

Explicit teaching of visualisation strategies improves listening comprehension and oral retell of Prep students.

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ABSTRACT

Comprehension is an area of Literacy in which students at the lower junior primary lack skills required to listen to and make meaning of a text. The aim of this study was to explore the L.I.T.E.L strategy and implement the approach into small group situations of two groups of pre-reading Prep students. The students were involved in ten sessions, focusing on the development of their listening comprehension through visualisation.

The hypothesis of the study was that through the explicit teaching of visualization strategies students improve their listening comprehension and oral retell. Research on the development of comprehension indicates that teaching students to visualize and discuss their mental images with others gives students the ability to scaffold ideas and make meaning of the text.

For the purpose of the study, the R.I.D.E.R strategy was adapted to suit the facets of listening comprehension. The class was split into a control group and an intervention group. However, the sheer size of the intervention group was impractical in a teacher focus group capacity and therefore was further split forming two intervention groups. The participants in the two intervention groups were randomly selected because of their lower score on the February pre-testing. The study compared the results of the control and intervention group and monitored the use of visualization strategies during the ten explicit teaching sessions. Each session took place during the Literacy Block in small foci groups beginning with a tuning in activity that promoted and was linked to the L.I.T.E.L strategy.

The results indicated that there was a positive progression in comprehension and an increase in a student's ability to store and recall information from the text. Students also had an identifiable increase in their Oral language scores.

It would appear that progression made throughout the study in teaching students to construct mental images and discuss their understandings built the foundations to not only improve comprehension and oral language but is the first stage automaticity for visualization a universal strategy which can be transferred throughout the curriculum.

INTRODUCTION

Many students at the lower junior primary level experience difficulties in listening comprehension and the oral retelling of a text. They are often able to decode a text at competent level, showing signs of an orthographic memory and phonemic awareness when reading. However, students present difficulties in listening to and recalling the events, structure or characters in a story as a result of poor listening comprehension skills. This is evident in the research of Cain (1996 as cited in Center et al 1999.) “poor comprehenders have a less well- developed story event structure than their more skilled peers, seemingly unaware that stories consist of a series of casually related events with a climax and consequent resolution.” (p. 251)

In order for students to comprehend the text Isbell (2004) suggests that teachers and parents need to influence the oral language development of storytelling and retelling by young children. Students need to build their listening comprehension and ability to structure events from stories to successfully make meaning and fully comprehend a text. This idea is supported by Center (1999) who states “Acknowledging that fluent, automatic print- to – sound translation are essential for accessing the meaning from the print. Attention also needs to be directed to the second and most critical component of skilled reading namely comprehension of spoken text.” (p.242)

Further studies on mental imagery during reading was conducted by Gambrell (1993) who identifies that by teaching students to construct mental images as they read, students not only generate ideas and remember what has been said but are able to make meaning. The study focused on teaching visual imagery strategies for the purpose of comprehending text through recalling and

storytelling. Processes involved in the study built upon development of vocabulary, visual imagery and recalling events within the story.

Visual imagery / visualisation involve participants making a mental picture of a story to which they have either read or have had read to them. This allows students with poor comprehension a non verbal tool to associate, retrieve and store information (Center et al 1999, p251). The use of visual imagery can be seen as a powerful tool to link Children's oral language with that of the written text. "Written language development draws on competence in oral language, since, for most learners, oral language competence reaches a higher level earlier. As children become literate, the two systems become interactive, and children use each to support the other" (Goodman 1979 as cited in Riley et al 2007)

In examining the research completed on oral language and storytelling Riley (2007) noted that visual imagery is an effective tool in teaching the verbal skills required to scaffold the sequence of events within a text. The research continued identifying that these verbal skills modeled from the teacher are essential in discussing and evaluating the response of the students to make meaning of the story. Engel (1995) concluded that "children's experiences of both stories and storytelling support the development of simple and complex linguistic and discursive structures." (1993, p.25)

Munro (2006) stated that by teaching students visualization strategies they have the ability to organize ideas and information in the text whilst they are reading. They may also be able to generate questions or wonderings to build their understanding and comprehension of the text. "Reading researches have noted that good readers, both children and adults create visual images spontaneously" (Fehrenbach 1991 as cited in Green 1995 p.3) This notion is supported by Munro (2006) who states that readers use the technique of spontaneous visualization and elaboration of ideas during reflection to link the meanings of the prose to what they have retrieved.

Through the explicit teaching of Visualisation it is anticipated that students will develop the ability to make mental images and use them to organize ideas and infer meaning of the text. Considerable research by Clark, Deshler, Schumaker, Alley and Warner (1984) into the teaching of visualization strategies provided teachers with the R.I.D.E.R strategy (Read, Imagine, Describe, Evaluate and Repeat.) This strategy requires the making of mental pictures, verbal discussion and explanation to other students in a group. For the purpose of this study, the R.I.D.E.R strategy has been adapted into the L. I. T.E.L strategy (Listen, Imagine, Tell, Evaluate and Listen again.) Luke & Freebody (1999) declare that good readers use paraphrasing, clarifying and evaluating when reading to make good meanings, they use these strategies to overcome confusion. The research continued identifying that these skills should be taught to improve the retelling of the text and therefore would inevitably improve student's comprehension of the text.

Riley (1996) discovered that as children begin their first year of school they arrive with vary levels of exposure and range of rich knowledge of stories and differing levels of imagination and ability to visualize. They have been read to at home, at kindergarten and have been exposed to visual images through media and technology. However, when questioned about stories and events students are unable to recall information, make mental pictures and retell what they have previously heard. Many students who have achieved a competent standard of reading still display poor comprehension skills. Teachers have been achieving the benchmark standard for decoding text however the same can not be said for results in helping our students develop verbal comprehension skills.

Teachers need to begin modeling and teaching junior primary students strategies involved in visualization. As students practice and are exposed to the process of creating a visual image in their minds they are able to internalize these operations and utilize them to predict, retrieve information and make meaning of an unseen text. As students become more confident with visualization they will in turn develop their auditory and visual memory the more they practice and use these skills.

At the end of the intervention study it will be evident that the intervention group are utilizing the L.I.T.E.L strategy when they are able to :

- Immediately draw a picture depicting a story they have been read.
- Stop and think about the story they have just heard.
- Discuss with group members what they have heard and the events of the story.
- Modify or evaluate their opinion/ understanding of the story.
- Continue listening to discussion/ story.

This study aims to increase student's ability to retell a story and develop their ability to make a mental image of the story using the L.I.T.E.L strategy. Explicit small group activities are intended to focus on supporting students to listen to a text, create an image in their minds, tell others of their understanding, evaluate and discuss and continue listening. The formulation of questions, discussion and evaluation of their mental image will increase students listening comprehension through participation in the visualization learning strategy.

Prediction: Teaching Junior Lower Primary students who have difficulties in listening and retelling stories to visualize using the L.I.T.E.L strategy is associated with improved listening comprehension.

METHOD

Design

The study uses a case study OXO design, in which the gain in student ability to retell a story following the explicit teaching of Visualisation through the L.I.T.E.L strategy are monitored. The study compares the results of two groups, a control group and intervention group.

The students selected to participate in the study are currently beginning their Prep year of schooling. The student's ages range between 5 and 6 years who all began the school year on a reading text level of 0. At present, students who achieve an ROL score below 15 and have a text level of 0 are considered 'at risk' and are given extra support within Teacher Focus Groups. However, for the purpose of this study and to make the two groups equal in numbers, students were randomly selected. As the table 1.0 indicates, within this class group there

were a wide range of children with scores placing them 'at risk', therefore a random selection proved more beneficial for this study as all students would benefit from intervention.

Table 1.0 Data Set for the current study.

