CHAPTER 4

FINDINGS AND DISCUSSION

This chapter presents the research findings and discussion derived from the data analyses which are reported on the reading ability of the two subject groups of students taught by two different teaching methods.

English Reading Comprehension Ability and the Responding Abilities to the Literal and the Reinterpretation Questions of the Two Subject Groups Taught by Two Different Teaching Methods

The questions of this study were put forward for investigation whether the pre, while-, and post-reading questioning strategies affect students' reading comprehension in general, whether the pre-, while- and post-reading questioning strategies affect the students' ability in responding to the literal and reinterpretation questions and, whether the pre-, while- and post-reading questioning strategies differently affect the students with different English proficiency levels.

Research Question 1: Do the pre-, while-, and post-reading questioning strategies affect students' reading comprehension?

In order to answer the first question, the mean scores of the pre- and post-tests of the control and the experimental group were compared using the paired samples t-test to see the difference in improvement of reading comprehension ability between the control and the experimental groups before and after the experiment. **Table 5** shows the improvement of the reading comprehension ability of both groups.

Table 5: Comparison of the English Reading Comprehension Ability of the Control and the Experimental Groups before and after the Experiment

Tests	Subject groups	Mean	S.D	t-values	Two-tailed test
Pre-test	**Control**	**7.348**	**2.671**	**.51**	**.613**
	Experimental	**7.023**	**3.135**		**N=43**
Post-test	**Control**	**8.558**	**2.797**	**-5.295**	****.000**
	Experimental	**11.953**	**3.779**		**N=43**

** Significant at 0.01 level

With respect to the data presented in **Table 5**, the pre-test mean scores of the control and the experimental groups are not significantly different at 0.05 level though the pre-test mean score of the control group is slightly higher than that of the experimental group. This is because these groups were selected as subjects on the assumption that they had approximately similar English language ability (See **Table 2** page 25).

However, according to the post-test**,** the mean score of the experimental group was higher than that of the control group. The mean score of the control group was 8.56 and the mean score of the experimental group was 11.95. The results of the test taken by the two groups are significantly different at 0.01 level. This indicates that after both groups were taught with two different methods, the English reading comprehension ability of the experimental group improved more than that of the control group. That is,

English reading ability of the subjects who had been trained by using the pre-, while- and post-reading questioning strategies was significantly greater than that of the subjects who had been trained according to the procedures as recommended in Teacher's manual of **Say Hello 6**.

Therefore, it is interesting to further investigate the level of improvement in English reading comprehension of the control and the experimental groups. Each group's ability increased significantly as can be seen in **Table 6**.

Table 6: English Reading Comprehension Ability of Each Group before and after the Experiment

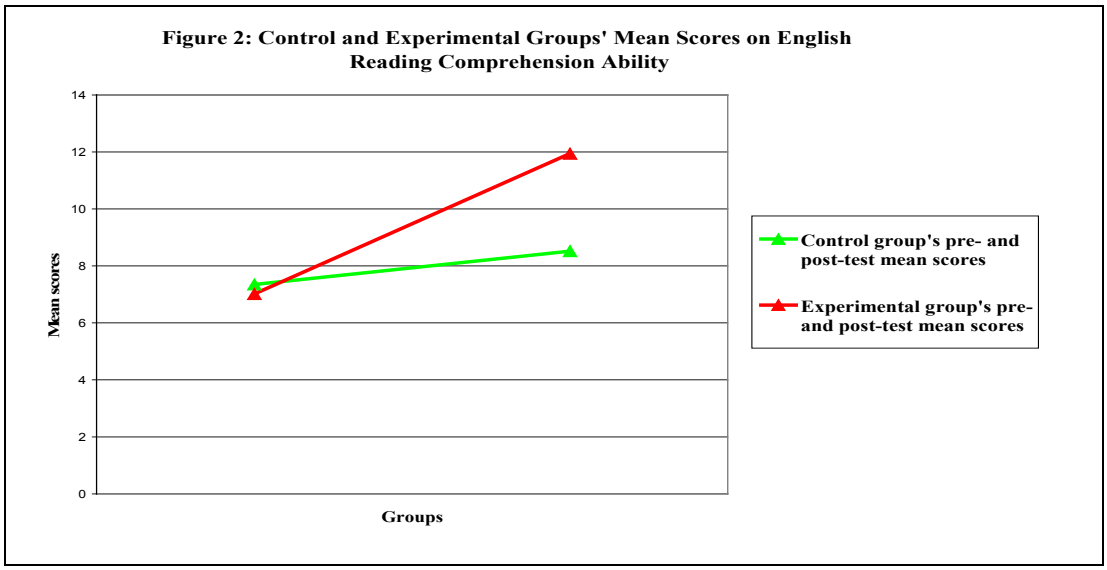
Subject groups	Tests	Mean	S.D	t-values	Two-tailed test
Control	**Pre-test**	**7.348**	**2.671**	**-3.156**	****.003**
	Post-test	**8.558**	**3.126**		**N=43**
Experimental	**Pre-test**	**7.023**	**3.135**	**-9.595**	****.000**
	Post-test	**11.953**	**3.779**		**N=43**

