

Explicit teaching of visualising to a whole class of Prep students will improve listening comprehension and oral retell.



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ABSTRACT

Comprehension is an area of difficulty experienced by a growing number of students from lower primary to high school. They struggle to recall information and answer questions and are not engaged with texts.

The hypothesis of this study is that explicit teaching of visualising to a whole class of Prep students will improve listening comprehension and oral retell. There is much research that suggests, teaching of various strategies effects comprehension. Visualising is such a strategy that enables the reader or listener to engage with texts by creating a mental picture to derive meaning and demonstrate comprehension. It immerses the student in the text, maximising their comprehension and enjoyment.

In this study, all students in a Prep class were taught to visualise and create mental images while listening to a text. They were taught to draw on their prior knowledge to create mental images, change their images as the story evolved and to recall information and to gain greater comprehension. The effectiveness of the study was assessed using two Prep groups: an intervention group who received intervention and a control group from another class to compare progress.

The study's result supports the hypothesis showing a growth in students' ability to visualise and recall information. It also demonstrates the importance of vocabulary in comprehension. The findings suggest that explicit teaching of the visualising strategy is a great benefit to students' by improving comprehension, self-efficacy, engagement and enjoyment of the text.

INTRODUCTION

Reading comprehension is a struggle for many primary and high school students (Tovani, 2000). A growing number of students see reading as an arduous undertaking (Brinda, 2007). Lower and middle primary students also display difficulty in comprehension when listening to texts. These students enjoy listening to fictional and non-fictional texts. However, when asked to retell or answer questions regarding a text they have listened to, they have difficulty demonstrating adequate comprehension of the text.

Bell (1991) states that the purpose of reading and listening is to gather meaning, to understand, to analyse and to form conclusions. When comprehending, readers should not only be thinking about what they are reading, they should also be constructing meaning and building knowledge (Goudvis & Harvey, 2000; cited in Nelson, 2005). Brinda (2007) argues that reading is more than acquiring information and recording facts. Sadoski & Paivio (2001) and Sumara (2002) (cited in Brinda, 2007) believes that students have to recognise that reading provides them with great opportunities to make connections, to visualise, to understand, to deliberate and to find enjoyment. Brinda (2007) quotes Somerset Maugham (1939) who believed that reading was one of lives greatest pleasures.

From an early age students are taught strategies to decode and read texts. Most lower and middle primary students are able to successfully decode texts that are at a level appropriate for their age and some far exceed this level. But many of these students are not able to make sense of what is being read (Tovani, 2000) and struggle to recall information or to demonstrate comprehension, suggesting the link between reading and comprehension are not adequately emphasised. Tovani (2000, p.16) argues that students experience difficulty with understanding as they do not know how to “go beyond the words” and lack strategies to make sense of texts. This not only applies to reading but when listening to texts as well.

Bower (1990; cited in Bell, 1991) states that language comprehension is based on mental images created by the reader or listener while reading or listening to another. Bell (1991, p.14) believes that “imaging is a sensory link to language and thought” and argues that there is much evidence that supports the link between reading comprehension and mental imagery. She argues further that the mental imagery is crucial to language comprehension and quotes Aristotle who said, “It is impossible even to think without a mental picture”. Visualising or creating mental images provides the reader or the listener with an “internal blackboard or a personal movie player” that assists with comprehension (Douville, 2004, p. 36). Menner (2007) supports the notion that visualising is fundamental to deep comprehension of texts.

Keene and Zimmermann (1997; cited in Menner, 2007) believe that students should be explicitly taught strategies that empower them with the skills for comprehension. Pressley’s (2001; cited in Donnelly, 2007) research identifies a number of strategies that can be taught explicitly in order to improve students’ reading comprehension. These include teaching of prediction, analysis, questioning, visualisation and paraphrasing. Similarly, Goudvis & Harvey’s (2000; cited in Nelson, 2005) research also supports the notion that teaching students visualising improves their level of comprehension. Munro (2009) believes strategies such as visualising assists readers with comprehending while reading and for inferential and evaluative comprehension after reading. Visualisation also enables students to link receptive language to and from prior knowledge, make links to

their own experiences and make connections and to create and retain information in short and long term memory (Bell, 1991; Munro, 2009).

Nelson (2005) on completing her intervention noticed three areas of change in the participants' abilities: students' answers to questions were more in-depth; students were able to articulate their personal opinions more readily; and students attitude towards reading improved. Nelson (2005) concludes her findings by stating that the visualising strategy has helped improve her participants' ability to comprehend, to infer and to evaluate and most importantly they demonstrate a greater enjoyment when reading.

The process of visualising or forming mental images is generally known as the practice of creating mental pictures in ones mind Douville, 2004; Goudvis & Harvey, 2000; cited in Nelson, 2005). Although there is much research that supports the benefits of visualising across the curriculum, it is not a strategy taught explicitly by many (Douville, 2004). Visualising is an essential part of gaining an in-depth understanding of texts (Menner, 2007). "Proficient readers use images to immerse themselves in rich detail as they read. The detail gives depth and dimension to the reading, engaging the reader more deeply, making the text more memorable" (Keene and Zimmerman 1997, p. 141; cited in Menner, 2007). Oliver (1982; cited in Bell, 1991) concludes his research findings by stating that elementary school teachers should help develop in their students the skill of visualising as a vital strategy for improving comprehension.

The current study aims to investigate the effect of teaching the visualisation strategy to a whole class of students in their first year of schooling. The study will focus on students' ability to use visualising and metal imagery to assist in recalling information and oral retelling and thereby improving comprehension, engagement and experience greater enjoyment when reading.

The hypothesis of this study is that explicit teaching of visualising to a whole class of Prep students will improve listening comprehension and oral retell.

METHOD

Design:

This study uses a case study OXO design in which the gains in listening comprehension and the ability for oral retell are monitored following the explicit teaching of the visualising strategy to a whole class of Prep students with varying comprehension and retell abilities. In the study, the performance of an intervention group (with intervention) and a control group (without intervention) are compared.

Participants:

All participants are Prep students who attend the same primary school and are aged between 5 and 6 years. The school has a large student population and represents many cultures and backgrounds.

The study comprised of two students groups: an intervention group and a control group. All students in a Prep class were involved in the teaching process (intervention class). Six students with varying abilities and needs that formed a mixed ability group were selected from the intervention class for the intervention group. The control group consisted of six students of mixed ability from another Prep class, in the same school. Each group was limited to six students due to difficulties in obtaining consent from more control group parents for their children to participate in the study. The groups were primarily based on students' ROL scores and their ability for oral retell and comprehension displayed during classroom discussions. Participant details are shown in Table 1.