Student	Gender	Age (YM)	Age (M)	ESL	Funded CEO (speech oral)	Previous Intervention	ROL raw score	ROL %	Listening Comp raw immediate	Listening Comp % immediate	Listening Comp raw 5 mns	Listening Comp % 5 mins	Spont. Retell raw	Spont. Retell %	Cued Retell raw	Cued Retell %
A	2	5.2	62	0	0	0	24	57	6	30	3	15	5	20	11	47
B	2	5.6	66	0	0	0	4	9	2	10	1	5	1	4	9	39
C	2	5.1	61	0	0	0	7	16	6	30	1	5	2	8	10	43
D	1	5.7	67	1	0	0	10	23	4	20	5	25	3	12	4	17
E	1	5.6	66	0	0	0	29	69	2	10	1	5	3	12	8	34
F	2	5.9	69	0	2	2	2	4	2	10	0	0	1	4	7	30
G	2	5.9	69	0	0	2	5	11	5	25	2	10	1	4	7	30
H	2	5.0	60	0	0	0	17	40	11	55	6	30	2	8	11	47
I	1	5.1	61	0	0	0	9	21	6	30	3	15	2	8	4	17
J	2	5.3	63	0	1	0	0	0	0	0	0	0	1	4	8	34
K	1	5.11	71	0	2	2	3	7	2	10	2	10	2	8	2	8
L	1	5.11	71	0	0	2	5	11	1	5	1	5	1	4	6	26
M	2	5.2	62	0	0	0	12	28	4	20	2	10	1	4	4	17
N	1	5.4	64	0	0	0	18	42	11	55	7	35	4	15	8	34
O	1	5.1	61	0	0	0	8	19	3	15	2	10	3	12	7	30
P	2	5.4	64	0	0	0	10	23	5	25	3	15	1	4	7	30
Q	1	5.5	65	0	0	0	10	23	15	75	12	60	6	25	14	60
R	2	5.10	70	0	0	0	9	21	2	10	1	5	2	8	6	26
S	1	5.7	67	0	0	0	11	29	1	5	1	5	2	8	10	43
T	2	5.10	70	0	0	0	14	33	5	25	2	10	4	15	6	26
U	2	5.8	68	0	0	2	3	7	3	15	1	5	3	12	8	34
V	2	5.8	68	1	0	0	0	0	2	10	2	10	1	4	7	30
W	2	5.1	61	0	0	2	4	9	0	0	0	0	2	8	3	13
X	1	5.3	63	0	0	0	8	19	9	45	6	30	2	8	4	17
Y	2	5.9	69	0	0	0	10	23	10	50	8	40	6	25	12	52
Z	1	5.0	60	0	0	2	4	9	4	20	3	15	2	8	5	21

Legend			
Gender	ESL	CEO Funding	Group Division
1= Male	1= Yes	1= Behavioural	 Intervention Group
2= Female		2= Speech	 Control Group



Selected students appear on the data set highlighted are described in Table 1.2

Table 1.2 Description of students participating in the intervention group.

Student ID	Description
B	<ul style="list-style-type: none"> • A female student aged 5 years and 6 months. • She is the second of three children in her family • She has been identified as an “at risk” student during the pre-tests in oral language, letter identification and word recognition tests.
C	<ul style="list-style-type: none"> • A female student aged 5 years and 1 month. • She is the eldest of two children. • She is able to read simple short sentences but has difficulty concentrating, remembering stories and characters.
D	<ul style="list-style-type: none"> • A male student aged 5 years and 7 months. • He is an only child • He is articulate in oral language but has difficulties remembering and visualizing the story.
F	<ul style="list-style-type: none"> • A female student aged 5 years and 9 months. • She is a twin and the youngest of three children. • She is currently undertaking speech therapy through the Catholic Education Office. • She has been identified as “at risk” in oral language, letter id, book orientation and simple word tests.
G	<ul style="list-style-type: none"> • A female student aged 5 years and 9 months. • She is a twin and the second of three children. • She is able to identify some characters in stories but has difficulty visualizing without pictures.
I	<ul style="list-style-type: none"> • A male student aged 5 years and 1 month. • He is the second of two children. • He shows difficulty concentrating on stories and cannot recall characters or events in a simple story.

J	<ul style="list-style-type: none"> • A female student aged 5 years and 3 months. • She is the eldest child in her family. • She has been identified as severely “at risk” in pre testing tasks including; oral language, letter id, simple word tests, hearing sounds (dictation) and running records. • She presents with severe concentration problems, focusing on a task for no more than a few minutes. • She is currently undergoing testing for behaviour, speech and learning difficulties.
K	<ul style="list-style-type: none"> • A male student aged 5 years and 11 months. • He is the eldest twin in a child family. • He began the year with existing speech problems in articulation, basic communication and initial sounds. • He has been identified as “at risk” in oral language, letter ID, hearing sounds (dictation) and word tests. • He presents difficulties in retaining information from stories and visualising without pictures. • He is no longer receiving speech therapy.
M	<ul style="list-style-type: none"> • A female student aged 5 years and 2 months. • She is an only child. • She is ESL and has basic communication skills. • She presents with concentration, visualization and retelling difficulties after listening to stories.
O	<ul style="list-style-type: none"> • A male student aged 5 years and 1 month. • He is the second of three children. • He has basic articulation difficulties and has been identified as “at risk” in pre-testing of listening and hearing sounds tests, oral language and letter id tests.
V	<ul style="list-style-type: none"> • A female student aged 5 years and 8 months. • She is the eldest of two children. • She began the school year with existing speech difficulties in initial sounds, basic articulation and connecting words in sentences. • She has been identified as “at risk “in the pre- tests for oral language, initial sounds and hearing letters and sounds (dictation). • She presents with difficulties in concentration and visualization while listening to stories.

W	<ul style="list-style-type: none"> • A female aged 5 years and 1 month. • She is ESL and an only child. • She began the year with broken English and displays difficulties communicating in complete sentences. • She was identified as “at risk “in oral language and letter identification.
Y	<ul style="list-style-type: none"> • A female student aged 5 years and 9 months. • She is the younger of two children. • She presents with difficulties in retaining information, communicating ideas and visualizing stories without pictures.
Z	<ul style="list-style-type: none"> • A male student aged 5 years . • He is the second of three children. • His speech is broken, he presents with oral language difficulties as seen in the oral language pre-testing. • He shows severe difficulties in staying focused for more than a few minutes, visualization and recalling facts from a simple text.

Materials

The following materials were used during this study include;

- One Oral language test was conducted on all students using the Record of Oral Language (Clay et al, 1996). The test was administered in Pre test as record of a student's ability to listen and repeat sentences increasing from single event sentences to more complex sentences. The same test was completed in a Post test situation to measure student's improvement in listening and accurately repeating sentences of increasing difficulty by calculating the percentage of correct responses.
- Listening Comprehension tasks. The student's ability to listen to a story with no visual cues and recall events was assessed using the Listening Test (Munro, 2006).
- Oral retell tasks. Children were individually read a stories ("Ollie octopus' restaurant," " the farm concert" ~see References) then asked to recall the main facts of the prose spontaneously . A second text was read to students the following day using cued questioning. These tests were conducted separately so the text was unseen in both situations.

In this case study, tests were administered both in a Pre test and Post test situation. The initial tests were conducted individually to identify the students existing knowledge and ability to retain information. The Post tests were used as a measure of the student's increase in knowledge and ability to retain information and recall events through percentage calculation of correct responses.

Other materials used in the study include;

- L.I.T.E.L flash cards
- Talking flower
- Observational notes
- Microsoft Media Player used to record students recall.
- Reading text (see appendix)
- Lesson plans
- Student books containing comic strip activities for visualization.

Procedure

Pre-test

The tasks were administered individually in the following order; Oral language test, Listening test, Spontaneous Retell test and the Cued Retell tests. The tests were conducted at a rate of 1 per two days. The class was then divided into intervention students and control students.

Teaching Sessions

Two Teacher Focus Groups were created from the intervention students as the initial group number 13 participants was far too large to conduct meaningful sessions at this early stage of Prep. Children were allocated a Focus Group (table 1.0).

The lessons were designed to be conducted during the Literacy block, as it was not feasible for other session times to be allocated. The sessions were required to be manageable in duration for the Prep students to maintain focus and so both intervention groups would receive the same instruction a teaching time. With the assistance of colleagues, the control group was removed and not exposed to the two sessions of intervention within each lesson.

During the planning of lessons, simple text were identified and allocated to each lesson, ensuring that each modeled visualisation session introduced a previously unseen text to students. These texts were readily available and each contained simple 1 or 2 event sentences relating to themes the children were familiar with.

Students were introduced to the L.I.T.E.L strategy through explanation of the cue cards (see appendix 1A) and each session revisited the cards either directly or indirectly.

