CHAPTER 4

RESULTS

This chapter presents the statistical analysis of the collected data based on the four research questions. The first section demonstrates the effects of the strategy instruction on the participants' reading comprehension. The second section illustrates the influence of the strategy instruction on the participants' comprehension of different types of questions. The third section investigates the results of the participants' use of reading strategies. The final section presents the participants' responses to the explicit strategy instruction.

4.1 Effects of Explicit Reading Strategies Instruction on Students' Reading Comprehension

In this section, Table 4.1 reports the results of the pretest and posttest for both groups. The means and standard deviation of the pretest and posttest reading comprehension scores for the control group and the experimental group are presented in Table 4.1. The original grades of the reading tests can be found in Appendix H.

Table 4.1 Students' Pre- and Post-test in Reading Comprehension

Phase	Subjects		Means	SD	Independent Samples T-test Value	P
Pretest	E	38	35.53	23.61	-.063	.950
	C	38	35.84	20.19		
Posttest	E	38	61.50	20.21	4.048	.000*
	C	38	42.79	20.08		

*P<.05 Note: E stood for the experimental group, and C for the control group

As indicated in Table 4.1, the results of Independent Sample T-test showed that there was no significant difference between the two groups in the pretest. The mean score of reading comprehension test was 35.84 in the control group, and it was 35.53 in the experimental group. Table 4.1 revealed that the difference between the two groups in reading comprehension test ($p=.950$, $p>.05$) was not significant. In brief, each group consisted of students with similar proficiency level of reading comprehension before reading strategies instruction.

In the posttest, the mean score of the reading comprehension test in the control group was 42.79 and it was 61.50 in the experimental group (Table 4.1). This result indicated that the participants who received reading strategies instruction did significantly better in the reading comprehension test than those students who did not receive the instruction, and the difference between the control group and the experimental group reached a significant level after being examined by Independent Sample T-test ($p=.000$, $p<.05$).

Table 4.1 indicates that explicit instruction of reading strategies is an effective method in English reading comprehension. In other words, reading strategies are obviously effective in the development of reading comprehension. Thus, the answer to the first research question is that the strategy instruction helps improve the participants' reading comprehension. Also, this finding supports Hypothesis One that the reading strategy instruction will improve reading comprehension of EFL junior high school students in Taiwan. The result corresponds to the findings of the previous studies on second language reading that reading strategy training did help improve students' reading comprehension (Barnett, 1988; Carrell et al., 1989; Chen, 2005; Kern, 1989; Shih, 1992; Song, 1998).

4.2 Effects of Explicit Reading Strategies Instruction on Different Types of Reading Comprehension

This section displays the effects of the strategy instruction on different types of reading comprehension questions, such as main idea questions, detail questions, inference questions, and word-guessing questions (see Appendix A). The data used for the statistical analysis was based on the students' pre- and post-test scores for each type of questions. By conducting the Independent Sample T-test, the means of each set of scores of the control group and experimental group were compared first. Then Paired Samples T-test was used to examine the difference between the pre-test and post-test of the experimental group so that we can answer the second research question: Which types of reading comprehension questions (main idea questions, detail questions, inference questions, and word-guessing questions) JHS students would perform best from the strategy instruction? The statistical results are illustrated in Table 4.2.

Table 4.2 Means and Standard Deviations of the Pre- and Post-test Scores in Both Groups for Each type of Questions

Types of Question	Subjects		Phase	Means	SD	T-test Value	P
Main Idea	E	38	Pretest	11.13	8.34	-.043	.966
Questions	C	38		11.21	7.50		
(Max =30)	E	38	Posttest	19.50	6.79	3.960	.000*
	C	38		12.95	7.61		
Detail	E	38	Pretest	10.42	8.10	-.088	.930
Questions	C	38		10.58	7.50		
(Max =33)	E	38	Posttest	17.45	7.07	3.024	.003*
	C	38		12.55	7.04		
Inference	E	38	Pretest	9.32	6.86	.161	.872
Questions	C	38		9.08	5.90		
(Max =24)	E	38	Posttest	15.95	6.47	3.092	.003*
	C	38		11.37	6.44		
Word-guessing	E	38	Pretest	4.66	3.10	-.426	.672
Questions	C	38		4.97	3.37		
(Max =12)	E	38	Posttest	8.61	3.05	3.590	.001*
	C	38		5.92	3.45		

*p<.05

As shown in Table 4.2, all students gained scores for main idea questions, detail questions, inference questions and word-guessing questions from the post-test. But the students in the experimental group gained much more scores for these four types than those in the control group. The result of Independent Samples T-test showed that there

was no significant difference between the two groups for these four types in the pretest. The mean score of main idea questions was 11.21 in the control group, and it was 11.13 in the experimental group. The mean score of detail questions was 10.58 in the control group and it was 10.42 in the experimental group. The mean score of inference questions was 9.08 in the control group, and it was 9.32 in the experimental group. The mean score of word-guessing questions was 4.97 in the control group and it was 4.66 in the experimental group. The means scores for each type were then computed by Independent Samples T-test. The results in Table 4.2 revealed that the differences between the two groups in main idea questions ($p=.966$, $p>.05$), detail questions ($p=.930$, $p>.05$), inference questions ($p=.872$, $p>.05$), and word-guessing questions ($p=.672$, $p>.05$) were not significant at all. In other words, each group consisted of students with similar proficiency level of these four types before explicit reading strategies instruction.