Student	Age in months on 30/4/2010	Gender Male=0 Female=1	ESL Yes=1 No=0	ROL Max=42	Oral retell and comprehension ability displayed during Class Discussions Poor/moderate/good/excellent
Intervention Group					
I-A	68	1	1	12	good
I-B	74	1	0	32	good
I-C	72	0	0	33	excellent
I-D	67	0	0	17	poor
I-E	71	1	0	13	poor
I-F	64	0	1	11	moderate
Control Group					
C-G	61	1	0	6	poor
C-H	66	0	1	16	good
C-I	73	1	0	10	poor
C-J	67	0	0	22	excellent
C-K	64	1	0	18	good
C-L	73	1	1	21	excellent

Table 1: Participant Characteristics Table

Materials:

The following materials were used for the study:

- Listening Comprehension test: used to assess students' pre and post comprehension levels. The passage on the test is read to students and students retell the story orally. A two part scoring system is included on the test.
- Visualising Task & scoring sheet (Appendix A) (adapted from John Munro's Visualising Test & scoring): used to assess students' pre and post visualising skills and comprehending skills while listening to a story. A story is broken into segments of one or two sentences. Each part is read to the student and asked to visualise what is heard. They then have to draw a picture and orally articulate what was heard. The scoring schedule is included in the test.
- Self-efficacy Scale- ERIK: used to assess students' pre and post self-efficacy with regard to reading. The test consists of two parts. When administering the first part of the questionnaire students have to point to a face that best describes their answer. In the second section students have to select the answer that best describes their reading strategies.
- Record of Oral Language: used to pre-test students' abilities to remember oral detail and language performance.
- Alternate Record of Oral Language: used for post test students abilities to remember oral detail and language performance.
- 2 Balloons: tactile objects to assist with visualising.
- 2 Mystery Boxes and two different objects (2 of each type) to use in the Mystery Boxes: in this study two soft balls and two metal spoons were used.
- Cue cards: image of child listening, image to prompt visualising, image of child talking (Appendix B).
- Sentence Starters (Appendix C)
- Descriptive Sentences (Appendix C)
- Nursery Rhymes (Appendix C)
- Picture Story books (Appendix C)

Procedure:

All students in the control and intervention groups were pre-tested prior to the teaching unit. Each student was individually tested and the tasks were administered to all students in the following order: Listening Comprehension test, Visualising Task, Record of Oral Language and the Self-efficacy Scale. The duration of each testing session was approximately thirty minutes. Students were tested in a quiet room adjacent to the classroom.

At the conclusion of pre-testing the students in the intervention group were involved in a ten lesson teaching unit (Appendix C). The sessions were conducted every day over a two week period. Majority of the lessons in the study were carried out in the normal classroom environment during the morning Literacy Block, as whole class teaching sessions. However, these sessions can occur at any time during the school day. In this study the sessions were conducted during the Literacy Block as Prep students' tend to focus better in the morning. Sessions 4 and 6 were conducted in the afternoon as games to help students realise that visualising is not restricted to reading or writing times but can be used when listening to anything at anytime.

The teaching sessions in the study began with the use of tactile materials and then on to familiar ideas and topics. The strategy of visualising was first modelled by the teacher. Students were then scaffolded to practise visualising themselves. Scaffolding was gradually faded to encourage students' independence.

In the first session students were given a balloon to touch and feel. Thereafter they were guided and directed on how to make a movie or a picture in their minds. They were then introduced to the term visualising and asked to discuss their opinions on scenarios with and without visualising. At the beginning of each subsequent session students had to reflect on and discuss what they had learned in the previous lesson. At the end of each lesson students had to reflect on and discuss what they had learned in that session, what they did well and what they could do better next time.

In the second session students were introduced to two mystery boxes (two shoe boxes with a flap cut out so that hands can be put into the box without opening the lid) to assist in visualising. Two mystery boxes were used simultaneously as the session included the whole class and helped students stay focussed. It also reduced the time it took for all students to touch and feel the "mystery item".

Sessions three and four focussed on students visualising using sentence starters and sessions five and six focussed on students visualising using descriptive sentences. As the sessions progressed the details given increased in complexity. In the next two sessions nursery rhymes were used as stimulus for visualising. Nursery rhymes were used at this stage of the study as they coincided well with the curriculum of the Prep level in the school. In the final two sessions students listened to two picture stories. Prior to reading the texts the students were reminded to get their knowledge ready for listening. Cue cards were used to remind students to listen, visualise/imagine and then to talk about the movie or picture they created in their minds.

At the conclusion of the teaching unit, post-testing was conducted in a similar manner and taking approximately the same duration as the pre-testing. All data collected was tabled and graphed in order to analyse and assess the effectiveness of the teaching unit.

A Student's ability to visualise was established by using the Visualising Task's drawings and explanations. The Listening Comprehension test and the Visualising Task results were analysed to determine whether or not by improving visualising, listening comprehension and oral retell improved.

RESULTS

Group trends

The detailed test scores for each student are located in Appendix D. Using that data, the mean/average values for each stage of a test is shown below in Table 2.

	Mean/Average of ROL			Mean/Average Listening Comprehension			Mean/Average of Visualisation Task			Mean/Average of Self-efficacy Scale		
	PRE	POST	Growth %	PRE	POST	Growth %	PRE	POST	Growth %	PRE	POST	Growth %
Intervention Group	19.67	24.17	23	5.17	15.83	206	18.67	28.17	51	53.5	59.33	11
Control Group	15.5	16	3	8	8.33	4	15	17.17	14	50.5	52	3

Table 2: Mean Scores for Pre and Post Tests Conducted and Corresponding Percentage Growth

Table 2 shows the pre and post mean scores for the four tests conducted in the study. The data indicates an overall improvement in the post-test means when compared with the pre-test means for each test for both groups. The data also indicates that there is a greater improvement in each of the post-test results in the intervention group.

The intervention group's ROL (Record of Oral Language) pre and post-test means are both higher than the pre and post-tests means of the control group. As shown on Table 2, the percentage growth of 23% for the intervention group is much greater than the percentage growth of 3% for the control group.

As Table 2 shows, the Listening Comprehension pre-test mean for the control group was higher than that of the intervention group. However, after visualising intervention, the post-test mean of the intervention group improved by 206% compared to 4% for the control group. The large improvement by the intervention group resulted in a higher mean score for the intervention group than the control group.

The Visualisation Task results on Table 2 demonstrate that both groups' means have increased at the post-test. In this test the intervention group experienced a 51% increase in the mean whereas the control group experienced an increase of 14%.

The Self-efficacy Scales' post-test column shows the control group mean has improved by 3% whereas the intervention group has improved by 11% showing a greater increase in the Self-efficacy Scales scores of the students in the intervention group.

Figures 1-4 depict the detailed pre-test and post-test scores of the individual students in both groups. The data used to create these figures are located in Appendix D.

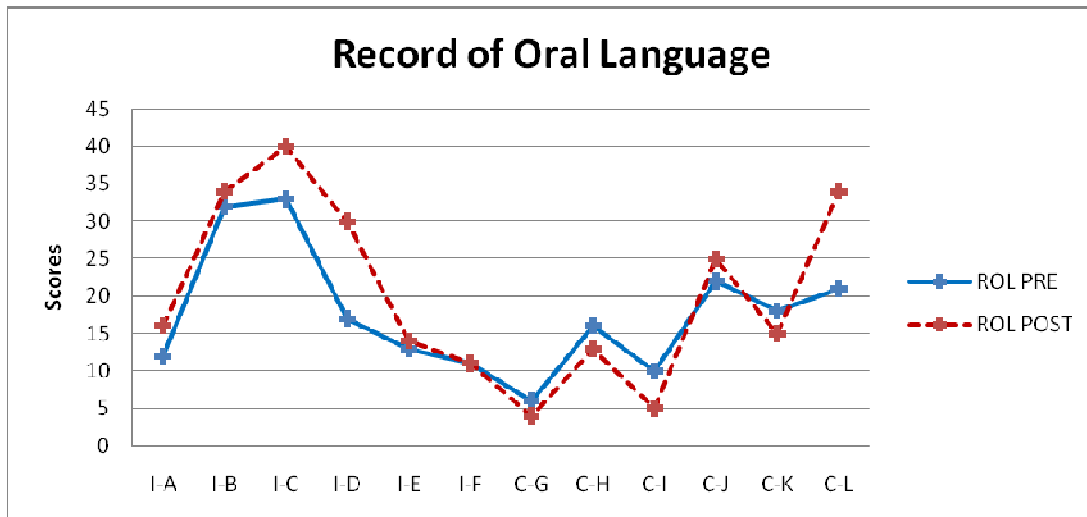


Figure 1: Individual Pre and Post ROL Scores for all Students

Figure 1 demonstrates the pre and post ROL scores for the students in intervention group (students I-A through I-F) and control group (students C-G through C-L) respectively. Two students (I-C and I-D) in the intervention group show a marked improvement over the duration the study. The other students in the group show marginal or no improvement. The improvement of the two students in the intervention group account for most of the 23% mean improvement. Two students (C-J and C-L) in the control group show an improvement in their ROL scores but the other four students' ROL scores have regressed between 19% and 50% as recorded in Appendix D.

