Hypothesis:
Explicitly teaching year 5/6 students who have reading comprehension difficulties, to ask questions about text, and to think out loud and carry on an internal conversation based on these questions while interacting with text, will improve their level of reading comprehension.

Materials
Materials used included the following:

**Formal assessment and evaluation of students:**
- TORCH

**Informal assessment and evaluation of students:**
- Teacher observation of students’ answers to verbal questions at varying levels in the questioning taxonomy
- Students’ written answers
- Discussion between students
- Use of post it notes as the students read.
- Tape recordings
- Observation of students’ as they read.

**Teaching Sessions:**
- Question cue cards – who, what, why, where, how, when, which, huh!.
- Blank tapes
- Tape recorder
- Pencils
- Paper
- Question matrix
- PM Benchmark reading passages
- Quite room – tables chairs
- White board
- Post – it notes
- Multiple copies of articles, books.

**Interventions**

- Teaching self-questioning
  In this approach the students will be taught to generate questions about the text, before, during and after reading. These questions will be generated out aloud initially moving to internalisation of the questioning process so that when the children read text, they formulate questions automatically inside their heads.
• Focused teaching

In this approach the teaching focuses on teaching students specific strategies to help them generate questions in order to clarify the meaning of the text. Specific teaching of the R.A.T. technique occurs. (Read, ask, Talk/Think in your head.)

• Positive feedback

In this approach the teacher positively cues the students when they apply the strategy correctly, saying exactly what they did. E.g. Good readers ask themselves questions like that. That was a great who question.

• Self Talk

In this approach the students were verbalizing what they would do, what they were doing and what they had done as they worked on text. They talked to themselves about the questions they had generated and the answers to those questions.

Guided Reading Lesson Outline

1. The students gather in a quiet room, with chairs around a table. The teacher is part of the group but sits at the head of the table where he or she can be clearly seen by all students.

2. The children each have a piece of prose to read.

3. The teacher introduces the prose by asking questions e.g.
   
   What is the title?
   
   What do you think it is about?
   
   What words might be in the story?
   
   (All questions are teacher generated)

4. The children read the text to themselves.

5. The teacher moves around the students having them read a part out aloud.

6. When all children have completed the reading, the teacher asked questions, literal and inferential, about the text.

7. Students answer some questions orally and some in written form.
8. The students complete a task based on the text.
9. The teacher and students discuss the answers to the questions.
10. The teacher corrects students’ written work.

TARGETED TEACHING

Session 1.

1. The students gather in a quiet room, with chairs around a table. The teacher is part of the group but sits at the head of the table where he or she can be clearly seen by all students.

2. The teacher says to the children:

   *Today we are going to think and talk about what we do when we read.*

   **What do you do when you are given a piece of text to read?**

   S1 – I just read it
   S2 – If there are questions, I read them first and then see if I can find the answers.
   S3 – I just read it
   S4 – I read the title and then the text
   S5 – I look at the heading. I see if the words are hard, then I read it.
   S6 – I read the title and then read the story.
   S7 – I just read it.

   **What do you do if you don’t understand what you are reading?**

   S1 – I just keep going
   S2 – Try to pronounce hard words, re-read the text.
   S3 – Ask the teacher what a word means. Look up the dictionary.
   S5 – Sound out words. Ask for help.
   S6 – Reread the story. Skip words I don’t understand.
   S7 – I’m used to that. I listen to other kids.

   **What do you do if you don’t understand the meaning of a word or group of words in the text?**

   S1 – I skip them
   S2 – Try to pronounce them out loud
   S3 – Look it up
   S4 – Ask the teacher or mum.
   S5 – Sound them out
S6 – Skip words I don’t know.
S7 – I just keep going.

Today we are going to look at some ways to make understanding what you read easier for you. We are going to be explorers because I’ve never used this method before and I’m really excited that you are going to be the first students to use it and you’re going to help me change it and make it work for you. O.K. Here we go! From now on we are going to be the R.A.T.s

The teacher introduces the cue card 1. **R**ead (Title, text, maps
diagrams, pictures, captions)

**A**sk (Questions- who, what, when, why, how, which, huh!)

**T**alk/Think (To yourself, out aloud, to others)

Teacher uses an enlarged copy of a text.
Teacher demonstrates the R.A.T. technique out aloud using a piece of text. (In this case a P.M. Benchmark text, level 28, text called Tracks by the stream was used.)

