questioning (Question prompts are available for the student to refer to).

• **Lesson 7**  
Guided practice in reading, paraphrasing and self-questioning (Question prompts are available for the student to refer to).

• **Lesson 8**  
Student practices self-directed reading, paraphrasing and self-questioning (Question prompts are available for the student to refer to).

• **Lesson 9**  
Continue self-directed reading, paraphrasing and self-questioning strategies (Student should use the strategies without the use of question prompts).  
Once the student fully grasps the concept of self questioning and gets the idea of the types of questions to be asked, any given question starters must be eliminated from the process of self questioning. Mastery of this learning strategy is solely based on the learner’s ability to formulate his or her own questions. (Wilson & Jan, 1993)

• **Lesson 10**  
Continue self-directed reading, paraphrasing and self-questioning strategies.
Interventions

Results
The influence of paraphrasing and self-questioning on comprehension was examined by comparing comprehension before and after instruction.

This was done by describing the student’s performance on the PROBE reading test. Paraphrasing; this was measured by the number of main points student J was able to identify.

Self-questioning was informally measured by noting the student’s ability to answer his own questions at the end of the text. This informally measured his recall of the facts.

‘End of unit’ comprehension questions: (At the end of each of the SOSE and SCI unit, there are a set of questions. Ten questions from each unit were asked by the teacher and answered by Student J, orally, to monitor how well he understood the material.) This information was graphed to show how effective the strategies were. As the strategies were introduces and Student J took a more active role in his reading, the results show an increase in the amount of information he could retain and understand.

Learning Trends for Student J

Results of the PROBE
Selection of entry point to PROBE was made using the PROBE Determiner and the results of the Woodcock Analysis.

Student J was started at Set 13 Non-fiction where his decoding was 100% correct and comprehension was 80% correct.

The During Test was done after lesson 5 and started at Set 14 Non-fiction where his decoding was 100% correct and comprehension was also 100% correct.

The Post Test started at Set 15 Non-fiction where his decoding was 100% correct and his comprehension was 90% correct.

At Set 16 Non-fiction his decoding was 97% correct and his comprehension was 80% correct.

From the results of the PROBE it would be accurate to say that Student J has improved his reading comprehension and recall of expository texts.
Results of PROBE Testing

Table 2

Graph showing the recall of facts through answering ‘end of unit’ questions.

Table 3

The graphs demonstrate that through the two strategies of paraphrasing and self-questioning, Student J was able to increase his recall and comprehension of expository text.

He was able to paraphrase the text sentence by sentence quite easily and found that after several sessions he was able to paraphrase larger amounts of information with the same accuracy.

Initially the questions generated by student J were relatively simple however as he became more experienced in the strategy the questions were far more succinct. He was able to quickly identify the key concepts and generate the question towards these facts. The more control that Student J had over his reading the greater his recall and understanding was.
Discussion
The data supports the hypothesis that Student J, through paraphrasing and self-questioning, had improved his comprehension of expository texts. He was able to recall facts and give quite detailed explanations for his answers. The strategy was very successful in teaching Student J to think about his own learning. He was able to talk about purpose for reading the text which strategies he would employ to remember the facts.

Implications for teaching practice
The results of this research indicate students with reading difficulties in the middle years of school need to be taught explicitly the strategies necessary to be able to access written material in all subject areas. Teachers need to be aware of the many different strategies that can be taught to these students who are greatly disadvantaged because so much of the information that they need is too difficult to access. Teachers need to provide the necessary strategies to scaffold the knowledge acquisition necessary for these students to succeed in their learning.

Possible Directions for Future Research:
- What effect does learning these reading comprehension strategies have on the self-efficacy of the student?
- How could graphic organizers enhance the retention of facts for these students with reading difficulties?
- How would paraphrasing and self-questioning help in an area such as mathematics?
Bibliography

Articles


Munro, John (2002) Literacy Intervention Strategies. Uni Notes 472697


**Books**

Book Bridges: A Family Literacy Program – Book 2. *Reading Workshops: Section III* Pages 78-86
Appendix 1

Teaching Unit for Paraphrasing and Self-questioning (Generating questions from factual texts)

This teaching unit was devised in association with this students SOSE and Science teachers. It was deemed appropriate that this student work on material that was to be covered in class during the third term. Many of the texts used in Science and SOSE in eight are actually quite difficult for this student as his decoding skills and reading rate are several years behind those of his peers. Because paraphrasing and self-questioning provides such a good scaffold for this student to work with, it was a good test to see how effective the strategies would be on his recall and understanding of the text.