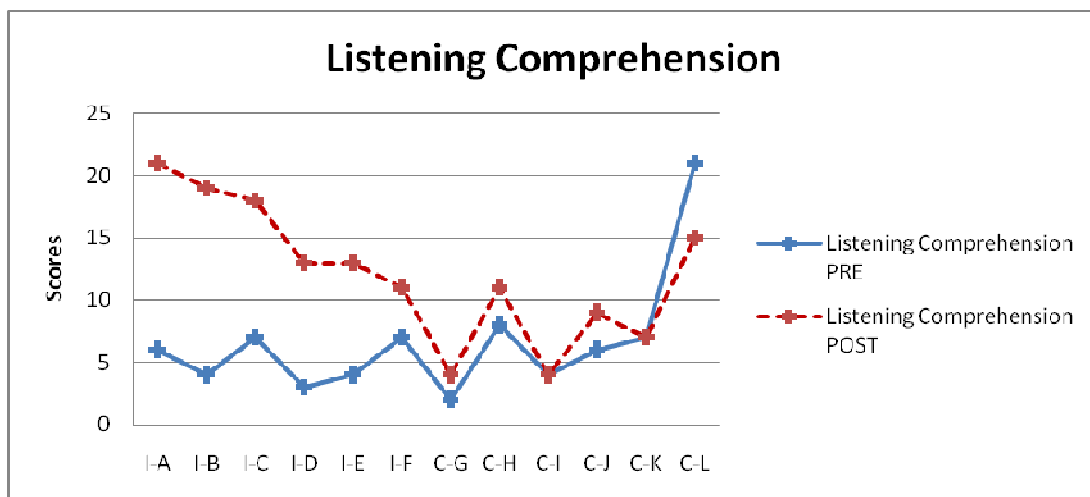


Figure 2: Individual Pre and Post Listening Comprehension Scores for all Students

The Listening Comprehension scores for the intervention group and control group students are shown in Figure 2. It indicates that the Listening Comprehension scores for each of the students in the intervention group has improved over the duration of the study. The mean improvement of this group is 206% as indicated in table 2. This high value is the result of the very large improvement of scores for at least 3 of the 6 students. This is contrasted with the marginal improvement in the Listening Comprehension scores of three students in the control group. It is also noteworthy that one student in the control group has regressed by 29% (Appendix D).

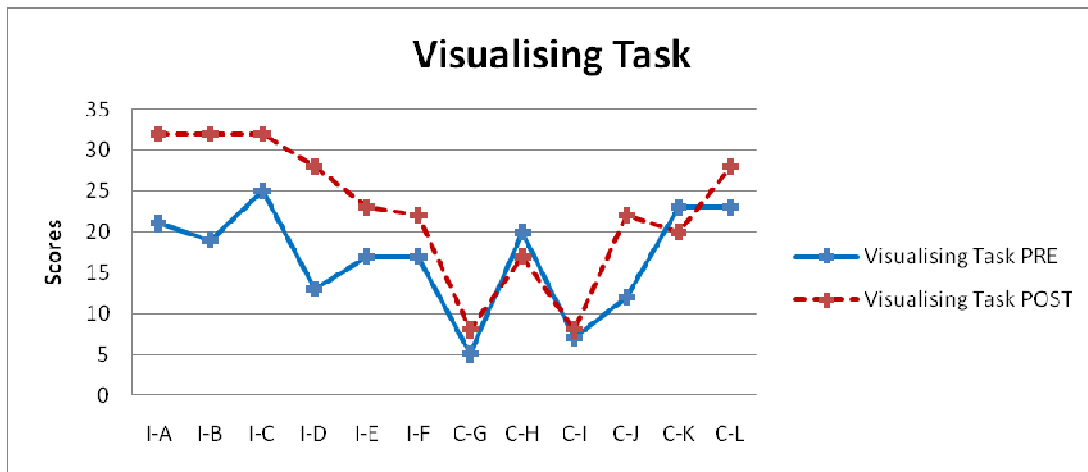


Figure 3: Individual Pre and Post Visualising Task Scores for all Students

Figure 3 displays the Visualisation Task scores for the intervention group and control group students. The mean improvement for the intervention group is 51% (Table 2). The mean post-test Visualising Task scores for each of the students in the control group rose by 14% (Table 2). Figure 3 shows that only one student (C-J) in the control group appears to have had a large effect on that group’s mean score. Two students appear to have regressed.

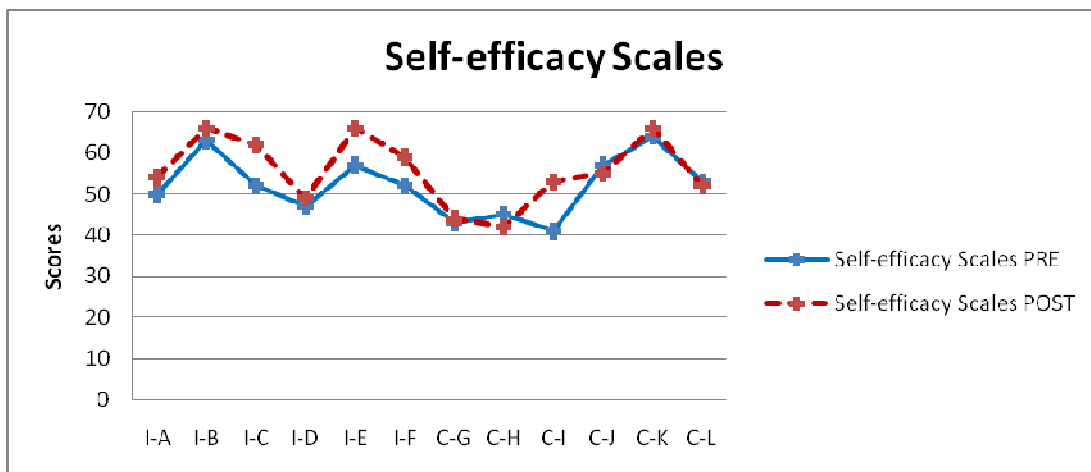
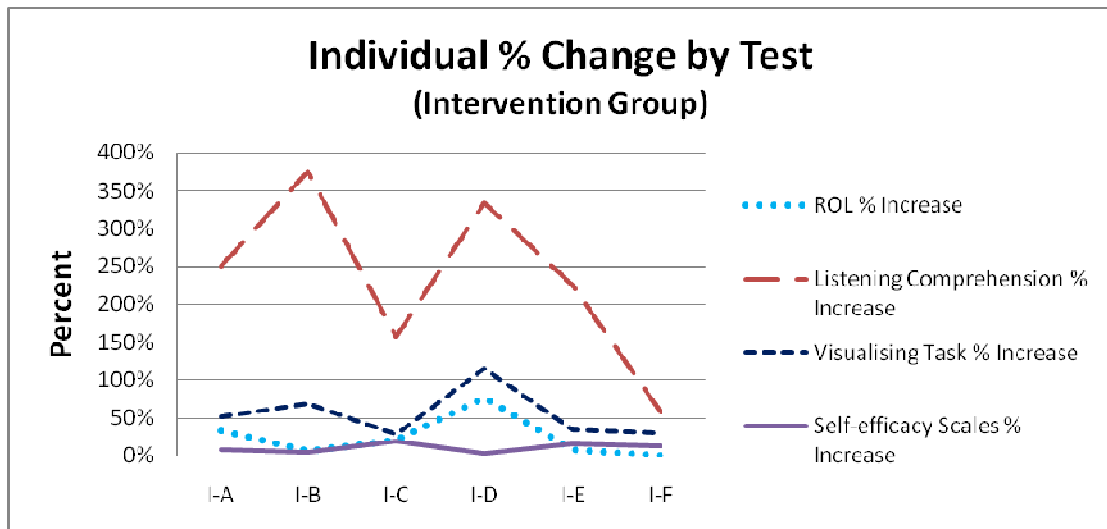


Figure 4: Individual Pre and Post Visualising Task Scores for all Students

Figure 4 shows the spread of Self-efficacy Scale scores for both the intervention and control group students. The mean increase in the scores of the intervention group is 11% and 3% for the students in the control group (Table 2). Figure 4 also shows that the scores of four of the students in the intervention group played a large part in 11% increase. For the control group, one student appears to have made a 29% improvement (Appendix D), however this appears to be offset by three students who show a small decrease in their scores (Figure 4).