** Significant at 0.01 level

The control and the experimental groups did significantly noticeably better in the post-test than on the pre-test. That is, the pre- and post-test mean scores of the control and the experimental groups show that although they were trained by two different teaching methods (reading procedures following the steps in the Teacher's manual of **Say Hello 6** and the pre-, while-, and post-reading questioning strategies), each group's reading comprehension ability significantly improved at 0.01 level. This implies that the pre-, while-, and post-reading questioning strategies can enhance reading comprehension ability of the experimental group. That is, after being trained to answer the literal and reinterpretation questions in the three stages of teaching, the experimental group could transfer the use of these strategies to the post-test.

However, the control group who was taught by reading aloud, translating, re-telling what they have translated, and answering or discussing in the whole class to summarize what they had read can also enhance their reading comprehension ability, but at the lower level.

As mentioned earlier, the reading comprehension ability of the control and the experimental groups after the training were significantly different, but they were not different before the training. It may be concluded that although each group's ability can be improved after training, each particular type of training can result in different levels of effectiveness. Although the control group's reading comprehension ability improved significantly, the experimental group improved much more (**See Figure 2)**.



Research Question 2: Do the pre-, while-, and post-reading questioning strategies affect the students' ability in responding to the literal and reinterpretation questions?

To answer the second question, the mean scores of the pre- and post-tests of the control and the experimental groups in responding to the literal and reinterpretation questions were compared using the paired samples t-test to determine the improvement of their responding ability to each kind of reading comprehension questions. **Table 7** shows the improvement in the responding ability to the literal and reinterpretation questions of the control and the experimental groups before and after the experiment.

Table 7: Ability in Responding to the Literal and the Reinterpretation Questions of the Control and the Experimental Groups before and after the Experiment

Subject groups	Types of questions and the number of items	Tests	Mean	S.D	t-values	Two-tailed tests
Control	Literal (12)	Pre-test	4.116	1.815	-1.635	.109
		Post-test	4.267	2.035		N=43
	Reinterpretation (8)	Pre-test	3.255	1.432	-2.36	*.023
		Post-test	3.93	1.667		N=43
Experimental	Literal (12)	Pre-test	3.604	2.361	-8.666	**.000
		Post-test	7.186	2.62		N=43
	Reinterpretation (8)	Pre-test	3.302	1.406	-5.534	** .000
		Post-test	4.814	1.762		N=43

** Significant at 0.01 level

* Significant at 0.05 level

The data presented in **Table 7** shows that the mean scores of the pre- and post-test of the control group in responding to the literal questions are not significantly different. In other words, the control group's responding ability to the literal questions did not increase significantly after being trained with reading aloud and translating according to the Teacher's manual of **Say Hello 6**. During the class, the whole class was asked to read after the teacher reads, then in groups and next individually. The teacher interrupted from time to time to correct pronunciation. The reading aloud modeled by the teacher could help the subjects in the control group discover units of meaning that should be read as phrases or sentences rather than word by word. It also helps them to see reading as a continuous, meaningful process of building larger semantic units rather than focusing on the graphic cues (Amer, 1997). However, in the translation stage, the subjects were divided into groups. Each group worked cooperatively to translate only one paragraph of the texts. They were then asked to re-tell in Thai to the whole class. It can be noticed that according to this procedure, the control group was not trained to relate their background knowledge to the texts before reading. They were encouraged to concentrate on the information of the part they were responsible for. Therefore, they would not get all the

details of the text until the end of the reading lesson. Their comprehension was developed mainly from the secondary source of information as the text was translated into Thai by their peers and they had to piece everything together. The accuracy of the content could not be guaranteed until the feedbacks from the teacher were provided. Besides, in the case that the translated parts were inaccurate, the students had to retrace their comprehension according to the teacher's correction. This might cause the control group to be confused with some details and eventually tend to rely on their teacher more than on themselves. However, at the end of the reading lesson, the students were asked to do the exercises which were mainly literal questions to check their comprehension.

On the other hand, though reading aloud modeled by the teacher could help the students discover units of meaning while they were reading, it might not be enough to enable them to answer the literal questions when taking the post-test. Besides, the students were not trained to decode the whole text. That is why the control group's responding ability to the literal questions did not increase significantly in the post-test.