Lesson One
Aim:
- To introduce the strategy of paraphrasing.
- Identify the Key nouns and verbs in each sentence.
- To identify the difference between an expository (factual) text and a narrative.

Materials:
Jacaranda SOSE 2 Studies of Society & Environment. G. Ciavarella and A. Calandra
Chapter 4 The Age of Discovery. Unit 4.1 Before the Adventure Began. Pg 60-61

1. Discuss the purpose for reading this text and how it is different to a narrative text.
2. Discuss what the author’s intent was in writing this text.
3. Talk about the time in history when these adventures took place and from which countries did the come from. Discuss what the world may have been like during these times.
4. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
5. Identify the nouns and verbs as the key words to be focusing on.
6. Teacher reads the first sentence and then models the paraphrasing strategy. (It is important to point out to the student that you should put the information into your own words.)
7. Teacher repeats step 4 several times.
8. Student reads the next sentence and the teacher paraphrases the main point.
9. The teacher reads the next sentence and the student has a try at paraphrasing the main idea.
10. Continue to alternate the roles of reading and paraphrasing to the end of the text.
11. Discuss with the student the main facts he recalls within the text.
12. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)
Lesson Two

Aim:

- To review the paraphrasing strategy.
- To create an atmosphere of active reading through paraphrasing.
- To revise the purpose of an expository text.
- To practice substituting synonyms for appropriate words in the text.

Materials:
Jacaranda SOSE 2  Studies of Society & Environment.  *G. Ciavarella and A. Calandra*  
Chapter 4 The Age of Discovery.  Unit 4.2 *Sailing and the Portuguese*.  Pg 62-63

1. Discuss the purpose for reading this text on the Portuguese and sailing.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Revise the work on nouns and verbs from the previous lesson.
4. Introduce the use of synonyms when paraphrasing.
5. Teacher reads the first sentence and then models the paraphrasing strategy.
6. Student identifies the synonyms that were used. (It is important to remind the student that you should put the information into your own words.)
7. The teacher reads the next sentence and the student paraphrases the main point.
8. Continue to alternate the roles of reading and paraphrasing though the student should be doing most of the paraphrasing by the end of the text.
9. Discuss with the student the main facts he recalls within the text.
10. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

Lesson Three

Aim:

- To practice using the strategy of paraphrasing.
- To encourage active and independent reading.
- To retell the information in each sentence in student’s own words.
- To improve reading comprehension and recall of the facts.

Materials:
Jacaranda SOSE 2  Studies of Society & Environment.  *G. Ciavarella and A. Calandra*  
Chapter 4 The Age of Discovery.  Unit 4.3 *Diaz and da Gama*.  Pg 64-65

1. Discuss the purpose for reading this text about Diaz and da Gama.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Student reads the first sentence and then uses the paraphrasing strategy.
4. The strategy is practiced to the end of the text.
5. Discuss with the student the main fact that he recalls within the text.
6. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

Lesson Four
Aim:
- To use the strategy of paraphrasing whilst reading the text without assistance.
- To encourage independent reading.
- To involve the student actively in their own reading.

Materials:
Jacaranda SOSE 2 Studies of Society & Environment. G. Ciavarella and A. Calandra
Chapter 4 The Age of Discovery. Unit 4.4 Columbus and the New World. Pg 66-67

1. Discuss the purpose for reading this text about Columbus.
2. Discuss where the New World would have been in that point in history.
3. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
4. Student reads the first sentence and then uses the paraphrasing strategy.
5. The strategy is practiced to the end of the text.
6. Discuss with the student the main fact that he recalls within the text.
7. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

Lesson Five
Aim:
- To introduce the strategy of generating questions (self-questioning) from the text.
- To introduce the question prompt card. (Who, What, Where, Why, and How?)
- To establish self-questioning as a reading strategy for the student.