In the posttest, the mean score of these four types (main idea questions, detail questions, inference questions and word-guessing questions) in the control group was 12.95, 12.55, 11.37, and 5.92 respectively. While the mean score in the experimental group was 19.50, 17.45, 15.95, and 8.61 respectively (Table 4.2).The difference between the two means for main idea questions is 6.55, which reached a significant level ($t = 3.960$, $p<.05$). As for detail questions, there was a significant difference ($t = 3.024$, $p<.05$). In inference questions, the difference in mean scores was 4.58, which is statistically meaningful and reached a significant difference ($t = 3.092$, $p<.05$). The difference in mean scores (2.69) for word-guessing questions was also statistically significant ($t =3.590$, $p<.05$).

Furthermore, Paired Samples T-test is administered to examine the difference in the score of each type of questions between the pretest and posttest in the experimental group. Comparing the scores, we know whether the experimental group

gains differently between the pretest and posttest. Table 4.3 illustrates the statistic results.

Table 4.3 Means and Standard Deviations of the Pre- and Post-test Scores in the Experimental Group for Each type of Questions

Types of Question	Subjects	Phase	Means	SD	T-test Value	P
Main Idea Questions (Max =30)	E 38	Pretest	11.13	8.34	-7.789	.000*
	E 38	Posttest	19.50	6.79		
Detail Questions (Max =33)	E 38	Pretest	10.42	8.10	-8.672	.000*
	E 38	Posttest	17.45	7.07		
Inference Questions (Max =24)	E 38	Pretest	9.32	6.86	-6.242	.000*
	E 38	Posttest	15.95	6.47		
Word-guessing Questions (Max =12)	E 38	Pretest	4.66	3.10	-7.594	.000*
	E 38	Posttest	8.61	3.05		

*p<.05

Table 4.3 reported the participants' mean scores for main idea questions, detail questions, inference questions and word-guessing questions. The difference between the two means for main idea questions was 8.37, which reached a significant level (t = -7.789, p<.o5). In detail questions, the difference in mean scores (7.03) suggested a significant difference (t = -8.672, p<.05). As for inference questions, the difference in the mean scores was 6.63, which also showed a significant difference (t = -.6.242,

$p<.05$). The difference in the mean scores (3.95) for word-guessing questions was also statistically significant ($t = -7.594$, $p<.05$).

The four significant findings indicate that the strategy instruction helped enhance the subjects' ability to grasp main idea, extract detailed information, make inferences and guess word-meanings from context. Thus, the finding indicates that participants' performance in main idea questions, detail questions, inference questions and word-guessing questions were affected by the strategy instruction. Therefore, as for the second research question, the results show that students perform best from the strategies instruction in main idea, detail, inference, and word-guessing questions. The finding supports part of Hypothesis Two that students perform best from the strategy instruction in main idea questions, detail questions and word-guessing questions, but rejects part of the hypothesis that students' improvement in inference questions is not significant. The result supports the finding in the relevant study (Song, 1998) that students improved their ability to grasp main idea and to make inference after the strategy training. Besides, the result is in agreement with the finding in previous studies that strategy instruction improved students' ability to infer the meanings of unfamiliar words from context (Kern, 1989; Lo, 2004; Yang, 2005).

4.3 The Frequency of Students' Use of English Reading Strategies before and after the Instruction

This section describes the results of Questionnaire I-A and I-B (Appendix B), which examined the reading strategies the participants used in the process of English reading. According to the frequency of using the strategies, students gave their answers from number one to number five representing five levels of frequency. These five levels were level 1 =never used, level 2 =seldom used, level 3 =sometimes used, level 4 =often used, and level 5 =always used. Students' answers were scored and

analyzed. Inter-group comparisons between the control group and the experimental group will be presented in the order of pretest and posttest.

4.3.1 Comparison of Students' Use of Reading Strategies before the Instruction

In the section of pretest, the frequencies of reading strategies used were presented first, and then the differences in the frequencies of reading strategies used before and after instruction were also shown. The frequencies of the strategies used are presented in Table 4.4. The original data can be found in Appendix I.