In contrast, the mean scores of the pre- and post-test of the control group in responding to the reinterpretation questions are significantly different at 0.05 level. This means that the responding ability to the reinterpretation questions of the control group increased significantly after being trained according to the reading procedure in the teacher's manual. This may be because the post-reading stage in the Teacher's manual of **Say Hello 6** requires teacher and students or students and students to help each other summarize what they have read. Hence, the students were guided to conclude the main points and think about the meaning that was not only directly presented but also implied in the texts at the end of the reading lesson. In other words, the important message has been comprehended at this post-reading stage.

Provided below is an excerpt from the class interaction (on Tuesday, July,12th, 2005) showing how the lesson helps cultivate the students' ability to answer both literal and reinterpretation questions at the same time. That is, after the control group was required to work in groups to translate one paragraph of the texts. In the post-reading stage, the teacher gradually encouraged the students to answer the questions which made them recall, analyze and piece together the important aspects of what they had read until they could reach a conclusion. Hence, when responding to the reinterpretation questions,

the students could discern the main message of the text and interpret the meanings that were implicitly stated. The reinterpretation questions require the students to think beyond the texts so they need to think logically and critically.

Teacher: What is this story about?
Students: A crow and the meat.
Teacher: Is this story about only a crow and the meat? No.
Students: A crow and a fox. / A fox and a crow.
Teacher: Right! What did the fox think when it saw the meat in the crow's mouth?
Students: It thought about the ways to get the meat to eat it himself.
Teacher: Why didn't it climb to get the meat?
Students: It could not climb the tree.
Teacher: Why did the fox pretended to greet the crow and to want to hear the crow singing?
Students: The fox thought that when the crow opened its mouth, the meat would fall on the ground.
Teacher: Right! What happened to the fox and the crow?
Students: The crow sang and the meat fell out its mouth. The fox did not listen to the crow's song, but it took the meat and ran away.
Teacher: If you were the crow, what would you do? Why do you think so?
Students: We would chase the fox to get the meat back because the meat was ours. /We would chase and fight with the fox in order to get the meat back.

The control group was firstly encouraged to think about the message of the texts to conclude the main points of what they had read. Their answer like "this story is about a crow and the meat" shows that the students could not cover the whole content of the story. Therefore, the teacher asked them to clarify their answer again. Then, their answer like "this story is about a crow and a fox" indicates that the students could piece more things or more information together into what they have translated and listened to their peers' translation to make a conclusion of the text. After that, other questions which were mainly reinterpretation questions required the students to recall and think about the implied meaning of what they had read. Gradually, they were led through a set of

questions relating to the events in the story. At this stage, they related their experiences or knowledge of the world to the text.

For the last question, the students were asked to put themselves in the situation of the story. The students were encouraged to discuss how to make a solution if they were the crow in the story. It is noticeable that the students' answer like "we would chase and fight the fox to get the meat back because the meat was ours" shows that what they thought was not only based on the content from the text, but also related to their experiences in life. As a result, after being guided to recall and think logically and critically about what they had read, the control group could transfer their responding ability to the reinterpretation questions when taking the post-test.

The data presented in **Table 7** for the experimental group shows that their mean scores of the pre- and post-test in responding to the literal questions are significantly different at 0.01 level. This shows that the experimental group's responding ability to the literal questions increased significantly after being trained with the pre-, while-, and post-reading questioning strategies.

According to the procedure, after being guided to make predictions, in the while-reading stage, the subjects were asked to read the story silently by themselves in order to confirm or verify their predictions set beforehand. Then, they were encouraged to read each paragraph of the story again, but now part by part and try to find the important information relevant to the questions, which were mainly literal and gradually presented on the transparency. They had a chance to read the whole story twice and on the second time fully concentrated on the detail of each part. As a result, the experimental group was experienced in sorting out the details of what they read. This enables them to understand the texts thoroughly. That is why they could significantly improve in answering the literal questions in the post-test.

The mean scores of the pre- and post-test of the experimental group in responding to the reinterpretation questions are also significantly different at 0.01 level. This means that the experimental group's responding ability to the reinterpretation questions increased significantly after being trained with the pre-, while- and post-reading questioning strategies. In the pre-reading stage, the experimental group was trained to predict from the pictures and the titles of the texts, preview the main points of what they

were going to read and also relate their background knowledge to the texts before reading. In other words, pre-reading questions were used to activate the subjects' background knowledge relevant to the central concept of the text. The subjects had a chance to preview the important points which are generally needed in answering the reinterpretation questions. In the while-reading stage, the students were trained to pay attention to the important information and the details of the whole text in order to answer the questions. In short, the students not only read the text purposefully but also understand the story thoroughly. This enriches their ability to discuss or make a comment in the post-reading stage. After reading, the students were divided into groups of five or six. Then, they were randomly assigned to answer one of the post-reading questions. After that, the representative of each group was asked to speak out to the whole class. By this procedure, the subjects were trained to discuss around the key concepts, review and summarize about what they had read. In other words, they were not only encouraged to integrate the textual information to their prior knowledge but also put themselves in the situation of the texts to give comments and express their ideas about what they had read.