Materials:
Jacaranda SOSE 2 Studies of Society & Environment. G. Ciavarella and A. Calandra
Chapter 4 The Age of Discovery. Unit 4.5 Conquest and Empire. Pg 68-69

1. Discuss the purpose for reading this text on conquest and empire.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Introduce generating of questions (self-questioning) strategy as another way of clarifying the text.
4. Teacher shows the student the question prompt card: Who, What, When, Where, Why, How?
5. Teacher reads the first sentence, paraphrases it and then generates a question from the facts using one of the question starters.
6. Teacher repeats step 4 several times noting to the student how they must also be able to give the answer.
7. Student reads the next sentence, paraphrases it and the teacher generates a question from the facts.
8. The teacher reads the next sentence and the student paraphrases it and generates a question.
9. Continue to alternate the roles of reading, paraphrasing and questioning to the end of the text.
10. Discuss with the student what he recalls as the main facts within the text.
11. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

**Lesson Six**

**Aim:**
- To practice the strategy of self-questioning after each sentence.
- To develop an understanding of the specific purposes of questioning.
- To clarify meaning when paraphrasing through generating questions.

**Materials:**
Jacaranda SOSE 2 Studies of Society & Environment. *G. Ciavarella and A. Calandra*
Chapter 4 The Age of Discovery. Unit 4.6 *Around the World with Magellan*. Pg 70-71

1. Discuss the purpose for reading this text about Magellan.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Revise the strategies of paraphrasing and self-questioning.
4. Student reads the sentences, paraphrases the information and generates a question from the facts.
5. Continue to read, paraphrase and generate questions to the end of the text.
6. Discuss with the student what he recalls as the main facts within the text.
7. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

**Lesson Seven**

**Aim:**
- To use the strategies of paraphrasing and self-questioning (generating questions) after reading each sentence.
- To know the reasons for using paraphrasing and self-questioning as a reading comprehension strategy.
- Record the sentences generated by the student.

**Materials:**

1. Discuss the purpose for reading this text about Ecosystems.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Revise the strategies of paraphrasing and self-questioning.
4. Student reads the sentences, paraphrases the information and generates a question from the facts.
5. Continue to read, paraphrase and generate questions to the end of the text.
6. Discuss with the student what he recalls as the main facts within the text.
7. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

Lesson Eight
Aim:
- To use the strategies of paraphrasing and self-questioning (generating questions) independently after reading each sentence.
- Record the questions generated by the student.
- To have the student answer their own questions about the text.

Materials:
Longman SCI 2 G. Phillips, G. Rickard, K. Johnstone  Chapter 7 Ecology  Unit 7.2
Physical Attributes of an Ecosystems Pg 166-168

1. Discuss the purpose for reading this text about the physical attribute of an ecosystem.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Revise the strategies of paraphrasing and self-questioning.
4. Student reads the sentences, paraphrases the information and generates a question from the facts.
5. Continue to read, paraphrase and generate questions to the end of the text.
6. Discuss with the student what he recalls as the main facts within the text.
7. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

Lesson Nine
Aim:
- To use the strategies of paraphrasing and self-questioning (generating questions) after reading each sentence.
- To create an atmosphere of active reading through self-questioning.
- Record the sentences generated by the student.
Materials:
Longman SCI 2 *G. Phillips, G. Rickard, K. Johnstone*  Chapter 7 Ecology  Unit 7.3  Food Chains and food Webs: Interactions of Life Pg 172-174

1. Discuss the purpose for reading this text about food chains and food webs.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Revise the strategies of paraphrasing and self-questioning.
4. Student reads the sentences, paraphrases the information and generates a question from the facts. The questions
5. Continue to read, paraphrase and generate questions to the end of the text.
6. Student answers the questions he has generated from the text.
7. Discuss with the student what he recalls as the main facts within the text.
8. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)

**Lesson Ten**
Aim:
- To independently use the strategies of paraphrasing and self-questioning (generating questions) after reading each sentence.
- To improve reading comprehension and recall of factual information.
- Record the sentences generated by the student.