Fig

Figure 5: Individual % Change by Test for the Intervention Group

Figure 5 above shows the percentage change in scores for each test for students in the intervention group. Each student has improved or stayed the same in all their post-test scores and most notable is their improvement in Listening Comprehension scores. Students in the control group have made fewer improvements compared to their peers in the intervention group. As Figures 1, 2, 3 and 4 indicates the control group’s post-test scores for all tasks are scattered, where some have made improvements and others’ scores have regressed. The results for the ROL, Listening Comprehension and Visualising Task for the two groups support this study’s hypothesis that explicit teaching of visualising to a whole class of Prep students will improve students’ listening comprehension and oral retell.

Learning Trends for Individual Students

Student I-A

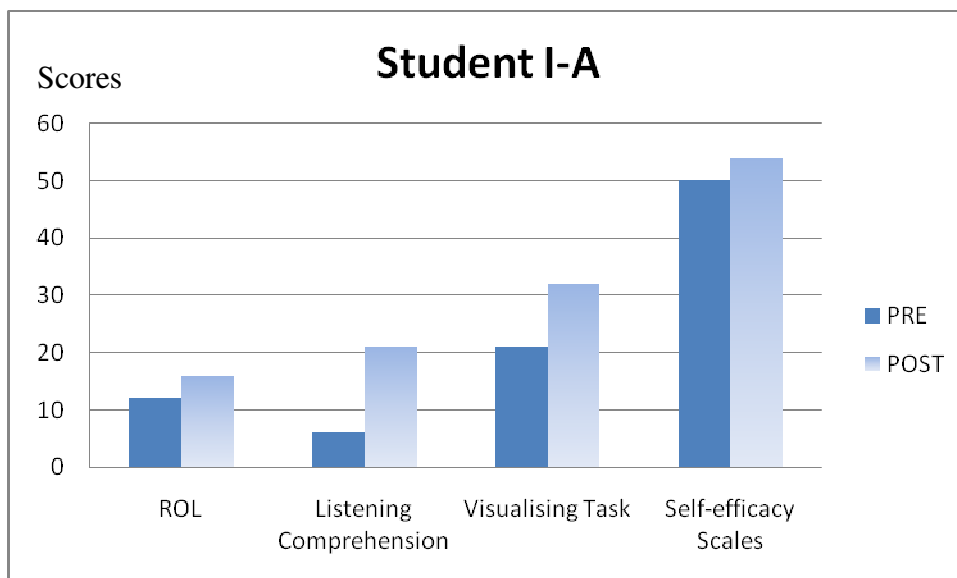


Figure 6: Pre and Post Test Scores for Student I-A

Student	% Growth - ROL	% Growth - Listening Comprehension	% Growth - Visualisation	% Growth - Self-efficacy
I-A	33%	250%	52%	8%

Table 3 Percentage Growth in Each Test for Student I-A

Student I-A is a quiet but confident student. She participates in class learning activities enthusiastically and is eager to learn. She is an ESL student who has difficulty with the use of pronouns when speaking. She was very confident during the post-testing and was able to retell considerable amount of detail during the Listening Comprehension test. As Figure 6 shows, all her post-test task scores have improved compared to her pre-test scores of the same tests. During the ROL task, although her responses were fluent, she had difficulty repeating the sentences with grammatical accuracy as the sentences became more complex. Although her ROL post-test score of 16 (Figure 6) is below the post-test mean of the intervention group her post-test score has improved by 33% (Table 3).

Student I-B

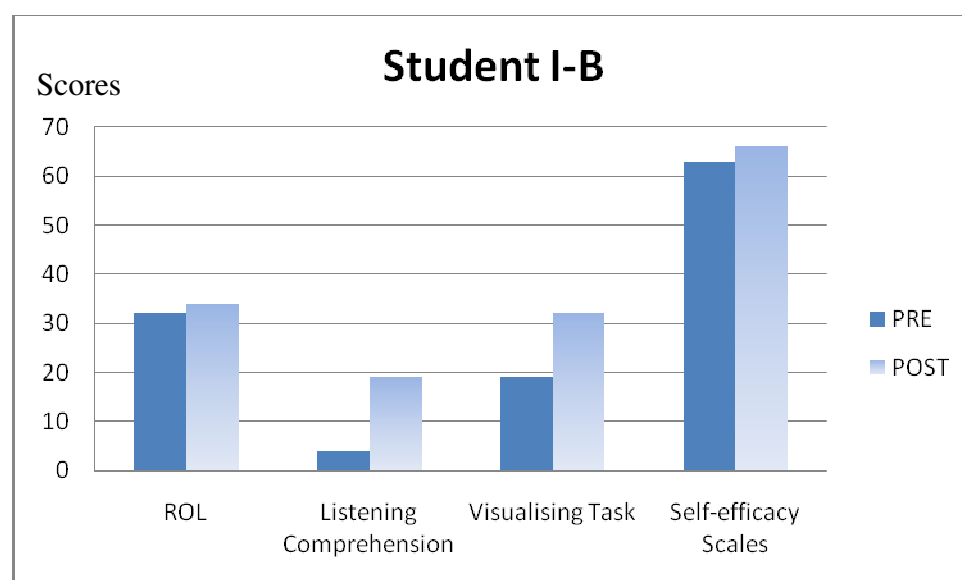


Figure 7: Pre and Post Test Scores for Student I-B

Student	% Growth - ROL	% Growth - Listening Comprehension	% Growth - Visualisation	% Growth - Self-efficacy
I-B	6%	375%	68%	5%

Table 4 Percentage Growth in Each Test for Student I-B

As Table 4 indicates, over the period of the study, Student I-B's Listening Comprehension and Visualising Task scores have improved greatly. Her oral retell of the Listening Comprehension text contained many details as did her drawings during the Visualising Task. Although her ROL post-test scores have only increased by 8% (Table 4) her score of 34 (Appendix D) is well above the post-test mean of the intervention group. Student I-B had a high self-efficacy at the beginning of the study (Appendix D). As Figure 7 shows her self-efficacy has grown with her ability to visualise.