It is noticeable that the post-reading questions could enrich the students' thinking process in various aspects. They were trained to discuss and express their ideas towards what they had read in different aspects and think in a variety of ways. By doing this, the students were encouraged not only to think more, but to learn more by listening to the others' opinions.

Compared to the experimental group in this respect, the control group had less chance to develop their thinking process than the experimental group because they were gradually led by the teacher's questions. Although they could think logically and critically along with the questions, they might be dominated by a small number of the students who were faster to answer. When the teacher got an acceptable answer, she moved on to another question. So the experimental group had more chance to exercise their thinking process by tackling the question in groups, and later sharing their ideas and learning about their peers' opinions than were the control group who were guided by the teacher's questions.

An excerpt taken from the class interaction of the experimental group (on Tuesday, July 12th,2005) shows how the lesson cultivates their responding ability to reinterpretation questions.

The excerpt below presents how the post-reading questions were reacted in **The Fox and the Crow Story** which was the first passage of the training stage.

Question 1

Teacher: Group 1, who is the cleverer of the two animals in this story? Why do you think so?

Representative of group 1: We thought that the fox was cleverer than the crow because he pretended to listen to the crow' s song to have it open its mouth so he could get the meat.

Teacher: Good! Class, give your friends a big hand. What about you, group 3? Who is the cleverer of the two animals in this story? Why do you think so?

Representative of group 3: We agreed that the fox was really cleverer than the crow because it didn't waste time to look for the meat by itself. It just pretended to listen to the crow's song, waiting for the meat falling from the crow's mouth.

Teacher: Very good! What is your comment, group 5? Who is the cleverer of the two animals in this story? Why do you think so?

Representative of group 5: We noticed that the silly person is always the victim of the clever one.

Question 2

Teacher: Excellent! Now, let's talk about the second question. If you were the crow, what would you do when the fox took a piece of meat and ran away? What do you think about this question, group 2?

Representative of group 2: We all agreed that if we were the crow, we would chase the fox to get our meat back.

Teacher: Good! What's about you, group 4? If you were the crow, what would you do when the fox took a piece of meat and ran away?

Representative of group 4: We thought that if we were the crow, we would chase the fox to get our meat back.

Teacher: Good! What's about you, group 6? If you were the crow, what would you do when the fox took a piece of meat and ran away?

Representative of group 6: We first thought that it was our own mistake for being silly and we did not want to chase the fox because we thought that the crow was smaller than the fox. If we chased the fox we might be the fox's snack. Also, we would remind ourselves not to easily believe anyone any more.

The subjects were required to discuss one of the two questions in groups and each group wrote its answer before presenting it to the class. Their answers shown here can be classified into two levels of reading comprehension; interpretation and critical levels. The interpretation comprehension is reading to find information which is not explicitly stated in a passage by employing the reader's experience and knowledge. Whereas, the critical comprehension means reading in order to compare information in a passage with the reader's knowledge and values. The critical level involves evaluation, making judgment on the accuracy, and values of what is read (Richard et al 1992; Rubin, 1993, 1997).

For the first question, the subjects were asked to make a judgement which they needed to integrate their background knowledge with what they had read. The first and the third groups' answers indicated that the students could express their comments or ideas not only by using the information implicitly contained in the story, but also by analyzing the behavior of the main character in the text.

For example, the answer "The fox thought that it didn't want to waste time to look for the meat by itself, so it just pretended to listen to the crow's song, and wait for the meat to fall from the crow's mouth" shows that the students could express their ideas and comment based on the information implicitly contained in the story. And the answer "We

agreed that the fox was really cleverer than the crow" indicates that the students could analyze the behavior of the main character in the text. On the other hand, the fifth group's reaction shows that the students could make a judgment of what they had read and they could also extract the moral from the text. This might result from their experiences in reading Aesop's Fables which usually ends with one moral lesson at the end of the story. Based on this experience, they critically condensed the message of the text into a moral concept. Interestingly, the fifth group's answers show how they critically thought beyond the text. They could make a conclusion that the silly one is always the victim of the clever one.