Table 4.4 demonstrated that the frequencies of the reading strategies were quite low between the two groups before reading strategies instruction. In the pretest, the participants both in the control group and the experimental group all regarded the seventeen items as seldom-used or sometimes-used sub-strategies. The frequencies of these items did not achieve often-used or always-used level. This indicated that the participants lacked general recognition of these sub-strategies. When asked if they would apply the seventeen sub-strategies to read English articles, they usually said, "seldom" or "sometimes". In their past English learning experience, they were seldom taught the strategies of reading, and thus had no opportunities to recognize the effectiveness of strategies on comprehending the reading texts. They often translate English into Chinese word by word or sentence by sentence. Although they agreed they would try using strategies to read, they were not equipped with sufficient knowledge to actually perform the reading strategies. So it was not easy for them to better comprehend the articles while doing the reading themselves, and thus they tended to give up reading English. The participants in the control group and the experimental group displayed similar responses in the use of reading strategies in the pretest.

Table 4.4 Frequencies of 17 sub-strategies before the instruction

Questions	Subjects		Pretest Means	Pretest SD	Independent Samples T-test Value(P)
I. Prediction					
1.Using knowledge of the topic, pictures and illustrations to predict the content before reading	E	38	2.97	1.00	1.324 (.189)
	C	38	2.68	.90	
2.Using understanding of the prior paragraph to predict the next paragraph	E	38	2.55	.92	-.453 (.652)
	C	38	2.66	1.10	
II. Skimming					
3.Skimming for the main idea	E	38	2.58	.89	-.243 (.809)
	C	38	2.63	1.00	
III. Scanning					
4.Scanning for important information	E	38	3.32	1.02	.218 (.828)
	C	38	3.26	1.08	
IV. Guessing the unknown words					
5.Figuring out the complete sentence first, and then guessing the unfamiliar words	E	38	2.55	.92	.506 (.614)
	C	38	2.45	.89	
6.Guessing the meanings of unknown words or phrases from the context	E	38	2.37	1.02	-.218 (.828)
	C	38	2.42	1.08	
7.Focusing on the understanding of the whole content rather than looking up each new word in the dictionary	E	38	2.37	1.02	.108 (.914)
	C	38	2.34	1.10	
8.Skipping the unknown words and go on reading	E	38	3.08	.97	-.101 (.920)
	C	38	3.11	1.29	
V. Making inference					

9.Using tables, figures, and pictures in text to better understand while reading	E	38	2.84	.97	.359 (.720)
	C	38	2.76	.94	
10.Using context clues to guess the missing information	E	38	2.61	.97	-.115 (.909)
	C	38	2.63	1.02	
11.Inferring the intention of the writer beyond the literal meanings	E	38	2.00	.84	-1.270 (.208)
	C	38	2.24	.79	
VI. Self-monitoring					
12.Adjusting the reading speed based on the difficulty of the articles and the time limitation for the reading	E	38	2.76	.97	-.238 (.812)
	C	38	2.82	.95	
13.Thinking more times to comprehend the parts I do not understand	E	38	2.45	1.18	-.814 (.418)
	C	38	2.66	1.07	
14.Seeking the strategy to better comprehend while having difficulty in reading	E	38	2.39	.86	.391 (.697)
	C	38	2.32	.90	
15.Knowing which strategy is used during the reading process	E	38	2.68	.99	-.127 (.899)
	C	38	2.71	.80	
16.Deciding what to read carefully and what to ignore	E	38	2.68	.87	-.270 (.788)
	C	38	2.74	.83	
17.Adjusting my prediction based on the content gradually	E	38	2.71	.90	.130 (.897)
	C	38	2.68	.87	

*p<.05 Note: E stood for the experimental group, and C for the control group

For more statistical evidence, the inter-group differences were computed by Independent Sample T-test. The results presented in Table 4.4 indicated no significant difference in the use of strategies, i.e., prediction (Appendix C: items 1-2), skimming (Appendix C: items 3), scanning (Appendix C: items 4), guessing the meanings of

words (Appendix C: items 5-8), making inference (Appendix C: items 9-11), and self-monitoring (Appendix C: items 12-17) between the two groups before reading strategies instruction ($p>.05$). The t-test showed that the difference did not reach significant level.

4.3.2 Comparison of Students' Use of Reading Strategies after the Instruction

To examine inter-group differences in the use of reading strategies after reading strategies instruction, mean values were calculated for these seventeen items (see Table 4.5). Independent Sample T-test was then conducted to gain the frequencies of using the reading strategies for the two groups (see Table 4.5).

The frequencies of using reading strategies presented in Table 4.5 indicated that the participants in the experimental group used these sub-strategies more often than those in the control group in the posttest. All the means in the experimental group were higher than those in the control group. In the posttest, the frequencies of using the seventeen sub-strategies increased. After receiving reading strategies instruction, the participants in the experimental group were more familiar with the sub-strategies and used them more frequently. Among these sub-strategies, the participants used (1) skipping the unknown words and go on reading, (2) scanning for important information, (3) using tables, figures and pictures in texts to better understand, (4) skimming for the main idea, and (5) guessing the meanings of unknown words or phrases from the context most often.