Student I-C

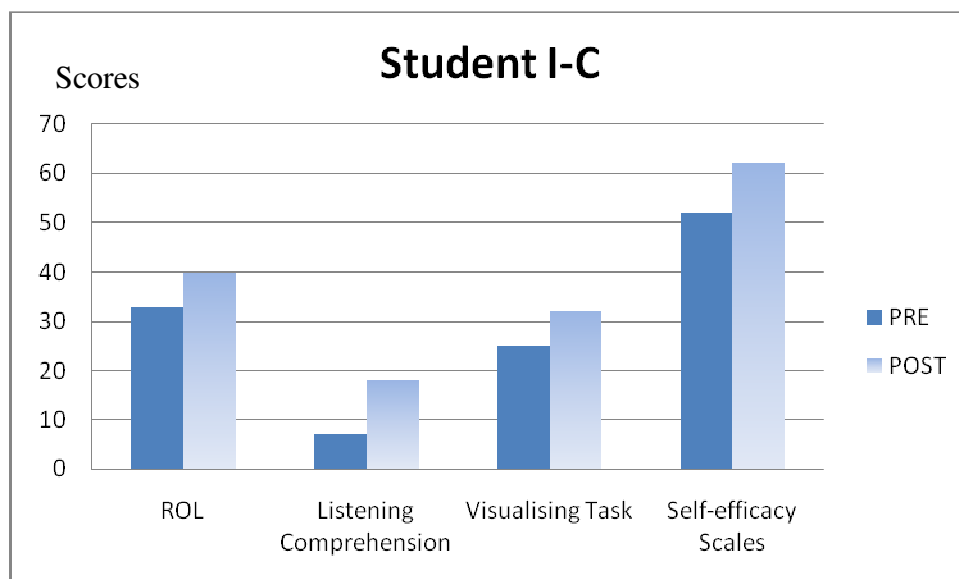


Figure 8: Pre and Post Test Scores for Student I-C

Student	% Growth - ROL	% Growth - Listening Comprehension	% Growth - Visualisation	% Growth - Self-efficacy
I-C	21%	157%	28%	19%

Table 5 Percentage Growth in Each Test for Student I-C

Student I-C missed 3 out of the 10 teaching sessions on visualising due to illness. However he has shown considerable growth in all areas (Figure 8). In particular his ability to retell information on the Listening Comprehension test was noteworthy. As Table 5 demonstrates his scored 21% higher in his post ROL, scoring 40 out of a possible 42.

Student I-D

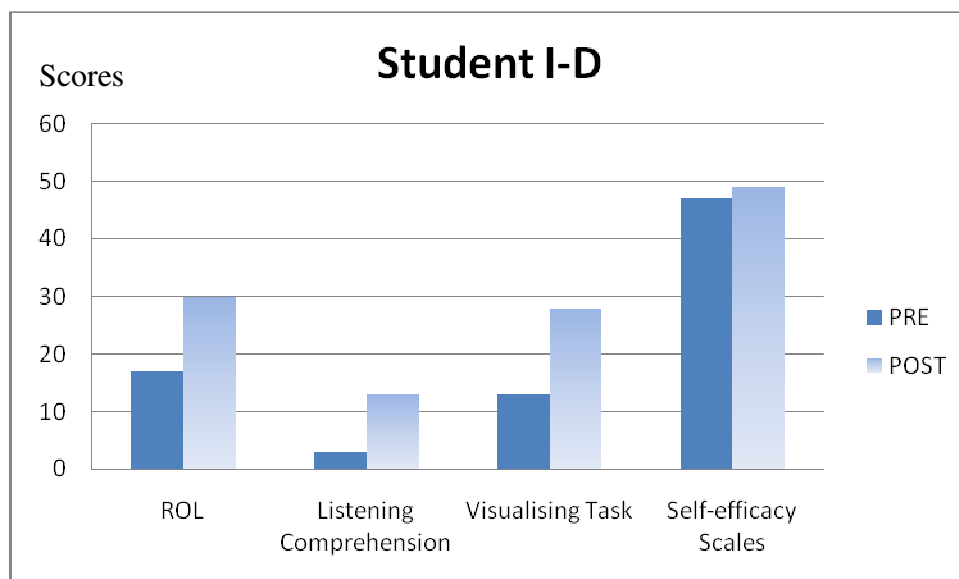


Figure 9: Pre and Post Test Scores for Student I-D

Student	% Growth - ROL	% Growth - Listening Comprehension	% Growth - Visualisation	% Growth - Self-efficacy
I-D	76%	333%	115%	4%

Table 6 Percentage Growth in Each Test for Student I-D

Student I-D is a quiet student who normally does not make contributions to class discussions unless called upon. During the visualising sessions he enthusiastically participated in the activities, at times letting his imagination get away from him. As Table 6 indicates, he has made substantial gains in the post-test scores in the ROL, Listening Comprehension and Visualising tasks. Although his Listening Comprehension score is still below the mean post-test score for the intervention group, his Listening Comprehension score has increased by 333%. His self-efficacy is still the lowest in the group (Appendix D).

Student I-E

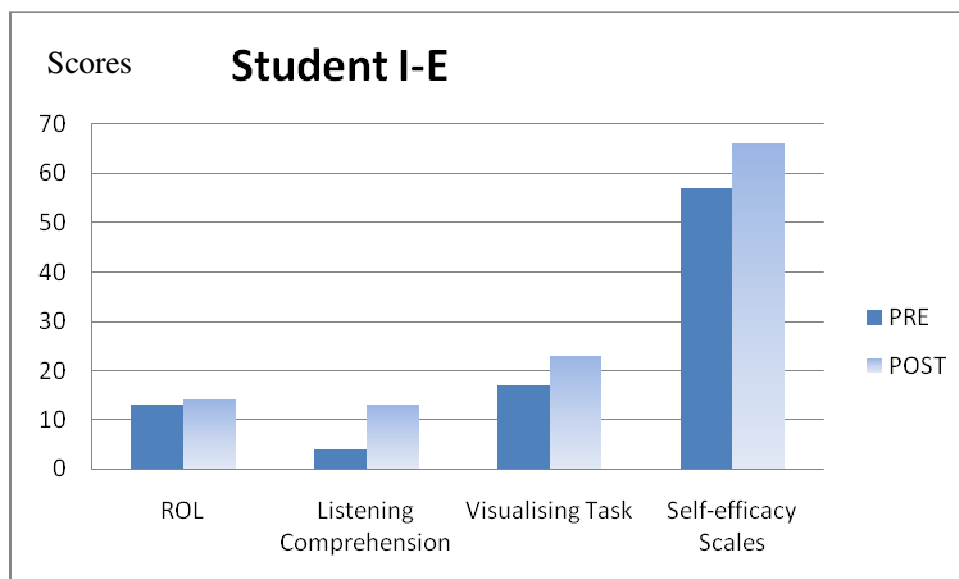


Figure 10: Pre and Post Test Scores for Student I-E

Student	% Growth - ROL	% Growth - Listening Comprehension	% Growth - Visualisation	% Growth - Self-efficacy
I-E	8%	225%	35%	16%

Table 7 Percentage Growth in Each Test for Student I-E

Student I-E is a quiet student who has severe language difficulties. At the beginning of the teaching sessions she was reluctant to participate in discussions or share her opinion with the class. But as the sessions progressed she became more enthusiastic during the sessions. Although the data in Appendix D indicates that her post-test scores for the ROL, Listening Comprehension and Visualising are below the post-test mean for the intervention group, Figure 10 shows she has made progress in all areas of testing. Her Listening Comprehension has increased by 225% (Table 7) and her self-efficacy is at the maximum score of 66 (Appendix D).