Ten sessions were conducted over a period of three weeks with both intervention groups receiving the same allocate time, frequency of session and content material. Each session began with a 'tuning- in' session where students could 'warm-up' their listening or visualization skills through memory games, songs and partner based listening activities.

Each session was conducted in the classroom environment during the reading block. As a result of the intervention group size, two small Teacher Focus Groups were created each experiencing the same sessions. Due to the obligations of the classroom, the two groups did not always experience the session on the same day. At the conclusion of each session students were asked to complete a simple drawing to illustrate their understanding of the prose and to discuss with other members. As the sessions increased so to do the complexity of the pictures.

Post -test

The tasks were administered individually in the following order; Oral language test, Listening test, Spontaneous Retell test and the Cued Retell tests. The tests were conducted at a rate of 1 per two days. Results were as follows;

RESULTS

Results from the completion of the ten intervention strategies teaching the L.I.T.E.L strategy support the hypothesis that explicitly teaching visualization strategies improves listening comprehension and oral retell of Prep Students. The comprehension scores of all students in the intervention group indicate overall trend of improvement in all areas of testing.

At the conclusion of the ten teaching sessions students were tested using the following tests to gain the scores and define the level of improvement:

- Record of Oral Language.
- Munro's Listening Comprehension Test.
- Munro's Spontaneous Retell Test.
- Munro's Cued Retell Test.

The results for each test are as follows:

Table 1.3 Results displayed in Data Set.

<i>Student</i>	<i>Gender</i>	<i>Age (YM)</i>	<i>Age (M)</i>	<i>ROL raw score</i>	<i>ROL %</i>	<i>ROL raw score</i>	<i>ROL %</i>	<i>Listening Comp raw Immediate</i>	<i>Listening Comp % Immediate</i>	<i>Listening Comp raw Immediate</i>	<i>Listening Comp % Immediate</i>
A	2	5.2	62	24	57	36	85	6	30	11	55
B	2	5.6	66	4	9	15	35	2	10	12	60
C	2	5.1	61	7	16	19	45	6	30	16	80
D	1	5.7	67	10	23	13	30	4	20	15	75
E	1	5.6	66	29	69	35	83	2	10	8	40
F	2	5.9	69	2	4	12	28	2	10	14	70
G	2	5.9	69	5	11	13	30	5	25	14	70
H	2	5.0	60	17	40	22	52	11	55	17	85
I	1	5.1	61	9	21	14	33	6	30	14	70
J	2	5.3	63	0	0	10	23	0	0	8	40
K	1	5.11	71	3	7	16	38	2	10	9	45
L	1	5.11	71	5	11	12	28	1	5	7	35
M	2	5.2	62	12	28	22	52	4	20	13	65
N	1	5.4	64	18	42	29	69	11	55	16	80
O	1	5.1	61	8	19	23	54	3	15	7	35
P	2	5.4	64	10	23	28	66	5	25	8	40
Q	1	5.5	65	10	23	27	64	15	75	18	90
R	2	5.10	70	9	21	15	35	2	10	8	40
S	1	5.7	67	11	29	22	52	1	5	9	45
T	2	5.10	70	14	33	16	38	5	25	15	77
U	2	5.8	68	3	7	9	21	3	15	7	35
V	2	5.8	68	0	0	12	48	2	10	15	77
W	2	5.1	61	4	9	20	47	0	0	9	45
X	1	5.3	63	8	19	14	33	9	45	14	70
Y	2	5.9	69	10	23	24	57	10	50	15	77
Z	1	5.0	60	4	9	19	45	4	20	10	50

Legend.

Gender.

1= Male
2= Female

ESL

1= Yes

CEO Funding

1= Behavioural
2= Speech

Group Division

 Intervention Group
 Control Group
 Post Testing Results

Table 1.3 Results displayed in Data Set Continued.

Student	Gender	Age (YM)	Age (M)	Listening Comp raw 5 mns	Listening Comp % 5 mins	Listening Comp raw 5 mns	Listening Comp % 5 mins	Spont Retell raw	Spont. Retell %	Spont .Retell raw	Listening Comp %	Cued Retell raw	Cued Retell %	Cued Retell raw	Cued Retell %
A	2	5.2	62	3	15	5	25	5	20	8	34	11	47	13	56
B	2	5.6	66	1	5	8	40	1	4	10	43	9	39	13	56
C	2	5.1	61	1	5	10	50	2	8	15	65	10	43	16	69
D	1	5.7	67	5	25	11	55	3	12	17	73	4	17	15	65
E	1	5.6	66	1	5	6	30	3	12	10	43	8	34	12	52
F	2	5.9	69	0	0	3	15	1	4	8	34	7	30	15	65
G	2	5.9	69	2	10	9	45	1	4	9	39	7	30	16	69
H	2	5.0	60	6	30	7	35	2	8	10	43	11	47	14	60
I	1	5.1	61	3	15	10	50	2	8	16	69	4	17	10	43
J	2	5.3	63	0	0	3	13	1	4	11	47	8	34	14	60
K	1	5.1 1	71	2	10	11	55	2	8	15	65	2	8	17	73
L	1	5.1 1	71	1	5	4	20	1	4	6	26	6	26	10	43
M	2	5.2	62	2	10	12	60	1	4	8	35	4	17	11	47
N	1	5.4	64	7	35	12	60	4	15	8	35	8	34	11	47
O	1	5.1	61	2	10	13	65	3	12	18	78	7	30	14	60
P	2	5.4	64	3	15	6	30	1	4	8	35	7	30	10	46
Q	1	5.5	65	12	60	13	65	6	25	9	39	14	60	16	69
R	2	5.1 0	70	1	5	6	30	2	8	7	30	6	26	8	34
S	1	5.7	67	1	5	4	40	2	8	6	26	10	43	11	47
T	2	5.1 0	70	2	10	5	25	4	15	6	26	6	26	7	30
U	2	5.8	68	1	5	5	25	3	12	5	21	8	34	9	42
V	2	5.8	68	2	10	10	50	1	4	9	39	7	30	16	69
W	2	5.1	61	0	0	5	25	2	8	7	30	3	13	10	43
X	1	5.3	63	6	30	10	50	2	8	4	17	4	17	7	30
Y	2	5.9	69	8	40	14	70	6	25	12	52	12	52	17	73
Z	1	5.0	60	3	15	12	60	2	8	13	56	5	21	16	69

Legend

Gender

1= Male
2= Female

ESL

1= Yes

CEO Funding

1= Behavioural
2= Speech

Group Division

Intervention Group

Control Group

Post Testing Results

Analysis of Results:

Record of Oral Language.

As Figure 1.0 shows the general trend for improvement in the intervention group was significant, with students averaging a 27% increase in accuracy of retelling simple 1 and 2 event sentences. Student V showed the most improvement with a 48% increase in accuracy. This indicates improved listening comprehension and oral language skills. However, Student D showed only a 7% increase in accuracy of retell.

Figure 1.0 Record of Oral Language (intervention Group)