Table 4.5 Frequencies of 17 sub-strategies after the instruction

Questions	Subjects		Posttest Means	Posttest SD	Independent Samples T-test Value(P)
I. Prediction					
1. Using knowledge of the topic, pictures and illustrations to predict the content before reading	E	38	3.63	.67	5.164 (.000*)
	C	38	2.74	.83	
2. Using understanding of the prior paragraph to predict the next paragraph	E	38	3.61	.64	4.154 (.000*)
	C	38	2.82	.98	
II. Skimming					
3.Skimming for the main idea	E	38	4.11	.73	7.157 (.000*)
	C	38	2.71	.96	
III. Scanning					
4.Scanning for important information	E	38	4.24	.68	3.684 (.000*)
	C	38	3.47	1.08	
IV. Guessing the unknown words					
5. Figuring out the complete sentence first, and then guessing the unfamiliar words	E	38	3.92	.88	5.773 (.000*)
	C	38	2.66	1.02	
6.Guessing the meanings of unknown words or phrases from the context	E	38	4.11	.73	6.680 (.000*)
	C	38	2.63	1.15	
7. Focusing on the understanding of the whole content rather than looking up each new word in the dictionary	E	38	4.08	.85	6.704 (.000*)
	C	38	2.71	.93	
8. Skipping the unknown words and go on reading.	E	38	4.34	.63	4.798 (.000*)
	C	38	3.42	1.00	

V. Making inference					
9. Using tables, figures, and pictures in text to better understand while reading	E	38	4.21	.70	6.083 (.000*)
	C	38	3.03	.97	
10.Using context clues to guess the missing information	E	38	3.97	.82	5.303 (.000*)
	C	38	2.84	1.03	
11. Inferring the intention of the writer beyond the literal meanings	E	38	3.16	.79	1.289 (.202)
	C	38	2.89	.98	
VI. Self-monitoring					
12. Adjusting the reading speed based on the difficulty of the articles and the time limitation for the reading	E	38	3.97	.79	4.185 (.000*)
	C	38	3.11	1.01	
13. Thinking more times to comprehend the parts I do not understand.	E	38	3.79	.93	3.561 (.001*)
	C	38	3.05	.87	
14. Seeking the strategy to better comprehend while having difficulty in reading	E	38	3.32	.77	3.460 (.001*)
	C	38	2.61	1.00	
15. Knowing which strategy is used during the reading process	E	38	3.05	.73	.680 (.499)
	C	38	2.92	.94	
16. Deciding what to read carefully and what to ignore	E	38	3.61	.82	.904 (.369)
	C	38	3.42	.95	
17. Adjusting my prediction based on the content gradually	E	38	3.53	.89	1.245 (.217)
	C	38	3.26	.95	

*p<.05

In the posttest, the seldom-used techniques in the experimental group were (1) knowing which strategy is used during the reading process, and (2) inferring the intention of the writer beyond the literal meanings. The infrequent use of these

sub-strategies may be due to the lower reading proficiency level of junior high school students. Further, the reading materials which they have access to can be understood from the literal meanings. What's more, most of the junior high school students were seldom asked to work on their thinking process, so it may not be easy for them to apply "knowing which strategy to be used" when taking reading tests.

Concerning the "prediction" strategy, the use of the sub-strategies were less frequent: (1) using the knowledge of the topic, pictures and illustrations to predict the content, and (2) using the understanding of the prior paragraph to predict the content of the next paragraph. This indicated that students comparatively lacked the opportunities of using prediction technique while reading English. The reason may be that there were few articles with the topic on the reading comprehension test. Since most articles were shown without any topic and title, sometimes students were asked to choose the title for the article to ensure students understand the article. Furthermore, due to the lower level of junior high school students, the articles of the reading comprehension tests are not too long, only two or three paragraphs in an article or sometimes even one paragraph. As a result, students did not have to predict a general idea from the title and seldom used the understanding of the prior paragraph to predict the next one.

To determine whether there was significant difference in the use of the strategies between the two groups after reading strategies instruction, Independent Sample T-test was conducted. The results of the t-test presented in Table 4.5 indicated that the control and the experimental group differed significantly in the use of most items of these strategies ($p<.05$).

However, as Table 4.5 indicated, the difference in the frequencies of items 11, 15, 16 and 17 for the two groups were not significant ($p>.05$). Students were unfamiliar with the use of these sub-strategies: inferring the intention of the writer

beyond the literal meanings, knowing which strategy is used during the reading process, deciding what to read carefully and what to ignore, and gradually adjusting prediction based on the content. In other words, junior high school students are not used to thinking about what they are thinking, so they could not make good use of the function of self-monitoring.

To sum up, the participants in the experimental group used these strategies much more frequently than those in the control group. This result demonstrated that reading strategies instruction did help the students make better use of the strategies while doing reading comprehension.