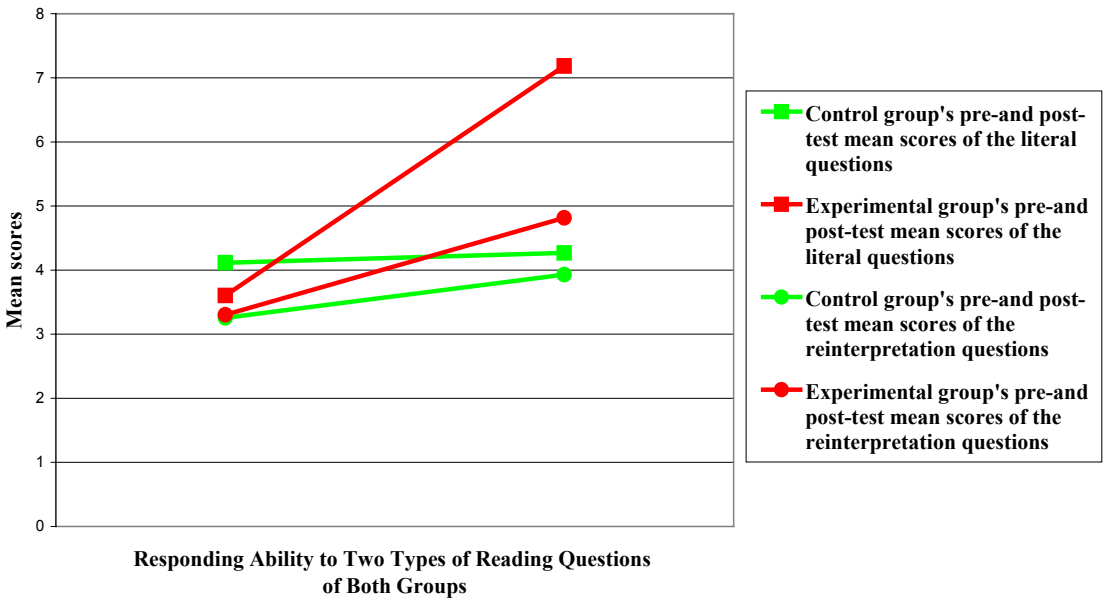
For the second question, the students were asked to put themselves in the situation, The second group's answer "We all agreed that if we were the crow, we would chased the fox to get our meat back" shows that the students were able to make a comment by using their experience. Furthermore, for the six group's answer "We first thought that it was our own mistake for being silly and we did not want to chase the fox because we thought that the crow was smaller than the fox. If we chased the fox, we might be the fox's snack. Besides, we would remind ourselves not to easily believe anyone any more" reflects their reactions and awareness towards related aspects of life which are a crucial development in their critical thinking. It might be noticeable that the students' responses to the post-reading questions covered important points of the whole story. As their answers were noted after discussing in groups before presenting, they truly represented their thought which was not influenced by the answers presented by the former groups.

As can be seen, the pre- and post-reading questions required the experimental group to think critically either to answer the questions or to put themselves into the condition according to each text. This means that the subjects in the experimental group were experienced in responding to the reinterpretation questions from the pre- and post-reading stages of the training. Therefore, they can apply these strategies to respond the reinterpretation questions when taking the post-test.

With reference to the data presented in **Table 7**, it can be seen that after being trained with the pre-, while- and post-reading questioning strategies, the experimental group's responding ability to both literal and reinterpretation questions is significantly higher than that of the control group. Moreover, being trained with the pre-, while-, and post-reading questioning strategies can enhance the experimental group's responding ability to the literal and the reinterpretation questions.

Likewise, being trained with the reading procedures as recommended in Teacher's manual of **Say Hello 6** can also enhance the control group's responding ability to the reinterpretation questions, but at the lower level. This indicates that being trained with reading questioning strategies in the three stages of the reading lessons enabled the experimental group to significantly improve their responding ability to two types of reading questions in the post-test (**See Figure 3**).

Figure 3: Control and Experimental Groups' Mean Scores of Responding Ability to the Literal and the Reinterpretation Questions



Research Question 3: Do the pre-, while-, and post-reading questioning strategies affect the students with different English proficiency level differently?

To find whether the pre-, while-, and post-reading questioning strategies affect the students with different English proficiency level differently, the experimental group's mean scores of the pre- and post-test of the high and the low proficiency students were compared using the paired samples t-test to see the improvement of both groups' reading comprehension ability after the experiment. The experimental group was divided according to the pre-test scores into the high and the low proficiency groups using a 27 % technique (Hughes, 1989).**Table 8** presents the English reading comprehension ability of the high and the low proficiency students in the experimental group before and after the experiment.

Table 8: Comparison of the English Reading Comprehension Ability of the High and the Low Proficiency Students in the Experimental Group before and after the Experiment

Tests	Subject groups	Mean	S.D	t-values	Two-tailed test
Pre-test	High	11.000	2.522	6.601	**.000
	Low	4.083	1.164		N=12
Post-test	High	14.833	4.063	1.892	.085
	Low	11.833	2.790		N=12

** Significant at 0.01 level

The data presented in **Table 8** shows that the pre-test mean scores of the high and the low proficiency students are significantly different at 0.01 level. That is, the mean scores of the high proficiency students are significantly higher than that of the low proficiency students. This indicates that before being trained with the pre-, while-, and post-reading questioning strategies, the high proficiency students had significantly better reading comprehension ability than that of the low proficiency students.