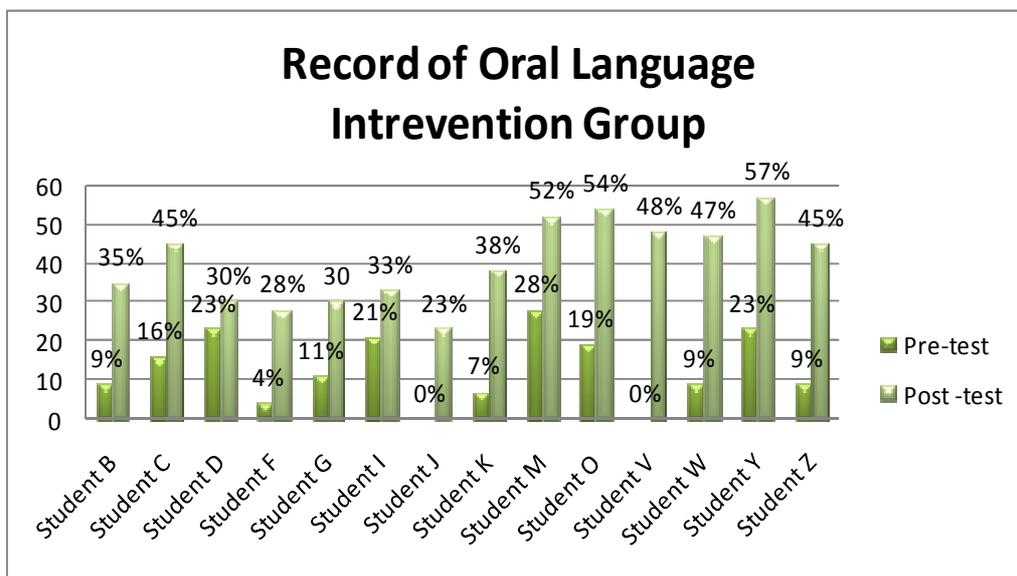
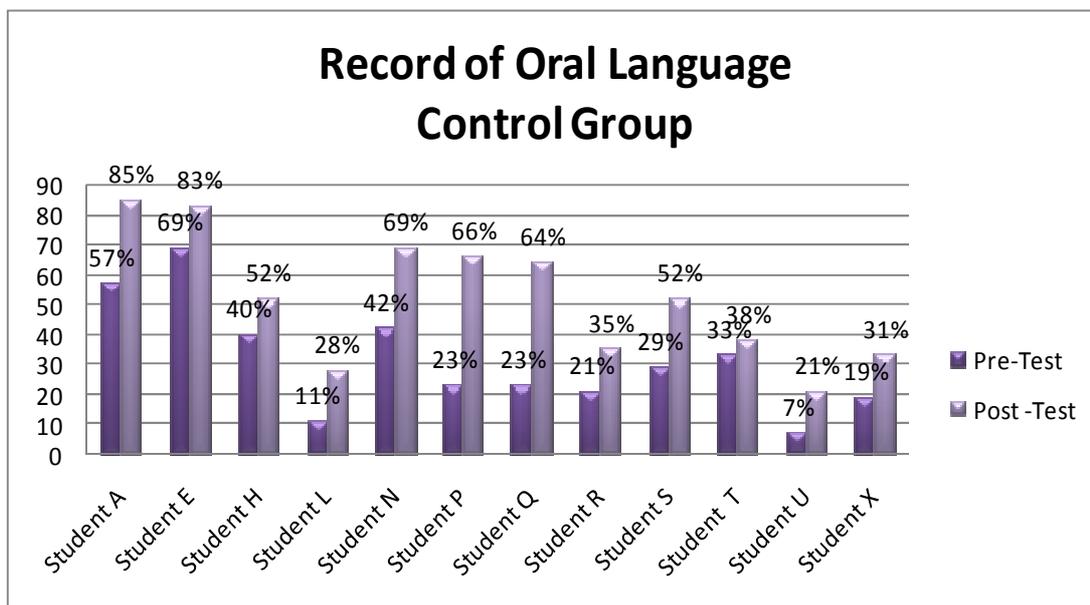


Figure 1.1 indicates the Control Group has also increased in the accuracy in which they repeat simple 1 and 2 event sentences contained in the Record of Oral Language. The average increase for the Control Group was identified as a 20%. The General trend indicated that most students achieved at least 10% more accuracy in the sentences except for student T who only achieved a 5% increase.

Figure 1.1 Record of Oral Language Results (Control Group).



In comparing the results from the Intervention Group and the Control Group, the shift in percentages between pre and post tests indicate that the intervention group have achieved a higher level of improvement in their retell. This may also suggest a higher improvement in their oral language skills. The difference between the groups is not vastly significant but showing the learning progression is positive within both groups.

Munro’s Listening Comprehension Test (immediate Retell).

All students within the Intervention Group show significant improvement in their ability to listen to a text and immediately retell the story identifying specific details from the text, as indicated in figure 2.0. The general trend of the learning progression supports the prediction as all students achieved more than double the percentage on the post test as they did on the pre- test with the exception of student Y who only achieved a 27% increase. The average increase was recorded at 40%. Student V again showing the greatest improvement of 67%.

Figure 2.0 Munro's Listening Comprehension Test Results for Pre and Post Testing(Intervention Group).

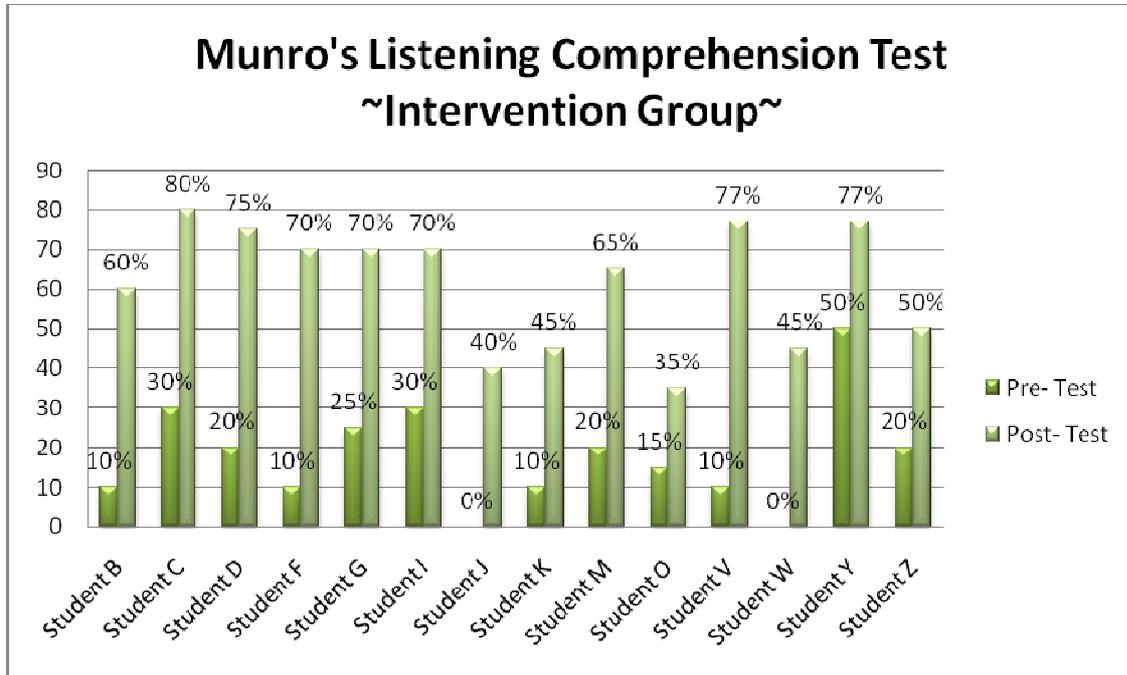
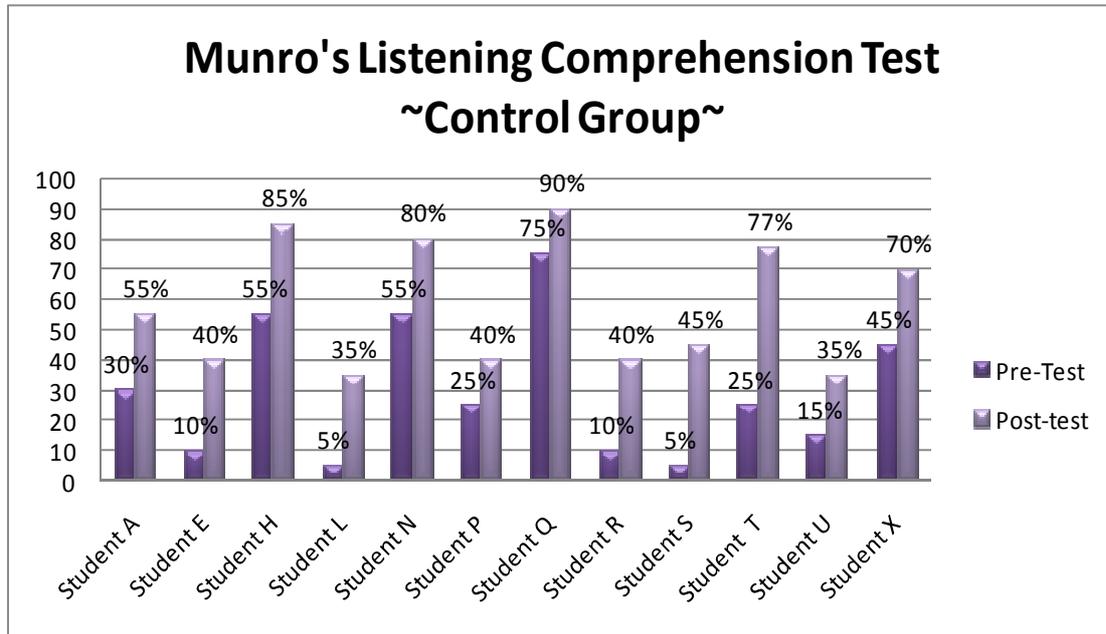