4.4 Students' Responses to the Explicit Strategies Instruction

This section presents the participants' responses to the explicit strategy instruction. The responses of participants in the experimental group to the 22 items in Questionnaire II: Students' Responses toward the Explicit Strategy Instruction (see Appendix D) were calculated by the use of frequencies and percentages to answer the fourth research question: What are the participants' responses to the explicit strategy instruction? Questionnaire II fell into two sections: one is the use of checking and the other is an open-ended question. The statistic results of the experimental groups' response questionnaire are reported as follows. The 20 items in the first part fell into four areas—(1) my reflection on learning the instructed strategies (Appendix D, items 3-8), (2) my evaluation of applying the instructed strategies to the reading comprehension tests (Appendix D, items 14-19), (3) my belief in the effect of the explicit reading strategies instruction (Appendix D, items 9-13), and (4) my attitude toward the way to teach the instructed strategies (Appendix D, items 1, 2, 20). The two items in the second part were collected to show students' liking of the instructed strategies and their comments on the benefits they had obtained from the strategy

instruction.

4.4.1 Students' Responses to Question 1: My Reflection on Learning the Instructed Strategies

This section demonstrates the frequencies and percentages of the participants' responses to their reflection on learning the instructed strategies after the instruction. The participants' responses to Items 3-8 in the questionnaire were calculated for statistical analysis. The statistical results are shown in Table 4.6.

As Table 4.6 illustrates, the results on Items 3, 4, 5, and 7 suggested that most of the participants had positive responses toward their learning of these instructed strategies after the instruction. For instance, 81.58% (18.42% for strongly agreed and 63.16% for agreed) of the participants agreed that they had learned how to skim for the main idea, and 84.21% (31.58% for strongly agreed and 52.63% for agreed) of them agreed that they had learned how to scan for important information. Besides, the percentages of participants who reported their learning of the other three strategies are also rather high, with 76.32% (26.32% for strongly agreed and 50% for agreed) for making predictions, and 78.94% (23.68% for strongly agreed and 55.26% for agreed) for guessing the meanings of unfamiliar words from context. The results imply that the explicit strategy instruction did help most of the participants acquire these instructed strategies. Nevertheless, the percentage of participants who either strongly agreed or agreed with Item 6 and 8 is much lower. For example, 63.16% (18.42% for strongly agreed and 44.74% for agreed) of the participants agreed that they had learned how to make inferences. Only 47.437% (13.16% for strongly agreed and 34.21% for agreed) of the participants reported that they had learned to do self-monitoring. These results correspond to the results of Questionnaire I-B in this study that most of the participants can not infer the writers' intention beyond the

literal meanings. Also most of them seldom used some sub-strategies under self-monitoring (see Table 4.5). This indicates that the explicit strategy instruction did not help most of the participants acquire all of these six strategies.

Table 4.6 Frequencies and Percentages of Participants' Responses to Question 1: My Reflection on Learning the Instructed Strategies

Item	Response	n	%
3. I have learned how to skim for the main idea.	SA	7	18.42
	A	24	63.16
	N	5	13.16
	D	1	2.63
	SD	1	2.63
4. I have learned how to scan for the important information.	SA	12	31.58
	A	20	52.63
	N	5	13.16
	D	0	0
	SD	1	2.63
5. I have learned how to make predictions.	SA	10	26.32
	A	19	50
	N	4	10.53
	D	5	13.16
	SD	0	0
6. I have learned how to make inference.	SA	7	18.42
	A	17	44.74
	N	9	23.68

	D	5	13.16
	SD	0	0
7. I have learned how to guess the meanings of unfamiliar words from context.	SA	9	23.68
	A	21	55.26
	N	5	13.16
	D	2	5.26
	SD	1	2.63
8. I have learned how to do self-monitoring.	SA	5	13.16
	A	13	34.21
	N	15	39.47
	D	5	13.16
	SD	0	0

Note. SA: Strongly Agree A: Agree N: Neutral D: Disagree SD: Strongly Disagree n=38

It is a satisfying result that most of the participants had a positive response toward their reflection on learning the instructed strategies, such as skimming for the main idea, scanning for the important information, making predictions, and guessing the meanings of unfamiliar words from context. The result highlights the importance of strategy instruction. Therefore, the results on Items 3, 4, 5 and 7 reflect that the explicit strategy instruction helped facilitate the participants' acquisition of skimming, scanning, making prediction, and word-guessing. This supports what Oxford (1990) emphasized that strategy training could help students make effective use of multiple strategies.

The result on Item 8 revealed that of the six instructed strategies, doing

self-monitoring while reading was reported by most of the participants as the most difficult strategy to be acquired. This may be one possible explanation for the participants' difficulty in learning this strategy. Another possible reason is that during the instruction of this strategy, students were required to think about their reading process; however, Taiwan junior high school students seldom have the chance to think. In the past, they tend to directly accept what teachers taught rather than think by themselves. Therefore, it is not easy for JHS students to get used to self-monitoring.

4.4.2 Students' Responses to Question 2: My Applying the Instructed Strategies to the Reading Comprehension Tests

In this section, the frequencies and percentages of the participants' responses to their applying the instructed strategies to reading comprehension tests are illustrated. Items 14-19 in the questionnaire were designed to investigate whether the participants would use the instructed strategies in taking reading comprehension tests. The participants' responses to these items were collected for the statistical analysis. The statistical results are displayed in Table 4.7.