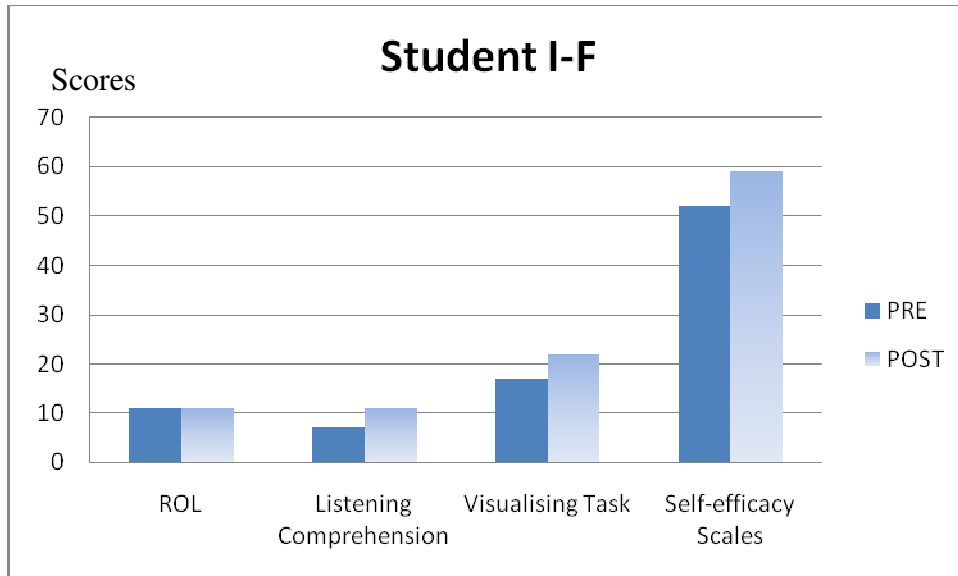


Figure 11: Pre and Post Test Scores for Student I-F

Student	% Growth - ROL	% Growth - Listening Comprehension	% Growth - Visualisation	% Growth - Self-efficacy
I-F	0%	57%	29%	13%

Table 8 Percentage Growth in Each Test for Student I-F

Student I-F is a confident student and he is eager to learn. He readily contributes to class discussions. He is a student who comes from a non-English speaking background. He has a limited vocabulary and he tends to use incorrect grammar when expressing his thoughts and ideas. As shown in Figure 12 and Table 8 he has made improvements in his listening comprehension and visualising. He had difficulty with the correct use of pronouns during the ROL and his score has remained the same.

As demonstrated by the Figures 6 – 11 and Tables 3 – 8 it can be said that the individual learning trends of the intervention group students support the hypothesis of this study that explicit teaching of visualising to a whole class of Prep students will improve their listening comprehension and oral retell.

DISCUSSION

When reflecting on the average results as shown in Table 2 it can be said that the various strategies taught in both the intervention and control classrooms have had a positive impact on the listening comprehension and oral retell of both groups.

Although the control group shows an improvement as a whole, on closer inspection of individual performances, one can say that the strategies adopted in the control classroom have had little or no impact on improving the scores of about half the students' listening comprehension and oral retell. On the other hand, explicit teaching of visualising in the intervention class has resulted in improving the listening comprehension and oral retelling ability of all students in the intervention group (Figures 2 and 3). Hence, it can be said that the results support this study's hypothesis that explicit teaching of visualising to a whole class of Prep students will improve students' listening comprehension and oral retell.

This study supports the findings of Nelson (2005) who noted that students' responses after the intervention had become more detailed and insightful. This is reflected in the intervention group's improved ability to recall details of what they had listened to. When listening to texts students were able to visualise images and change the created images to include new information. Students I-A, I-B and I-C when reflecting on what they had learned and what they would like to better, on a number of occasions, stated that they had to remember to change the movie in their minds as they listened to a story. It is interesting to note that the students were actively comparing the story they were hearing with the visualised image. As the story progressed they noticed the disconnection between the image in their minds and the progression in the story. They then made a mental effort to update the image to reflect the new state of the story. These students' high scores support Bell's (1991) argument that mental imagery is crucial to language comprehension and Menner's (2007) notion that visualising is fundamental in deep comprehension of texts.

Student I-D who displayed a vivid imagination at times, conjured up images in his mind that diverged from the story and was reminded by his peers that he had to "use the words of the story to make the movie". Student I-D later commented that he could "rewind the movie" when he wanted to recall information. The intervention group's ability to effectively visualise by creating images and then to utilise the images created to recall information is reflected in their results of the Listening Comprehension and the Visualising tasks. Most importantly, students were also able to voice their thoughts on how to create images and how to recall information from internalised images.

Studies show a high correlation between vocabulary and comprehension (Pressley, 2001; cited in Donnelly, 2007). This was noticeable in students I-E and I-F during the Visualisation Task. Student I-E experiences severe language difficulties. During the Visualising Task her drawings were detailed and demonstrated that she understood many sentences of the text but at times did not have the appropriate vocabulary to express herself correctly. On one occasion she was required to draw and describe, "The bike track became narrow and twisted". In spite of repeating the sentence and emphasising "track" in case she miss-heard, she drew a truck and said, "The truck became twisted". Her drawing and description were based on her mapping of what she heard, to her limited vocabulary. She did not understand the word "track" and mapped it to the closest word she knew which was "truck". She did not think to ask what track meant. Student I-F too has a

limited vocabulary and stated that he didn't know what words such as chatting, track and stone meant and was unable to comprehend the associated sentences accurately.

Student I-C's results in Listening Comprehension and Visualising tasks have increased in the post-test but in comparison to the results of students I-A and I-B he does not seem to have made as considerable an improvement as expected (Figures 2 and 3). Some contributing factors might be: has he reached his potential in this area at this time or could it be a more simplistic reason in that he attended only 7 out of the 10 teaching sessions on visualising?

Students I-A, and I-E's post ROL scores have improved marginally and student I-F's score has remained the same. This is not a surprising outcome as all these students experience difficulty with grammar. Student I-A displayed difficulty as the sentences became more complex. Students I-E and I-F demonstrated difficulty with the correct use of pronouns and tenses. The result highlight the need for continued explicit teaching of the use of pronouns and simple grammatical features.

Keene and Zimmerman (1997; cited in Menner, 2007) states that visualising enables the reader or listener to immerse themselves into a text and gain more enjoyment. This was apparent during the intervention sessions where the students became more engrossed in the listening process and were keen to participate and to share during discussions. This is also reflected in the increase in Self-efficacy scale scores. It also highlights the sense of empowerment students experience when given new and useful tools to help them better engage and comprehend texts.

It would be interesting to retest the intervention group in a few weeks or months to ascertain if the skills taught during the intensive teaching period continue to be used.

There are a number of implications for teaching as a result of the finding of the study.

- Continue to develop visualising skills so that all students are able to visualise automatically, independently and with confidence.
- Regular monitoring through discussion and drawing of images created by students to ensure accurate alignment of the images and text.
- Consistent and continued use of visualising in all areas of the curriculum in order to strengthen students ability in comprehension.
- Continue to develop vocabulary and world knowledge of students especially of students with lower comprehension. (Pressley, 2001; cited in Donnelly, 2007)
- Continue to develop Prep students' knowledge of pronouns and develop awareness of grammatical structures.
- Continue to develop in students the skills and knowledge to become self monitors of their own learning.
- Most importantly, to continue to develop a love of reading in the students.

Possible directions for future research could include examining the self-efficacy of students with regard to visualising and students' understanding of the effects of visualising on comprehension and enjoyment of texts. Much research has been carried out on the effects of visualising and reading comprehension. A possible area of interest for research in the future would be to study the effects of listening comprehension and visualising on a larger number of students of mixed ages.

REFERENCES

- Bell, N. (1991). *Visualizing & verbalizing*. Paso Robles, CA : Academy of Reading Publications.
- Brinda, W. (2007). Three acts to engagement and enjoyment: Theatre brings literature back to life for reluctant and struggling readers. *Literacy Learning: the Middle Years*, 15, 2, 29-36.
- Donnelly, P. (2007). Inking your thinking: The ultimate meaning making strategy. *Literacy Learning: Middle Year*, 15, 1, i-viii.
- Douville, P. (2004). Use mental imagery across the curriculum. *Preventing School Failure*, 49, 1, 36-39.
- Menner, M. (2007). Are we teaching or testing reading comprehension? *Practically Primary*, 12, 1, 35-38.
- Munro, J. K. (2009). Literacy Intervention Strategies, 472697. Lecture notes. 2009.
- Nelson, A. N. (2005). *Developing reading comprehension through use of the visualization strategy*.
<http://www.uwosh.edu/coehs/departments/curriculum-instruction-department/documents/Nelson2005Spring.pdf> Printed: 07/04/10.
- Tovani, C. (2000). *I read it, but i don't get it: Comprehension strategies for adolescent readers*. Portland, ME : Stenhouse Publishers.