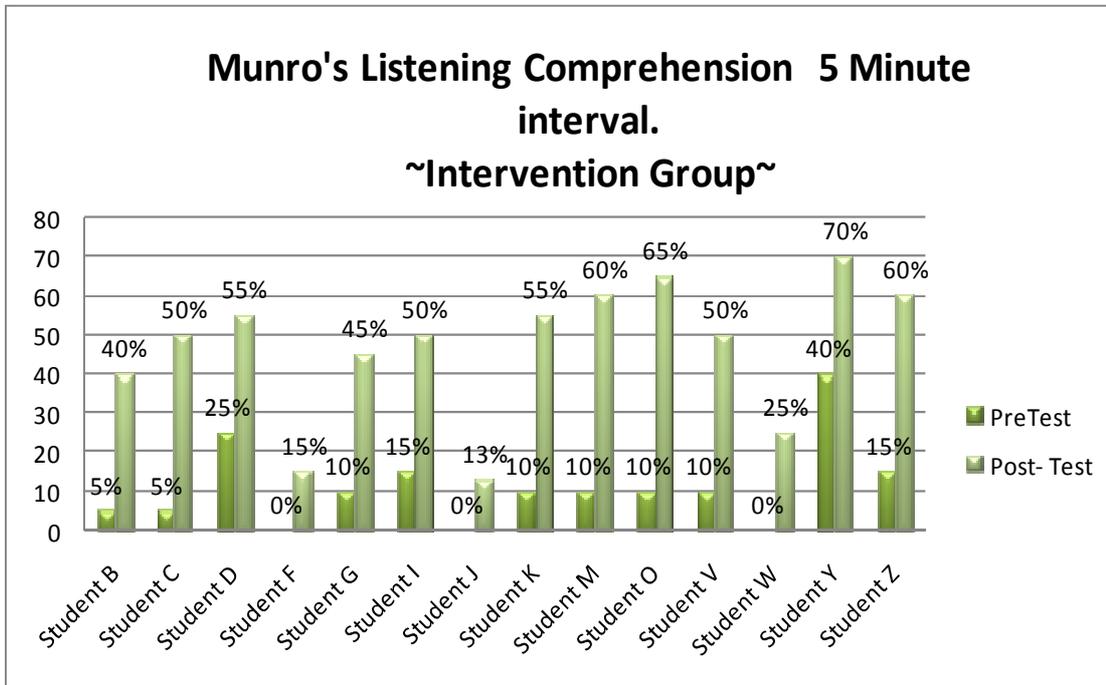
Figure 2.1 Shows the natural progression of learning for students who did not receive any intervention. The average percentage increase in accuracy for the Immediate Listening Comprehension Retell was 29%. The general trend for improvement was at least at 20% increase per student with the exception of student P who achieved a 15% increase. The most improvement by a student not receiving intervention was a 52% increase by student T. This may be attributed to the child settling into the school environment or merely a natural progression of learning as student T was anxious and quiet at the beginning of the year and has developed in confidence within classroom activities.

Figure 2.1 Munro's Listening Comprehension Test Pre and Post Test results for Control Group.



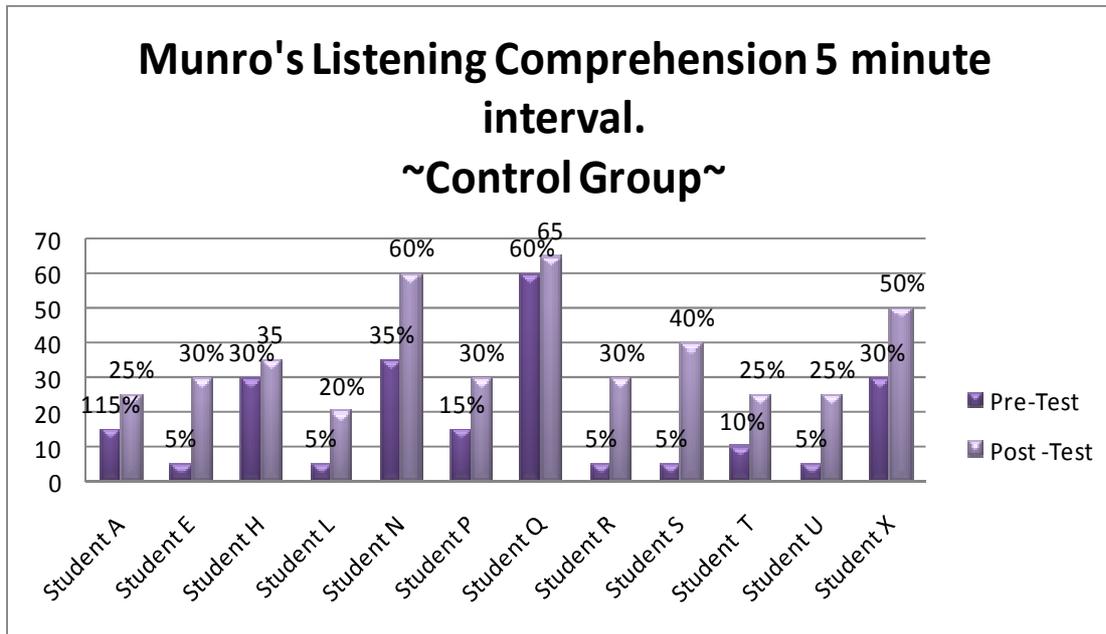
This test was also implemented again after 5 minutes, where students were asked to retrieve the story structure and events 5 minutes after hearing the story. Figure 2.2 indicates the results for the Intervention Group. In reference to the figure (2.2), Students achieved a vast improvement in storing and retrieving the information from the story they had previously listened to with the average improvement shown as a 35% increase between the pre and post testing sessions. Individual students showed and improvement of at least 20% . However, students showed a 15 % improvement where previously they could not retrieve any information.

Figure 2.2 Munro's Listening Comprehension Results for Pre and Post tests after a 5 minute interval (Intervention Group).



The same interval was given to the students who were participating in the control group for the study. Figure 2.3 indicates the difference in learning progression for those students. As the graph suggests, students within the control group also achieved an improvement in retrieving stored information at an average increase of 16%. The greatest improvement recorded was by student S who recorded a 35% increase whereas students H and N recorded only a 5% increase. In analyzing the Listening Comprehension Test the immediate test showed that students who experienced intervention had a larger progression of learning, structuring and storing information. This idea is supported by the results of the Listening Comprehension results of the same test conducted with a 5 minute interval. The Post test results from the Intervention Group supports the retrieval strategies taught. The outcome achieved from the Listening Test supports the prediction that students who receive intervention in the form of the L.I.T.E.L strategy are able to successfully store and retrieve information for recall and retelling of a story.

Figure 2.3 Munro's Listening Comprehension results from Pre and Post test using a minute interval prior to administering the test. (Control Group)



Munro's Spontaneous Retell test, (Figure 3.0) indicated an average increase in accuracy of 43% between the Pre and Post test sessions. Each individual student achieved at least a 20 % increase in ability to spontaneously recall information. Student O achieved the highest improvement scoring a massive 66% improvement. This test result supports the prediction that students who are explicitly taught visualization are able to create mental images and therefore can structure events and recall stories with more accuracy. Figure 3.1 displays the results of the students who also spontaneously recalled information from a text but who did not receive any form of explicit visualization strategies. The Control Group was able to achieve an average increase of 19% more detail recalled from the text. The natural progression of learning is indicated as each child was able to improve their results by at least 10% from the time of Pre testing (in term 1) to the Post testing session (in term 2). This may suggest a natural learning curve by students.

Figure 3.0 Munro's Spontaneous Retell Results in Pre and Post Testing Intervention Group.