However, the post-test mean scores of the high and the low proficiency students are not significantly different. This means that after being trained with the pre-, while- and post-reading questioning strategies, the low proficiency students could progressively increase their reading comprehension ability to the close level to the high proficiency students'. That is why their reading comprehension abilities are not significantly different.

In order to see the level of improvement of reading comprehension ability of the high and the low proficiency students, the mean scores of the pre- and post-test of each group were compared using the paired samples t-test. **Table 9** shows that the high and the low proficiency students' English reading comprehension ability improved significantly.

Table 9: English Reading Comprehension Ability of Each Group before and after the Experiment

Subject groups	Tests	Mean	S.D	t-values	Two-tailed test
High	Pre-test	11.000	2.522	-4.131	** .002
	Post-test	14.833	4.063		N=12
Low	Pre-test	4.083	1.164	-11.108	** .000
	Post-test	11.833	2.790		N=12

** Significant at 0.01 level

The data presented in **Table 9** shows that the mean scores of the pre-and post-test of both high and low proficiency students are significantly different at 0.01level. This shows that the reading comprehension ability of both the high and the low proficiency students in the experimental group increased significantly after being trained with the pre-, while-, and post-reading questioning strategies.

The effectiveness of the pre-, while- and post-reading questioning strategies might result from the fact that being trained with reading questioning strategies in the three stages of teaching reading required the students to read the texts interactively.

The interactive process is viewed as an effective process in reading. It requires the students to use both bottom-up and top-down processes when they read. That is, in the pre-reading stage, the students were trained to relate their background knowledge and to predict the contents from the title and pictures and preview the important information

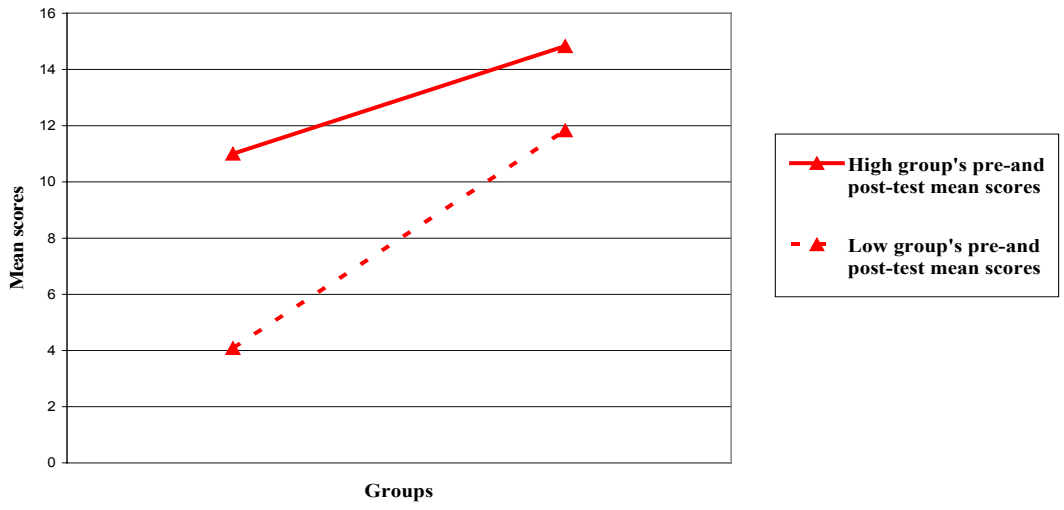
before reading the text. In this stage, the students were required to use top-down processes. In other words, the students employ their knowledge to make predictions about the text. The top-down processes seem to create the students' schema that helps them interpret the meaning of the text they read effectively.

In the while-reading stage, they were trained to pay particular attention to the main points and the details of what they were reading to answer the literal questions and read the texts purposefully and meaningfully. The students needed to employ the bottom-up processes at this stage. In bottom-up processing, the students rely on their knowledge of language to recognize linguistic elements—letters, words, and sentence structures—for the construction of meaning (Chia, 2001). The bottom-up processes were employed in this stage to confirm or verify the students' anticipation which occurred before reading. Then, they could make sense of what they were reading. In other words, they basically had to analyze words, phrases and sentences in the text to understand the details of the text. The students derived the meaning of what they were reading by decoding words, phrases or sentences accurately and developed their comprehension. After that, in the post-reading stage, the students were required to use the top-down processes again. That is, they were trained to conclude the main points of what they had read and integrate the textual information with their knowledge of the world. This stage requires the experimental group to think logically and critically. So, they could do better in responding to reinterpretation questions.

With respect to data presented in **Table 8** and **Table 9**, it might be concluded that the pre-, while- and post-reading questioning strategies can enhance the high and the low proficiency students' reading comprehension abilities in the experimental group. However, it is apparently noticeable that although these strategies benefit both groups, the great improvement of the low proficiency students shows that they seem to gain more benefits.