MATERIALS

- Clay, M. M., Gill, M., Glynn, T., McNaughton, T., & Salmon, K. (1983). *Record of oral language and biks and gutches*. Auckland, New Zealand: Heinemann.
- Fox, M. (1986). *Hattie and the fox*. Lindfield, NSW : Scholastic Press.
- Inkpen, M. (1989). *The blue balloon*. London, NW1 : Hodder Children's Books.
- O'Connor, J. & Rajasingam, D. (2010). *Prep Visualising Task*. Adapted from Munro, J. K. (2005). Melbourne : University of Melbourne.
- University of Melbourne & CEOM. (2004). *Task 18: Listening Comprehension*.
- University of Melbourne & CEOM. (2006). *Self-efficacy scales*. Adapted from Chapman, J. W. & Tunmer, W. E. (2002). New Zealand : Massey University.

APPENDIX A – VISUALISING TASK & SCORING SHEET

Visualising Task – Individual Administration
(Adapted from John Munro’s Visualising Task and scoring system)
Prep Test

Introduce the target sentences, follow the script:

This is a story about a boy and his friend who go on a bike ride together.

Give the students the following instructions:

Listen to each sentence. Make a picture in your mind. Draw the picture in the space. Then describe your picture in words.

The teacher is to write the child’s description in the space provided next to each sentence.

Sentence	Drawing	Score for drawing /13	Description	Score for description *a /13	Score when synonyms used or order of sentence changed *b /13
The boy and his friend rode on their bikes. They were having fun.		/2		/2	/2
The two friends chatted to each other.		/1		/1	/1
They were not watching where they were going.		/1		/1	/1
The bike track became narrow and twisted.		/1		/1	/1
They came to the top of a hill.		/1		/1	/1
Suddenly the bikes went faster. The two riders weren’t smiling and chatting anymore.		/2		/2	/2
Now they were holding their bikes as tightly as they could. They looked very scared.		/2		/2	/2
One boy’s bike hit a stone and he flew into the air.		/2		/2	/2
His bike was ruined.		/1		/1	/1

***a**

Give 0 points if a sentence is incomplete, or does not maintain meaning.

Give 1 point if a the meaning of a sentence is maintained.

***b**

Give 1 point for a sentence that has been reworded, and the student has substituted more than 50% of the words in the sentence (using synonyms).

or

Give 1 points for a sentence in which the order of the words within the sentence has been changed and meaning has been maintained. (Some synonyms may also be used.)

Give 1/2 point for a sentence that has had less than 50% of the words in the sentence have been substituted with synonyms.

Note: Students can only gain points if the meaning of the sentence is maintained.

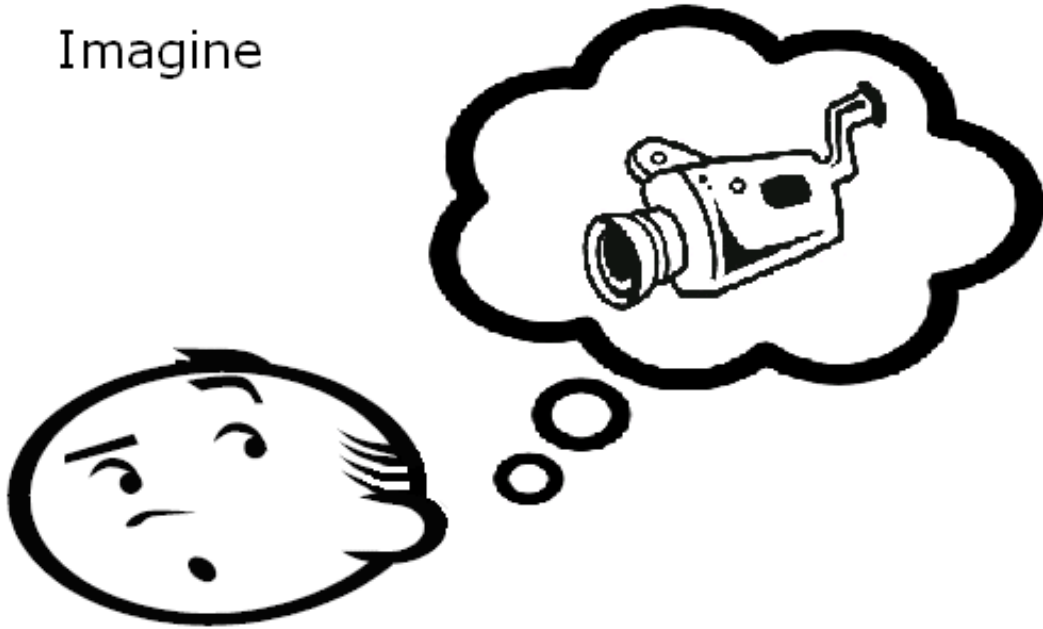
APPENDIX B – CUE CARDS

1.

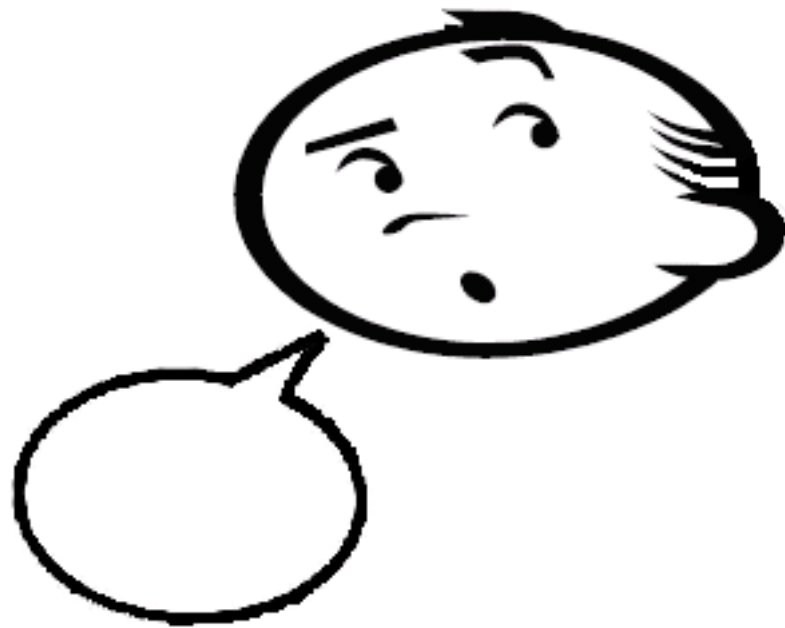
Listen



2. Imagine



3 Talk



APPENDIX C – TEACHING UNIT

Session 1

(30 – 35 minutes)

Students are to sit in a circle on the floor.

Teacher asks the students “What do you think of when I say balloon?”, “Where have you seen one?”

Students discuss their opinions.

Teacher shows the students an inflated balloon. Two inflated balloons are passed around the circle so that the students can touch & feel a balloon.

Teacher puts the balloons away and asks the students to do the following:

Close your eyes and make a picture of a balloon in your mind. What does it look like? What colour is it? What shape is it? What does it feel like? What is it doing? “What sort of place is it in? While you’re thinking, make a movie or a picture of the balloon in your mind. Now keep the movie or picture in your mind and open your eyes.

Students take turns to share what they saw.

Ask students which scenario is more interesting and easier to remember: when we just talk about a balloon or when we make a picture or a movie of it in our minds?

Teacher introduces the term visualisation to the students.