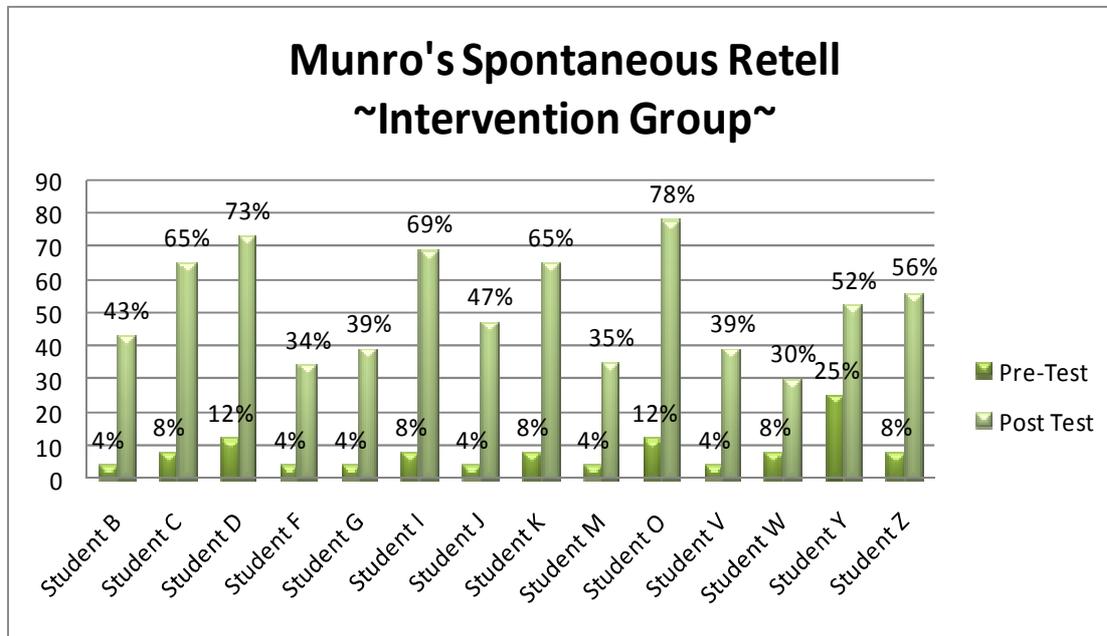
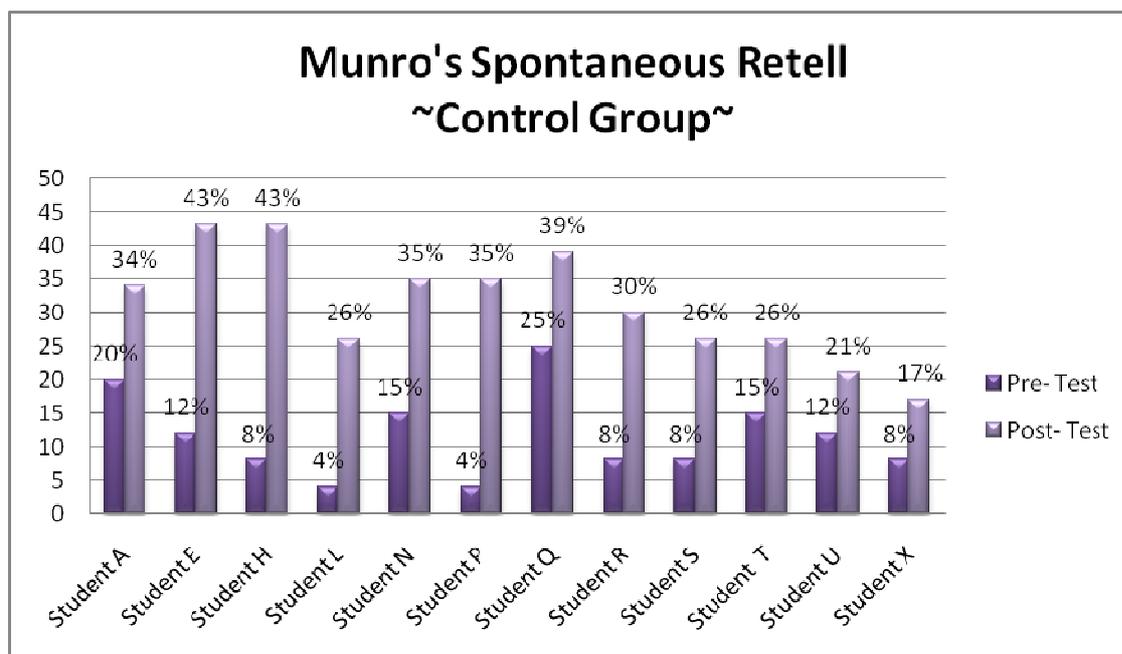
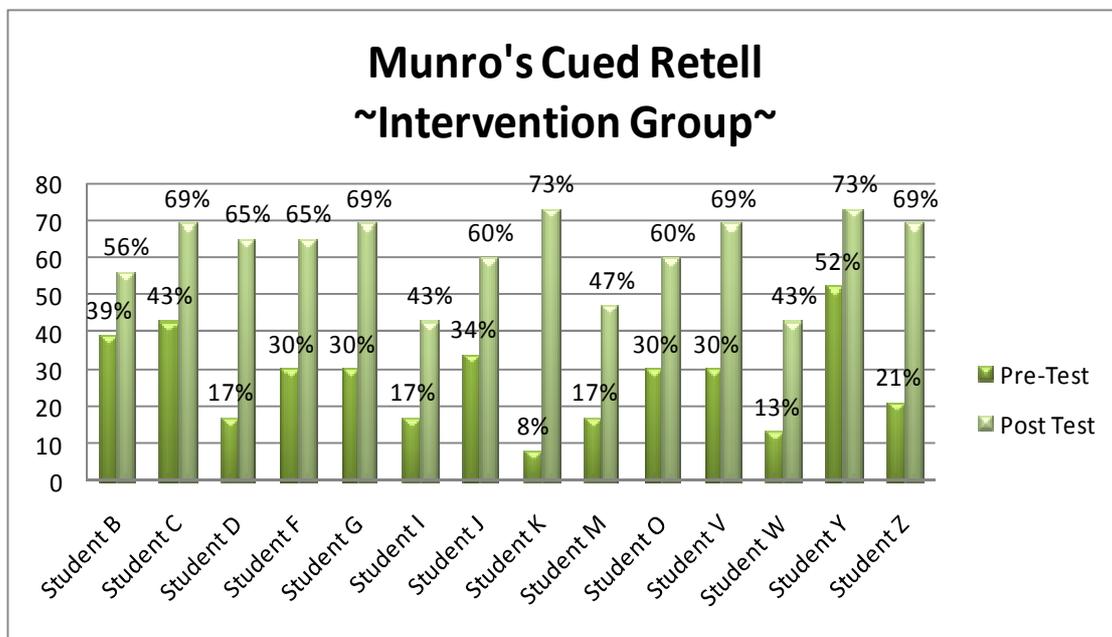


Figure 3.1 Munro's Spontaneous Retell results from Pre and Post testing (control Group)



The final test administered for both Intervention and Control Groups is documented in Figures 4.0 and 4.1. The Munro's Cued Retell of a text is where students recall the events of a story through recall and response to various textual questions. Figure 4.0 suggest that the Intervention group were able to improve their recall of information specific to the text. The average increase in accuracy of the answers given correctly was recorded at 34%, where all students achieved at least a 20 % increase with the exception of students B and Y who showed a 17% increase in accurately answering questions with more detail. Student D showed the greatest increase in recalled information more than doubling the information recalled in the answers given, showing more detail in each answer.