Before the instruction, the high and the low proficiency students' reading comprehension abilities were significantly different. Whereas, after being trained with the pre-, while- and post-reading questioning strategies, the low proficiency students can increase their level of reading comprehension ability so that it is closer to that of the high proficiency students and both high and low proficiency students' abilities are no longer significantly different **(See Figure 4).**

Figure 4: High and Low Proficiency Groups' Mean Scores on English Reading Comprehension Ability



In order to see the details of the effects of using the pre-, while- and post-reading questioning strategies in responding to the literal and the reinterpretation questions of the high and the low proficiency students in the experimental group, the mean scores of the pre- and post-tests of both groups in responding to the literal and the reinterpretation questions were compared using the paired samples t-test. **Table 10** shows the high and the low proficiency students' abilities in responding to literal and reinterpretation questions before and after the experiment.

Table 10: Ability in Responding to the Literal and the Reinterpretation Questions of the High and the Low Proficiency Students in the Experimental Group before and after the Experiment

Subject groups	Types of questions and the number of items	Tests	Mean	S.D	t-values	Two-tailed tests
High	Literal (12)	Pre-test	6.333	2.229	-4.213	**.001
		Post-test	9.083	2.353		N=12
	Reinterpretation (8)	Pre-test	4.666	.887	-2.493	* .030
		Post-test	5.75	2.137		N=12
Low	Literal (12)	Pre-test	1.75	1.138	-11.188	**.000
		Post-test	7.666	2.015		N=12
	Reinterpretation (8)	Pre-test	2.333	.984	-5.332	**.000
		Post-test	4.166	1.193		N=12

** Significant at 0.01 level

* Significant at 0.05 level

The data presented in **Table 10** shows that the mean scores of the pre- and the post-test of the high and the low proficiency students in responding ability to literal questions are significantly different at 0.01 level. This shows that the high and the low proficiency students' responding ability to literal questions improved significantly after being trained with while-reading questioning strategies.

According to teaching procedure, after being trained to find details on the main points of each paragraph of the texts by being required to answer while-reading questions. These were gradually presented on the transparency while the students read each paragraph of the texts carefully. Hence**,** they learned and were aware of the information directly stated in each paragraph. As a result, the students learned to read the texts purposefully and meaningfully. That is why they could improve significantly in responding to literal questions when taking the post-test.

The mean scores of the pre and post-test of the high proficiency students in responding to the reinterpretation questions is significantly different at 0.05 level; whereas, the mean scores of the low proficiency students in responding to the reinterpretation questions is significantly different at 0.01 level.

As can be seen, both high and low proficiency students' responding abilities to the reinterpretation questions improved significantly. This is because the pre- and post-reading questions required the students to read and think logically and critically either to answer the questions or to put themselves into the situations presented in each text. Both high and low proficiency students were experienced in responding to the reinterpretation questions in the pre- and post-reading stages of the training. Hence, they can apply these strategies to respond to the reinterpretation questions when taking the post-test.

However, it can be clearly seen that although the high proficiency students' responding ability to the reinterpretation questions improved significantly, the low proficiency students improved more after being trained with the pre- , and post-reading questioning strategies.

To determine the different improvement of the high and the low proficiency students' responding ability to literal and reinterpretation questions before and after the experiment, the mean scores of the pre- and post-test of both the high and the low proficiency students in responding to each kind of reading questions were compared using the paired samples t-test as can be seen in **Table 11**.

Table 11: Comparison of the High and the Low Proficiency Students' Responding Ability to the Literal and the Reinterpretation Questions before and after the Experiment

Tests	Types of Questions and the number of items	Subject groups	Mean	S.D	t-values	Two-tailed tests
Pre-test	Literal (12)	High	6.333	2.229	5.242	**.000
		Low	1.75	1.138		N=12
	Reinterpretation (8)	High	4.666	.887	6.567	**.000
		Low	2.333	.984		N=12
Post-test	Literal (12)	High	9.083	2.353	1.308	.218
		Low	7.667	2.015		N=12
	Reinterpretation (8)	High	5.75	2.137	2.258	*.045
		Low	4.166	1.193		N=12