Table 4.7 Frequencies and Percentages of Participants' Responses to Question 2: My Applying the Instructed Strategies to the Reading Comprehension Tests

Item	Response	n	%
14. I once used the strategy "skimming for the main idea" in taking a reading comprehension test.	**SA**	7	18.42
	A	23	60.53
	N	7	18.42
	D	1	2.63
	SD	0	0.00
15. I once used the strategy "scanning for important information" in taking a reading comprehension test.	**SA**	11	28.95
	A	18	47.37
	N	5	13.16
	D	3	7.89
	SD	1	2.63
16. I once used the strategy "making predictions" in taking a reading comprehension test.	**SA**	7	18.42
	A	17	44.74
	N	10	26.32
	D	3	7.89
	SD	1	2.63
17. I once used the strategy "making inferences" in taking a reading comprehension test.	**SA**	9	23.68
	A	18	47.37
	N	6	15.79
	D	3	7.89
	SD	2	5.26
18. I once used the strategy "guessing the meanings of unfamiliar words from context" in taking a reading comprehension test.	**SA**	8	21.05
	A	20	52.63
	N	6	15.79
	D	3	7.89
	SD	1	2.63
19. I once used the strategy "doing self-monitoring" in taking a reading comprehension test.	**SA**	3	7.89
	A	14	36.84
	N	14	36.84
	D	6	15.79
	SD	1	2.63

Note. SA: Strongly Agree A: Agree N: Neutral D: Disagree SD: Strongly Disagree n=38

As shown in Table 4.7, the results on Items 14, 15, 17 and 18 reveal that a majority of participants once applied the instructed strategies in taking reading comprehension tests, with 78.95% (18.42% for strongly agreed and 60.53% for agreed) of the participants skimming for the main idea, 76.32% (28.95% for strongly agreed and 47.37% for agreed) scanning for information, 71.05% (23.68% for strongly agreed and 47.37% for agreed) making inference, and 73.68% (21.05% for strongly agreed and 52.63% for agreed) guessing the meanings of unfamiliar words from context. In addition, 63.16% (18.42% for strongly agreed and 44.74% for agreed) of the participants reported their use of the strategy “making predictions”. On the contrary, only 44.74% of participants (7.89 % for strongly agreed and 36.84% for agreed) used the strategy “doing self-monitoring” least.

The results suggest that “skimming for the main idea,” “scanning for important information,” “making inference,” and “guessing the meanings of unfamiliar words from context” were reported by most of the participants as practical strategies in taking a reading comprehension test. In contrast, “making predictions” and “doing self-monitoring” may not be useful test-taking strategies for most of them. One possible reason for the outcome is that the former four strategies are often related to the types of questions in most reading comprehension tests, i.e., main idea question, detail question, inference question, and vocabulary question. Therefore, students are more familiar with these four types of questions in taking a reading comprehension test.

On the contrary, with respect to Item 16, although there were only 63.16% of the participants reporting their use of the strategy “making predictions” in tests, it is used as not often as the four strategies. The reason may be, in the elementary reading comprehension test, titles are seldom given ahead of the article, and the whole article is not long. The result on Item 19 reveals that most of the participants did not report

their use of the strategy “doing self-monitoring” in tests. One possible explanation is that the questions in most reading comprehension tests they took are often multiple choice questions; therefore, they did not need a thinking process to answer these questions. This was consistent with the result in Questionnaire I-B (see Table 4.5).

4.4.3 Students’ Responses to Question 3: My Belief in the Effects of Explicit Reading Strategies Instruction

This section demonstrates the frequencies and percentages of the participants’ responses to Items 9-13 in the questionnaire. These items were designed to evaluate the participants’ belief in the effects of explicit strategies instruction. The participants’ responses to these items were collected for the statistical analysis. The statistical results are displayed in Table 4.8.

Table 4.8 summarizes the frequencies and percentages of the participants’ belief in the effects of explicit reading strategies instruction. The results on Items 9, 12 and 13 suggested that most of the participants’ beliefs in the effects of the instruction are positive. For instance, the percentages of participants who either strongly agreed or agreed with Item 9 (84.21%), Item 12 (81.58%) and Item 13 (76.32%) were the top three highest ones. This revealed that the promotion of reading ability and the improvement on reading comprehension tests were regarded by a majority of participants as the most beneficial gains from the instruction. In addition, the result on Item 10 indicated that many of the participants (55.27%) considered the keen interest in English learning a benefit. However, only 34.21% of the participants viewed the enhancement of motivation in English learning as a benefit from the instruction.