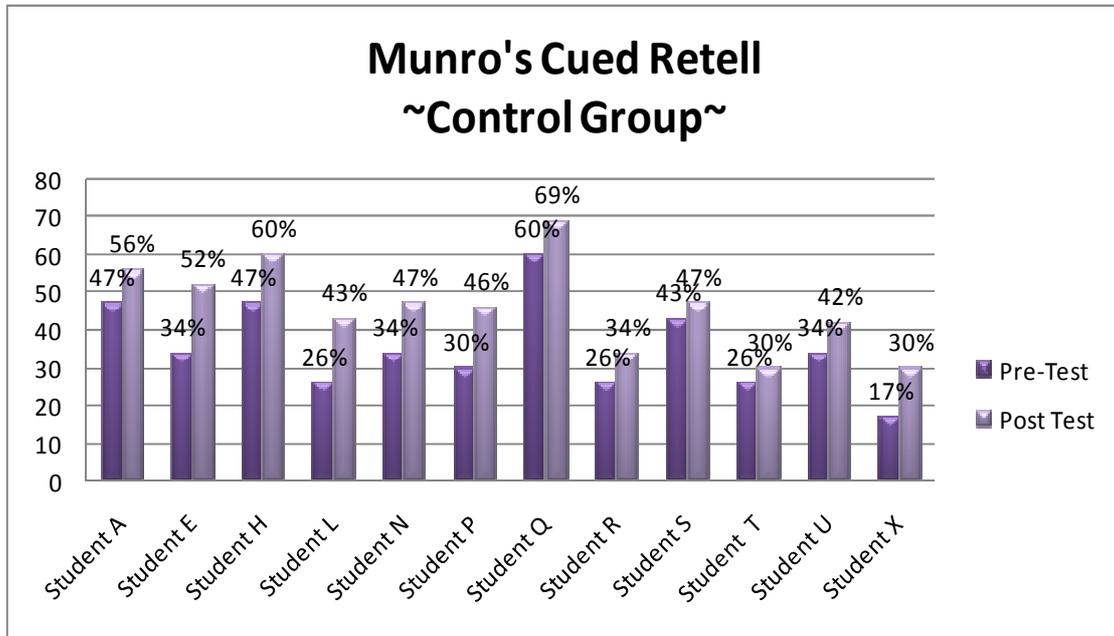
Figure 4.0 Munro's Cued Retell results from Pre and Post test Intervention Group.



The results from the Control Group (Figure 4.1) show that the average improvement for the group was 11%. This can gain be attributed to the possibility of a natural learning progression. Students E and P showed the greatest improvement with the above average score of 18%. Students S and T showed the least movement improving their detail in recalling information by only 4%. In comparing the results from this test, the intervention group showed more improvement than the control group counters parts. This indicates further support of the prediction as students who received intervention and explicit

teaching of visual strategies were able to implement the teachings to store, recall and make meaning of information from text as indicated in the results in Figures 4.0 and 4.1.

Figure 4.1 Munro's Cued Retell results from Pre and Post testing (Control Group).



DISCUSSION

In reflecting on the results of this study, there is much support for the prediction within the research that suggests by explicit teaching of visualization strategies there is improvement in listening comprehension and oral retell. Students who participated in the study all showed improvement whether it be in the storing and retrieval of information after an interval, or the use of mental imagery to recall detail when answering specific questions relating to the text. All students were able to use their visualization skills taught to improve their oral language in listening to a simple sentence and repeating with increased articulation and accuracy, therefore improving their listening comprehension.

Listening comprehension requires the scaffolding of oral language, visual imagery and skills require to store and retrieve information. Munro (2006) supports this idea by stating “oral language knowledge is necessary to scaffold both learning to read words and to store and make meaning of what has been read. Aspects of oral language are necessary for comprehending text.” (p.96) The students who received small group intervention did increase their scores by least an average minimum of margins throughout the study. However, the participants who were placed in the Control Group also achieved positive gains in the tests undertaken. This has implications for the study in relation to the natural progression of learning. It can be suggested that all students who are at an early stage of learning will absorb and develop their literacy skills in decoding, speaking and listening and oral language automatically as they advance through their first year of schooling. Riley (2007) identifies that students in their first year of schooling have had previous exposure to stories and this combined with the skills they explicitly develop or infer during their lessons achieve a natural progression which varies from student to student and occurs gradually over time.

One crucial element of the student’s development of listening comprehension relates to the direct retell of simple sentences as seen in the Record of Oral language testing. All students displayed a positive gain in their ability to listen to and retell sentences in both one and two event scenarios. The difference in results between intervention and control groups was not significant enough to

support the hypothesis. This suggests, as previously stated, children achieve a natural progression of learning in their first year of schooling.

As the study continued it became evident that students had had little experience in listening to stories which did not contain pictures. Isbell (2004) identifies that children's picture books have evolved and often contain illustrations that confuses students and distorts meaning (story-line) when making a mental picture. Therefore it became important to expose students to 'read-to stories' with little picture cues in association with the introduction of the L.I.T.E.L prompt cards to build their ability to listen, imagine, discuss, store information and listen again. The data collected from Munro's Listening Comprehension test (a test containing no visual prompts) indicates that students in the intervention group had difficulty in the Pre-test recalling information without visual cues as did the Control group. However, at the conclusion of the study students were again tested and showed vast improvement in retelling details from the read to story. In particular, the intervention groups were able to nearly double the amount of information they retold. This suggests that students were able to utilize the strategies taught to make a mental picture of the events and structure them in ordered retelling.

The data collected from the interval retell of the same test further supports the prediction. Students proved that after the visualisation explicit focus groups, they were able to more readily listen to the story and retain information for a period of 5 minutes before retelling. This scenario was familiar to students as they incurred a ' wait time' in the L.I.T.E.L sessions, each child having to wait their turn before telling and evaluating. This test was delivered with no picture cues so students were solely relying on the events and structure of information they had stored in their memory. " Poor comprehenders, after training in visual imagery, show a marked improvement in their memory for reading comprehension passages and a greater extend than good comprehenders" (Oakhill as cited in Center,(1999).

The data associated with the control group for the interval Listening test indicate this statement to be true, as students did show positive progression but not to the same extent as the intervention group. A consequence of the study has been identified that the students involved felt more comfortable in small group

situations where they had the L.I.T.E.L cue cards as prompts which was noted during discussions with students. Therefore, small groups are more beneficial in explicitly teaching a specific skill like visualization where 1:1 is required between teacher and student and also made possible by numbers within the group.

The L.I.T.E.L strategy builds confidence in children as they feel safe in that their answers are valued when sharing their retrieved information and images with the group. This links to the study as it promotes risk taking in verbalizing responses, decoding unknown words and using their meaning making motor to comprehend the text.

As all the students partaking in the study were pre-reading students the importance of building the visualizing skills for meaning and storing information was essential. As seen in the Spontaneous test results, students were not confident in recalling events from a passage during the pre-test. After completing the sessions, students were armed with strategies for making mental pictures and predicting whilst listening to a story. The post test results concur that students had adapted skills in storing and evaluating their own mental image of the story as it was being read to them. Using the cued retell, students used their skills from the visualization strategies in the ten sessions such as the mental comic strip to store information retrieve specific details in response to questions asked.

As student pre-testing occur during the first 6 weeks of the school year it is important to note that students had still not fully settled into the school environment nor had they been exposed to the testing situations. It can not be implied that this had great effect on the study however, it is crucial to note that students entered their first year of schooling with limited to non-existent knowledge of individual visualization of a prose with no picture cues.

The L.I.T.E.L visualisation strategies allows students the wait time to process information and store it in their individual way in their memory. As stated all students experienced positive progression of both cued and spontaneous retell as a result of the consistency in the session time and frequency. This allowed students to consolidate previous learning and use it as a foundation upon which new skills could be built.

Implications for future study would relate to the amount of skill retained over time. To consider whether students would continue to utilize these visualization skills without instructed to and whether the skills would increase to the point of automaticity. The benefit of visualization strategies include the transfer of these acquired skills into other areas of the curriculum. Visualisation and skills acquired in listening and retelling comprehension are universal, not specific to the boundaries of literacy. The participants have been given the ability to use mental imagery in all areas of their learning. To further explore the nature of visual imagery would be to take the successful skills to promote listening comprehension and apply them to reading comprehension through the introduction of the R.I.D.E.R strategy and compare the results. As students become more proficient readers, there is potential to take this study and explore listening comprehension through factual text and compare the outcome with the fictional counter-part.