“Does anyone look at the pictures when we are reading or listening to a story? We get lots of clues about the words and the story from the pictures. The pictures help us understand what the story is saying. It helps us to enjoy the story.

Some books don’t have any pictures. If I read you a story without any pictures which would be better: just listening to the story or making your own pictures or movie to go with the story?”

Discuss.

When we listen to a word, a sentence or a story and we make a picture or a movie in our minds, we call that visualising. Teacher puts up on the board a picture of a child imagining an image (Appendix B).

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 2

(15 – 20 minutes)

Students recall what they remember about the balloon from the previous lesson.

What does the movie or picture in your mind look like now?

What helps us make movies or pictures?

Discuss

Thinking about what does it looks like, feels like, what is it doing, what does it sound like helps us make better movies or pictures in our mind.

Explain mystery box activity.

(Mystery box contains a soft ball)

Put your hand into the mystery box and try to imagine what might be inside.

No peeking

Think about:

What does it feel like, what does it sound like?

Make a picture of it in your mind.

Draw a picture of what you think it is.

Discuss what it might be.

Reveal the mystery item.

Reflection

What did you do well?

What can you do better next time?

Place another item in the mystery box .

(Mystery box contains a metal spoon)

Follow the same procedure as before.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 3

(15 – 20 minutes)

Students to recall reflections of the previous lesson.

Teacher selects 4 students.

They sit in a circle & play the game “I went to the playground and I saw...”

Teacher to model and scaffold.

Students go around the circle, each one remembering what the previous students saw and adding their own item to the list.

Eg. Student 1: I went to the playground and I saw a boy

Student 2: I went to the playground and I saw a boy playing with a blue ball

Student 3: I went to the playground and I saw a boy playing with a blue ball and a girl on the slide

Ask the students what helped them remember

Discuss and help students realise that visualising helps us remember and recall information.

Introduce the Listen, Imagine, Talk cue cards (Appendix B).

Break class into groups of 4 or 5 students.

Teacher reads out a story starter to the whole class.

Teacher to model and scaffold.

I went to the shops with...

Students take turns to add to the story remembering to visualise at each stage of the story.

Teacher to rove and listening to students' contributions.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 4

(15 – 20 minutes)

Recap previous lesson.

What is something you will try to do this time to help you visualise?

Remind students to use the cue cards to remember to Listen, Imagine and Talk.

Break class up into groups of 4 or 5 students.

Teacher to scaffold.

Teacher reads out a story starter to the whole class.

My friend and I...

Students take turns to add to the story remembering to visualise at each stage of the story.

Teacher to rove listening to students' contributions.

Students reflect on what they did well and what they can do better next time.

Follow same procedure as before

On the holidays...

Students take turns to add to the story remembering to visualise each stage of the

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 5

(15 – 20 minutes)

Recap previous lesson.

What is something you will try to do this time to help you visualise better?

What can we do to help make a movie in our imagination?

Explain new task.

You have to listen to what I say and make a movie of it in your mind.

Think about

What does it look like?

What does it sound like?

What does it smell like?

What does it feel like?

A boy and girl skipped along the footpath and they saw some beautiful butterflies.

Students take turns sharing their movie with the class.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 6

(15 – 20 minutes)

Follow same format as lesson 5

The children were so excited to see the kangaroo they yelled out to their friends to come and look.

Students take turns sharing their movie with the class.

Students reflect on what they did well and what they can do better next time.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 7

(15 – 20 minutes)

Review strategies that helped make good movies in our minds.

Discuss unfamiliar vocabulary and draw on prior knowledge.

Read Nursery Rhyme **Humpty Dumpty**

Students take turns sharing their movie with the class.

Students reflect on what they did well and what they can do better next time.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 8

(15 – 20 minutes)

Review strategies that helped make good movies in our minds.

Discuss unfamiliar vocabulary and draw on prior knowledge.

Read Nursery Rhyme **Jack and Jill**

Students take turns sharing their movie with the class.

Students reflect on what they did well and what they can do better next time.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 9

(30 – 35 minutes)

Review strategies that helped make good movies in our minds.

Discuss unfamiliar vocabulary and draw on prior knowledge.

Look at the front cover of “**The Blue Balloon**”. Take the book away.

Make a movie or picture in your mind:

What did you see?

Who was in the picture?

What colour was the balloon?

What was the boy doing?

What do you think the picture will look like in a little while?

Read the story without showing the students the pictures.

Ask students to make a movie in their minds as the teacher reads the story.

Stop at various points and & question.

Share movies with class.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

Session 10

(30 – 35 minutes)

Review strategies that helped make good movies in our minds.

Discuss unfamiliar vocabulary and draw on prior knowledge.

Look at the front cover of “**Hattie and the Fox**”. Take the book away.

Make a movie or picture in your mind:

What did you see?

Who was in the picture?

Where could the story be happening?

What do you think the picture will look like in a little while?

Read the story without showing the students the pictures.

Ask students to make a movie in their minds as the teacher reads the story.

Stop at various points & question.

Share movie with class.

Reflection

What did you learn today?

What did you do well?

What can you do better next time?

APPENDIX D – TABULATED (EXCEL) DATA

Name	Control = 0 Teaching=1	Age in MONTHS	Gender 0=Male 1=Female	Years of Schooling	ESL No=0 Yes=1	On Integrati on Program No=0 Yes=1	EMA No=0 Yes=1	Attendan ce No. of sessions	ROL PRE (max 42)	ROL POST (max 42)	Listening Compreh ension PRE (max 26)	Listening Compreh ension POST (max 26)	Visualisi ng Task PRE (max 39)	Visualisi ng Task POST (max 39)	Self- efficacy Scales PRE (max 66)	Self- efficacy Scales POST (max 66)	% Growth - ROL	% Growth - Listening Compreh ension	% Growth - Visualisa tion	% Growth - Self- efficacy
I-A	1	68	1	1	1	0	0	10	12	16	6	21	21	32	50	54	33%	250%	52%	8%
I-B	1	74	1	1	0	0	1	10	32	34	4	19	19	32	63	66	6%	375%	68%	5%
I-C	1	72	0	1	0	0	0	7	33	40	7	18	25	32	52	62	21%	157%	28%	19%
I-D	1	67	0	1	0	0	1	10	17	30	3	13	13	28	47	49	76%	333%	115%	4%
I-E	1	71	1	1	0	1	1	9	13	14	4	13	17	23	57	66	8%	225%	35%	16%
I-F	1	64	0	1	1	0	0	10	11	11	7	11	17	22	52	59	0%	57%	29%	13%
C-G	0	61	1	1	0	0	0	0	6	4	2	4	5	8	43	44	-33%	100%	60%	2%
C-H	0	66	0	1	1	0	0	0	16	13	8	11	20	17	45	42	-19%	38%	-15%	-7%
C-I	0	73	1	1	0	0	0	0	10	5	4	4	7	8	41	53	-50%	0%	14%	29%
C-J	0	67	0	1	0	0	0	0	22	25	6	9	12	22	57	55	14%	50%	83%	-4%
C-K	0	64	1	1	0	0	0	0	18	15	7	7	23	20	64	66	-17%	0%	-13%	3%
C-L	0	73	1	1	1	0	1	0	21	34	21	15	23	28	53	52	62%	-29%	22%	-2%
								Mean for												
								Intervention	19.67	24.17	5.17	15.83	18.67	28.17	53.50	59.33	23%	206%	51%	11%
								Control	15.50	16.00	8.00	8.33	15.00	17.17	50.50	52.00	3%	4%	14%	3%
								Std Dev												
								Interv	10.15	12.04	1.72	4.02	4.08	4.67	5.68	6.80				
								Control	6.32	11.66	6.72	4.27	8.07	7.96	9.03	8.60				
EMA = Education Maintenance Allowance																				