** Significant at 0.01 level

* Significant at 0.05 level

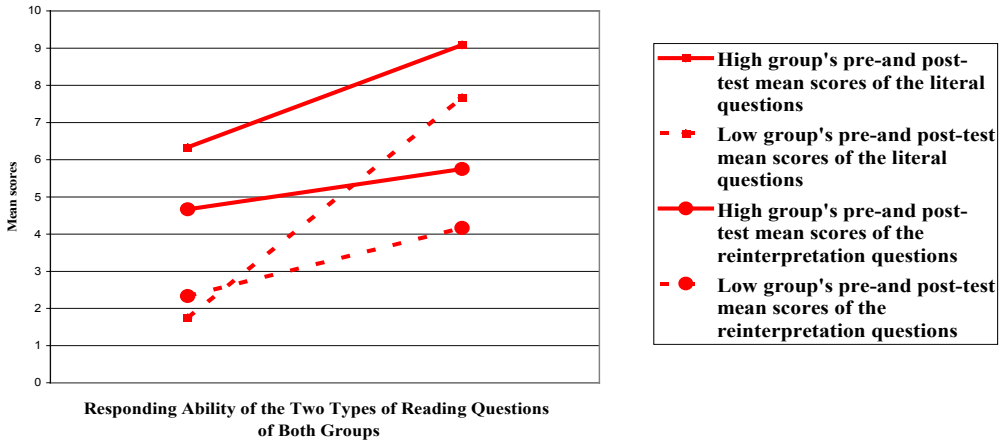
The data presented in **Table 11** shows that the pre-test mean scores of responding to literal and reinterpretation questions of each group is significantly different at 0.01 level. This resulted from the fact that the subjects in the experimental group were divided into the high and the low proficiency based on their pre-test scores so the high and the low proficiency students' abilities were identified significantly different.

On the other hand, the post-test mean scores of the high and the low proficiency students' responding ability in the literal questions are not significantly different. This means that although the post-test mean scores of the high proficiency students' responding ability to the literal questions increased, the low proficiency students' responding ability to the literal questions distinctively increased more. In other words, the responding ability to literal questions of the high and the low proficiency students come to a close level.

Hence, the low proficiency students seem to gain more benefits from being trained to find the details of the texts in the while-reading stage. This implies that the while-reading questioning strategies can efficiently enhance the low proficiency students' responding ability to the literal questions when taking the post-test more than they do to the high proficiency students.

In terms of reinterpretation questions, the post-test mean scores of the high and the low proficiency students' responding ability to the reinterpretation questions are significantly different at 0.05 level. It is in accordance with the level of significance of both groups in **Table 10** which means that although the high proficiency students' responding ability to the reinterpretation questions increased significantly, the low proficiency students' increased more. According to **Table 10 and Table 11**, the results reveal that the low proficiency students seem to gain more benefits after being trained with the pre-, while- and post-reading questioning strategies in developing the responding ability to both types of reading questions. **Figure 5** below illustrates the level of improvement of the two groups.

Figure 5: High and Low Proficiency Groups' Mean Scores of Responding Ability to the Literal and the Reinterpretation Questions



It might be concluded that the pre-, while-, and post-reading questioning strategies affected the students' English reading comprehension ability in the experimental group. The results shown in **Table 5** and **Table 6** indicate that there are significantly differences between the control and the experimental groups' reading comprehension ability at 0.01 level. That is, the reading comprehension ability of the subjects who were trained with the pre-, while- and post-reading questioning strategies was greater than that of the subjects who were trained with the procedures as recommended in Teacher's manual of **Say Hello 6**.

According to the results shown in **Table 8** and **Table 9**, it might be assumed that the pre-, while-, and post-reading questioning strategies can also enhance both high and low proficiency students' English reading comprehension ability in the experimental group. However, it is obviously noticeable that although these strategies benefit both groups, the greater improvement of the low proficiency students indicates that they seem to gain more benefits from the training as can be seen in **Table 8**. This conclusion comes from the fact that before the training, the high and the low proficiency students' reading comprehension abilities were significantly different whereas after being trained with the pre-, while- and post-reading questioning strategies, both groups' reading comprehension abilities were not significantly different.

On the other hand, it can be seen that the pre-, while- and post-reading questioning strategies affected the students' responding ability to the literal and the reinterpretation questions. As can be seen in **Table 7**, the results show that the experimental groups' responding ability to both literal and reinterpretation questions were significantly higher than that of the control group after being trained with the pre-, while-, and post-reading questioning strategies.

However, although the control group's responding ability to the literal questions did not significantly improve, the responding ability to the reinterpretation questions of the control group significantly increased after being trained with procedures as recommended in Teacher's manual of **Say Hello 6**, but at the lower level. This indicates that being trained with the pre-, while-, and post-reading questioning strategies enabled the experimental group to develop their responding ability to two types of reading questions.

Furthermore, **Table 10** supports that the pre-, while- and post-reading questioning strategies could significantly enhance the experimental group especially the low proficiency students to improve their responding ability to both literal and reinterpretation questions. In addition, according to **Table 11**, the low proficiency students could not only improve their English reading comprehension ability, but also develop their responding ability to both literal and reinterpretation questions to the close level to the high proficiency students' after being trained with the pre-, while-, and post-reading questioning strategies. This shows that the low proficiency students in the experimental group seem to gain better benefits from being trained with the pre, while- and post-reading questioning strategies.