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Listen



Imagine



Tell



Evaluate



Listen

APPENDIX 1B Lesson plans conducted for Visualisation session

<i>LESSON ONE ~</i>	<u>INTRODUCING THE CARDS</u>
<p align="center">Tuning In</p>	<ul style="list-style-type: none"> • Students sit in a circle and play the game “I went to the zoo and saw....” (memory / listening activity) Student go around using the sentence starter and add something they saw at the zoo, each child has to remember what has already been said.
<p align="center">Activity Focus</p> <p align="center"><i>The Bee</i></p>	<ul style="list-style-type: none"> • Students are introduced to the L.I.T.E.L cards : <ul style="list-style-type: none"> • Listen. • Imagine • Tell • Evaluate • Listen . • Teacher shows the students the front cover of the book . Students are asked to look at the cover and discuss what they can see ~keeping the picture they have made in their minds. • Students are shown the first card (Listen) and are told they must listen to the story (1st part). • Students are then shown the second card (Imagine) and are asked to make a picture in their mind of what they have heard. • Once students have an image in their minds they are asked to share it with the group cue card three (Tell). • After everyone has shared students check their own description as the fourth card is shown (Evaluate). • The group continue to listen as they are shown the fifth card (Listen). • The teacher will continually stop to undertake the strategy.
<p align="center">Reflection</p>	<ul style="list-style-type: none"> • Students are asked to share their ideas and reflect on what they have learnt using the talking flower. Students are reminded there is only 1 voice that of the person with the flower. • Students complete a three square drawing showing the sequence of the story (beginning middle end).

LESSON TWO ~	
Tuning In	<ul style="list-style-type: none"> • Students re-play : I went to the zoo and I saw.....” Students are asked to explain the game, 1 student selected to begin the game.
Activity Focus The Zebra’s Party	<ul style="list-style-type: none"> • Teacher re-introduces the cue cards and students are asked to explain each card. • _ Teacher shows students the front cover of a different book . • Teacher shows the students a WHO WHAT cards and asks them to describe WHO and WHAT they see. • Teacher reads the story showing the cue cards at appropriate times as in session 1 (with less time in between).
Reflection	<ul style="list-style-type: none"> • At the end of the session, Students take turns in describing what they remember, have learnt using the flower. • Students will draw a 3 squared picture illustrating the beginning middle and end events in the story.
LESSON THREE ~	
Tuning In	<ul style="list-style-type: none"> • Students play the copy cat game. The teacher chooses a sentence and the students are to repeat the sentence back.
Activity Focus <i>Kanga and Patty’s Spaceship</i>	<ul style="list-style-type: none"> • _ Teacher introduces the text , showing the front cover. • Students are shown the WHO WHAT WHERE cards and discuss the characters and the setting. • Teacher reads the story to the students cuing the L.I.T.E.L strategy without showing the cards.
	<ul style="list-style-type: none"> • At the end of the session, Students take turns in describing what they remember, have learnt using the flower. Discussion

LESSON FOUR ~	
Tuning In	<ul style="list-style-type: none"> Students Sit in a circle and play Chinese Whispers, where the teacher starts with a simple sentence and whispers it into the ear of the person next to. The next person whispers what they hear, the sentence travels around the circle returning to the teacher. This activity focuses on the student’s ability to listen and repeat.
Activity Focus Betty Bees Lunch	<ul style="list-style-type: none"> Review the cards and what they mean. Clarify the order of the cards. Teacher shows students the front cover of the text. Students picture the cover identifying WHO WHAT WHERE and WHEN (using cue cards). Teacher reads the text to students cuing the steps to the L.I.T.E.L strategy without showing the cards.
Reflection	<ul style="list-style-type: none"> At the end of the session, Students take turns in describing what they remember, have learnt using the flower. Teacher models how to select the main ideas from the story, drawing the events in a sequence of 6. Students will draw a 6 squared picture detailing the events of the story in the version of a comic strip so they can remember the sequence of the picture/ story.
LESSON FIVE ~	
Tuning In	<ul style="list-style-type: none"> Students re-play Chinese Whispers, focusing on a two event sentence. Students are encouraged to picture the sentence in their minds before whispering to a new person.
Activity Focus Sam	<ul style="list-style-type: none"> Teacher reviews the L.I.T.E.L cue cards. Students are shown the front cover and asked to discuss what they see. Teacher writes what is said. As a group the sentences are placed in the WHO WHAT WHERE WHEN categories. Teacher reads the text to students cuing the steps to the L.I.T.E.L strategy without showing the cards.
Reflection	<ul style="list-style-type: none"> Students will draw a 6 squared picture illustrating the events of the story (in partners.)

LESSON SIX ~	
Tuning In	<ul style="list-style-type: none"> • Students play Barrier Games. Teacher gives students a blank piece of paper , students sit with their backs to teacher. Teacher describes a picture and students draw. Compare the pictures at the end. • Picture : Draw a house in the middle of the page with a chimney . Above the house draw three clouds, draw a tree next to the house and a mum, dad and child on the other side.
Activity Focus	<ul style="list-style-type: none"> • Teacher re-introduces the cue cards and students are asked to explain each card. • _ Teacher shows students the front cover of a different book . • _ Students are shown the front cover and asked to discuss what they see. Teacher writes what is said. As a group the sentences are placed in the WHO WHAT WHERE WHEN categories. • Teacher reads the text to students cuing the steps to the L.I.T.E.L strategy without showing the cards.
Reflection	<ul style="list-style-type: none"> • At the end of the session, Students take turns in describing what they remember, have learnt using the flower. • Students will draw a 6 squared picture in pairs detailing the events of the story.

LESSON SEVEN ~	
Tuning In	<ul style="list-style-type: none"> • Students re-play the barrier game with the teacher. The group then compare pictures and discuss.
Activity Focus <i>Benny wants to go out</i>	<ul style="list-style-type: none"> • Teacher reviews the L.I.T.E.L cue cards. • _ Students are shown the front cover and asked to discuss what they see. Teacher writes what is said. As a group the sentences are placed in the WHO WHAT WHERE WHEN categories. • Teacher reads the text to students cuing the steps to the L.I.T.E.L strategy without showing the cards.
Reflection	<ul style="list-style-type: none"> • At the end of the session, students take turns discussing the events of the story using the flower. • Students will draw a 6 squared picture detailing the events of the story. (individually)

LESSON EIGHT ~	
Tuning In	<ul style="list-style-type: none"> • Students re-play : I went to the zoo and I saw.....” Students are asked to explain the game, 1 student selected to begin the game.
Activity Focus The Sad Giraffe	<ul style="list-style-type: none"> • Teacher reviews the L.I.T.E.L cue cards. • _ Students are shown the front cover and asked to discuss what they see. Teacher writes what is said. As a group the sentences are placed in the WHO WHAT WHERE WHEN categories. • Teacher reads the text to students cuing the steps to the L.I.T.E.L strategy without showing the cards.
Reflection	<ul style="list-style-type: none"> • At the end of the session, students take turns discussing the events of the story using the flower. • Students draw a 6 squared picture detailing the events of the story (individually.)

LESSON NINE~	
Tuning In	<ul style="list-style-type: none"> • Students re-play Chinese Whispers using 2 event sentences.
Activity Focus In the Dark Dark Woods	<ul style="list-style-type: none"> • Teacher reviews the L.I.T.E.L cue cards verbally. • _ Students are shown the front cover and asked to discuss what they see. Teacher writes what is said. As a group the sentences are placed in the WHO WHAT WHERE WHEN categories. • Teacher reads the text to students cuing the steps to the L.I.T.E.L strategy without showing the cards.
Reflection	<ul style="list-style-type: none"> • Students picture in their minds the events of the story and turn to a friend to retell what they remember from the story (think pair share), partners take turns and then share with the group.

LESSON TEN~	
Tuning In	<ul style="list-style-type: none"> • Students replay the barrier game in pairs. Students sit back to back and take turns in describing a picture to a partner. At the end of the instructions they compare pictures. • Students play follow the leader. Students are given a series of instructions (3 at time) they have to complete and come and sit on the floor. Egg, Go to your tub and get a red pencil, After you get your red pencil place it on your table. Before you go to your tub pat your tummy.
Activity Focus Meanies	<ul style="list-style-type: none"> • Teacher reviews the L.I.T.E.L cue cards verbally. • _ Students are shown the front cover and asked to discuss what they see. Teacher writes what is said. As a group the sentences are placed in the WHO WHAT WHERE WHEN categories. • Teacher reads the text to students cuing the steps to the L.I.T.E.L strategy without showing the cards.
Reflection	<ul style="list-style-type: none"> • Students picture in their minds the events of the story and turn to a friend to retell what they remember from the story (think pair share), partners take turns and then share with the group.