Materials:

1. Discuss the purpose for reading this text about the effects of human civilization on the ecosystem.
2. Look at the features of the text (heading and sub-headings) and other visual features such as maps, illustrations and pictures.
3. Revise the strategies of paraphrasing and self-questioning.
4. Student reads the sentences, paraphrases the information and generates a question from the facts.
5. Continue to read, paraphrase and generate questions to the end of the text.
6. Discuss with the student what he recalls as the main facts within the text.
7. These points are noted down as part of the assessment of his recall of the facts. (The points are compared with the actual key points of the text.)
Appendix 2

Fry Readability Chart
Sample analysis of Reading Material (100 words selected from the body of the text)

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Text Title and subject.</th>
<th>Number of sentences in 100 words.</th>
<th>Number of syllables in 100 words.</th>
<th>Estimated grade level.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson 1</td>
<td>Before the Adventure Began. SOSE</td>
<td>4.5</td>
<td>134</td>
<td>Year 8</td>
</tr>
<tr>
<td>Lesson 2</td>
<td>Sailing and the Portuguese. SOSE</td>
<td>5.5</td>
<td>135</td>
<td>Year 7</td>
</tr>
<tr>
<td>Lesson 3</td>
<td>Diaz and da Gama SOSE</td>
<td>6</td>
<td>142</td>
<td>Year 8</td>
</tr>
<tr>
<td>Lesson 4</td>
<td>Columbus and the New World. SOSE</td>
<td>8</td>
<td>150</td>
<td>Year 8</td>
</tr>
<tr>
<td>Lesson 5</td>
<td>Conquest and Empire. SOSE</td>
<td>5</td>
<td>150</td>
<td>Year 9</td>
</tr>
<tr>
<td>Lesson 6</td>
<td>Around the world with Magellan. SOSE</td>
<td>6</td>
<td>138</td>
<td>Year 7</td>
</tr>
<tr>
<td>Lesson 7</td>
<td>Ecosystems SCI</td>
<td>8</td>
<td>160</td>
<td>Year 9</td>
</tr>
<tr>
<td>Lesson 8</td>
<td>Physical Attributes of an Ecosystem. SCI</td>
<td>5.5</td>
<td>140</td>
<td>Year 8</td>
</tr>
<tr>
<td>Lesson 9</td>
<td>Food Chains and Food Webs: Interactions of Life. SCI</td>
<td>5.5</td>
<td>149</td>
<td>Year 9</td>
</tr>
<tr>
<td>Lesson 10</td>
<td>Effects of Human Civilization on the Ecosystem. SCI</td>
<td>6</td>
<td>150</td>
<td>Year 9</td>
</tr>
</tbody>
</table>

Note:
The readability of some of the science material was quite high because of the language used in this subject. It is worth noting though that the student was quite familiar with many of the scientific terms used and didn’t have the decoding problems that I initially anticipated.
### Appendix 3
### Observations

| Lesson 1 | Before the Adventure Began. SOSE | The student was very interested in this unit. He listened intently and was very eager to show how he could paraphrase. At the end of the reading when referring to the questions about the unit he was able to recall most of the facts. |
| Lesson 2 | Sailing and the Portuguese. SOSE | Still very enthusiastic to find out more about the early explorers. The student was able to identify the main idea in his paraphrase. Again there were some quite challenging words that needed clarifying. |
| Lesson 3 | Diaz and da Gama SOSE | The student read confidently as he had to stop after each sentence and paraphrase the facts. He is less anxious about the decoding and more focused on finding the facts. |
| Lesson 4 | Columbus and the New World. SOSE | The student seems to be reading with far more intent and is paraphrasing with confidence. The student indicated that it was slow going when paraphrasing sentence by sentence. He thought he could paraphrase more than one sentence at a time. |
| Lesson 5 | Conquest and Empire. SOSE | The student enjoyed this unit as he had some prior knowledge about the Incas and the Aztecs. He could answer the literal questions after each sentence |
| Lesson 6 | Around the world with Magellan. SOSE | Student J generated questions that showed a good understanding of the material he had read. Used the question prompts as a guide. |
| Lesson 7 | Ecosystems SCI | The scientific nature of the language in this text meant that the reading was quite challenging for student J who has some problems with decoding unfamiliar words. He found the strategies really helped him to recall what the main facts within the text. |
| Lesson 8 | Physical Attributes of an Ecosystem. SCI |
| Lesson 9 | Food Chains and Food Webs: Interactions of Life. SCI |
| Lesson 10 | Effects of Human Civilization on the Ecosystem. SCI |
Appendix 4

Before-reading questions.

- What is my purpose for reading?
- What do I already know?
- What do I think I will find out?

Appendix 5

Question Starters

Who?
What?
Where?
When?
Why?
How?

Appendix 6

Resources Used In the Lessons

  Longman

  Jacaranda