Table 4.8 Frequencies and Percentages of Participants' Responses to Question 3: My Belief in the Effects of Explicit Reading Strategies Instruction

Item	Response	n	%
9. I think learning reading strategies promotes my reading ability.	**SA**	15	39.47
	A	17	44.74
	N	5	13.16
	D	0	0.00
	SD	1	2.63
10. I think learning reading strategies arouses my interest in English learning.	**SA**	5	13.16
	A	16	42.11
	N	14	36.84
	D	1	2.63
	SD	2	5.26
11. I think learning reading strategies enhances my motivation in reading English.	**SA**	4	10.53
	A	9	23.68
	N	17	44.74
	D	6	15.79
	SD	2	5.26
12. I think learning reading strategies helps me to get better grade on reading comprehension tests.	**SA**	12	31.58
	A	19	50.00
	N	7	18.42
	D	0	0.00
	SD	0	0.00
13. I think learning reading strategies helps me to read more quickly and correctly.	**SA**	13	34.21
	A	16	42.11
	N	8	21.05
	D	1	2.63
	SD	0	0.00

Note. SA: Strongly Agree A: Agree N: Neutral D: Disagree SD: Strongly Disagree
n= 38

As mentioned above, the strategy instruction helped promote the participants' reading ability and arouse their interest in English learning. On the other hand, the result that the participants gained scores from the post-test (see Table 4.3) also supports the result on Item 12 that most of the participants regarded that the learning

of reading strategies helped them to get better grades on reading comprehension tests.

With respect to the result on Item 11 (*I think learning reading strategies enhances my motivation in reading English*), not many of the participants (34.21%) considered the learning of reading strategies as a way to enhance their motivation in reading English. As argued by Grabe and Stoller (2002), motivating students to read in their L2 is a serious dilemma for teachers. Therefore, it is not easy to get these EFL students highly motivated to read English in such a short period of strategy instruction. However, it is hoped that the learning of reading strategies can be continued to see if it will help enhance students' motivation in reading English.

4.4.4 Students' Responses to Question 4: My Attitude toward the Way to Teach the Instructed Strategies

The frequencies and percentages of the participants' responses to their attitude toward the way to teach the instructed strategies are presented in this section. The participants' responses to Items 1, 2, and 20 in the questionnaire were collected for the statistical analysis. The statistical results are displayed in Table 4.9.

Table 4.9 shows the participants' attitude toward the way to teach the instructed strategies. The high percentage for the participants who strongly agreed or agreed with each item suggests that most of the participants liked to learn reading strategies. For instance, 73.68% of the participants reported that they liked to learn these instructed strategies, and 76.31% of the participants agreed that they liked the teaching method in the instruction. Most of all, 78.95% of the participants showed that they hoped there would be more teaching of reading strategies in English class. The participants' willingness to learn reading strategies implies the feasibility of incorporating strategy instruction into the regular English class to promote students' reading comprehension. Therefore, students should be provided with strategy

instruction as much as possible. It is hoped that strategy instruction would help students become strategic readers.

Table 4.9 Frequencies and Percentages of Participants' Responses to Question 4: My Attitude toward the Way to Teach the Instructed Strategies

Item	Response	n	%
1. I like to learn these instructed strategies.	**SA**	6	15.79
	A	22	57.89
	N	7	18.42
	D	1	2.63
	SD	2	5.26
2. I like the teaching method of these strategies.	**SA**	8	21.05
	A	21	55.26
	N	9	23.68
	D	0	0.00
	SD	0	0.00
20. I hope there will be more teaching of reading strategies in English class.	**SA**	10	26.32
	A	20	52.63
	N	7	18.42
	D	1	2.63
	SD	0	0.00

Note. SA: Strongly Agree A: Agree N: Neutral D: Disagree SD: Strongly Disagree n= 38

4.4.5 Students' Responses to Question 5: My Liking of the Instructed Strategies

This section displays the participants' responses to their liking of the instructed strategies. Item 1 in the second part of the questionnaire was designed to collect the data for the statistical analysis. The participants were asked to choose one or two strategies which were the most practical to them. Then, their responses were summarized by the use of frequencies and percentages. The statistical result is presented in Table 4.10. To get a clear comparison of the strategies ranked by the participants, a bar chart is shown in Figure 4.1.

Table 4.10 Ranking of the Frequency of Participants' Responses to Question 5: My Liking of the Instructed Strategies

Strategy	Count	% (Responses)
Scanning for important information	24	33.33
Skimming for the main idea	19	26.39
Guessing the meanings of unfamiliar words from context	12	16.67
Making inferences	9	12.50
Making predictions	5	6.94
Doing self-monitor	3	4.17