*Here is a piece of text. I am going to be a RAT! I am going to Read the title. “Tracks by the stream” Now, because I am a RAT, I am going to Ask myself, what might this be about? Now I’m going to Talk to myself about what it might be about.*

Teacher demonstrates this by thinking and talking out aloud.

*I wonder what the tracks are. Where is the stream?*

The teacher invites the students to generate some thoughts and questions out aloud.

*S2 – What kind of tracks are they?  
S4 – They might be car tracks  
S7 – Or animal tracks  
S1 - I wonder if they are human tracks?*

The teacher revises with the students, the R.A.T. technique.

*What did we do first when we became RATS? (Read)  
Then what did we do next? (Ask Questions)  
What do we do last? (Think and Talk)*

This procedure is repeated with 4 different texts. The concentration is only on the titles - reading, asking questions, thinking & talking out aloud.
**Targeted Teaching Session 2**

Teacher led discussion of RAT technique as introduced in session 1.

1. **When we read text, what are we going to do?**

   **What do RATS do when they read text?**

   Student responses included:
   - *Read the title*
   - *Ask what you think it’s about*
   - *Ask other questions*
   - *Talk to yourself about it*
   - *Talk out loud about it.*

2. Teacher explains to the students that they can be RATS when they read a paragraph as well.

3. Teacher demonstrates the technique using the first paragraph of the text “Tracks by the stream”

4. Reads paragraph out aloud. Asks questions – What are pioneers? Where are they? Why are they there? Who are they? How did they get there? Is this an old story or a modern story?

5. Students generate their own questions out aloud.

6. Teacher gives each child cue card 2. On this card are the words who, what, where, when why, how, is, where. There is a space at the bottom to add other words. The teacher explains to the students that these are question starters. The students are to use these as book marks and when they are reading text they can use the card to help them ask questions as they read. Teacher points out that the T in RAT can stand for think as well as talk. The teacher explains to the students that they can think the questions in their head.

7. The students practice this technique using paragraph 2 & 3 of the text.

8. General discussion about how the children are feeling about using the R.A.T. technique.

(Students were very positive about the use of the technique)
**Targeted Teaching Session 3**
Session 3 followed the format of session 2 i.e. recapitulation, teacher modeling, student practice of self generated questioning and using the RAT technique, teacher questioning and celebration of learning.

In this session the teacher introduced a more difficult text which was the basis for study in the classroom. The text was going to be used in the integrated studies program during the next week. The text was, “Making of Australia – The coming of the white man.”

This text is in a booklet form and includes maps, diagrams and pictures. The teacher demonstrates how the RAT technique can be applied to each of these. Students then practice the technique. The teacher continues instructing the students in the use of the cue cards. The teacher develops questioning techniques and awareness by asking questions of the students, e.g.

**What questions will you ask?**
**What sentence will answer a why, who, where, which, what, how, when question?**
**What did you do as you read?**
**What questions will you ask yourself about the map, diagram, or picture?**
**What questions do you have in your head?**
**Where did you get that question from?**

(It was obvious from the student’s questions and responses that they were asking more complex questions and thinking about the text as they read.)

**Targeted Teaching Session 4 & 5.**
These sessions followed the previous format of recapitulation, teacher modeling, student practice of self generated questioning and using the RAT technique, teacher questioning and celebration of learning.

**Targeted Teaching Session 6**
This session followed the previous format of recapitulation, teacher modeling, student practice of self generated questioning and using the RAT technique, teacher questioning and celebration of learning. However, during the teacher modeling segment, the “HuH!” post-it-note was introduced. This is a modification of an idea put forward by Stephanie Harvey and Anne Goudvis(2000). As the students come to a word, phrase, sentence or idea that doesn’t make sense to them they mark it with a Post – it – note on which is written the word ‘Huh!’ The children use the RAT technique and if they still don’t understand they read on. If later in the text the meaning becomes clear, they move the “Huh!” to the area where they have found clarification and draw a light bulb on the note. This is not to be seen as separate to the RAT technique but part of it when students are dealing with longer and more complex texts. It recognizes that students learn in different ways and gives them a concrete image and reminder of what reading is all about i.e. making sense of text. It is very much part of the T of RAT, in that it supports the talking to oneself and the thinking about text.
Targeted Teaching Sessions 7 – 10

These sessions followed the previous format of recapitulation, teacher modeling, guided student practice of self generated questioning and using the RAT technique, including the “Huh!” cue strategy, teacher questioning and celebration of learning.