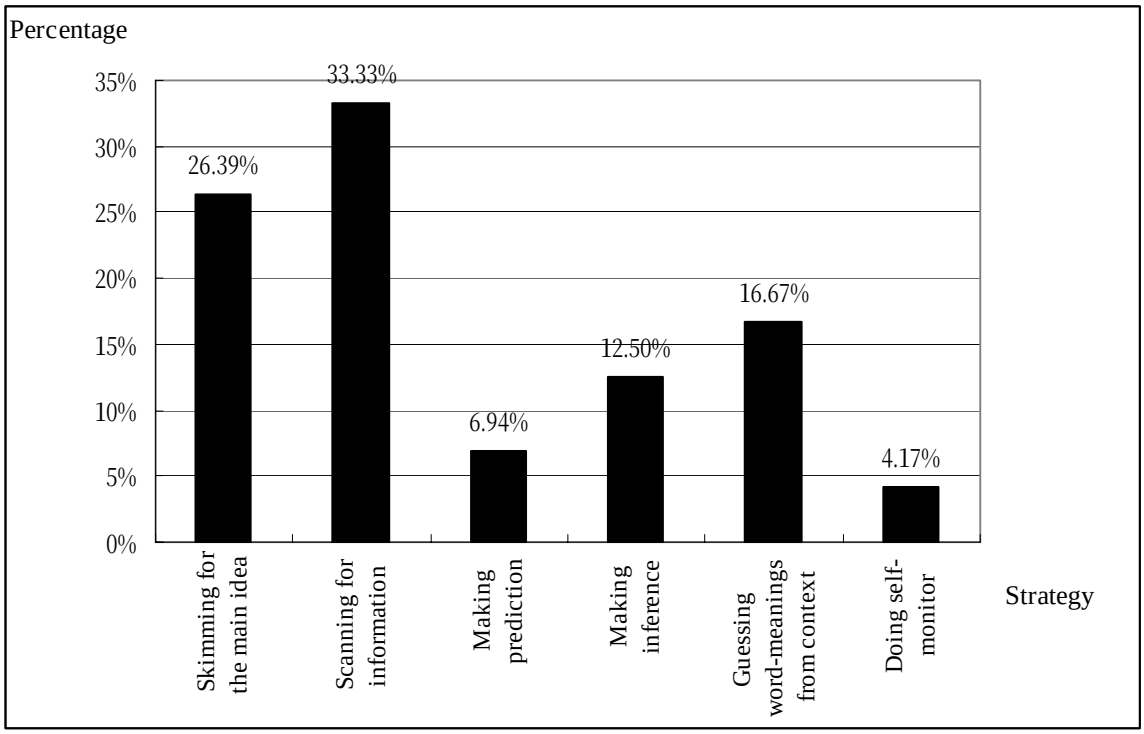

Figure 4.1 Percentages of Participants' Responses to Their Liking of the Instructed Strategies

As Figure 4.1 illustrates, the percentage of the participants' responses to the strategy "scanning for important information" is the highest. 33.33% of the

participants' responses supports that this strategy is the most practical one. That is, most of the participants regarded this strategy as the most useful one for them to comprehend a text. "Skimming for the main idea" is another strategy reported by many of the participants (26.39%) as a practical strategy, followed by "guessing the meanings of unfamiliar words from context" (16.67%), "making inferences" (12.50%), "making predictions" (6.94%) and "doing self-monitor"(4.17%).

These results suggest that among the six instructed strategies, "scanning for important information" "skimming for the main idea" and "guessing the meanings of unfamiliar words from context" are the most three practical ones for these junior high school students. "Scanning for important information" is the sufficient strategy to help students get the clearly answer without reading word by word or sentence by sentence. As for "skimming for the main idea," many of the participants considered it as a practical strategy. Since the participants in this study are all the eighth-grade high school students, they have to take a lot of English reading comprehension tests to prepare for the senior high school entrance examination. Thus, they may consider this strategy useful in taking a test because of the time limit. As for "guessing the meanings of unfamiliar words from context," according to Chern (1993) & Field (1985), Chinese students tended to look up the words in a dictionary instead of guessing their meanings from context when encountering unfamiliar words. That is why most of the participants regarded word-guessing strategy as the practical one, for this may help them overcome what Alderson (1984) called the largest obstacle to reading for ESL readers—a lack of vocabulary knowledge. Accordingly, helping Chinese students develop the ability to guess word-meanings from context should be a priority in the English reading class (Chern, 1993). Besides, many second language researchers also emphasize that teaching ESL learners techniques to guess word-meanings from context helps promote their reading comprehension (Coady,

1993; Huckin & Bloch, 1993, Lo, 2004). As a consequence, ESL/EFL reading teachers should teach students this strategy in a systematic way.

4.4.6 Students' Responses to Question 6: My Comments on the Strategy Instruction

This section presents the participants' comments on the benefits they had obtained from the strategy instruction for their English learning. The participants' responses to Item 2 (*What do I benefit most from the strategy instruction to facilitate my English learning?*) in the second part of the questionnaire were collected for data analysis. The participants were asked to write down at least two comments on this open-ended question, and their responses were summarized by the use of frequency to show what comments were reported most frequently. A summary of the participants' Chinese responses to Item 2 was classified and translated into English in Table 4.11.

Table 4.11 Students' Comments on the Strategy Instruction

Students' Comments	Frequency (%)
1. I improve my reading comprehension ability by learning these strategies.	25 (65.79%)
2. These strategies help me answer questions more correctly in taking a reading comprehension test.	22 (57.89%)
3. By skimming, I learn to read fast for the main idea, and this improves my speed in taking a reading comprehension test as well as my grasp of the main idea of a passage.	15 (39.47%)
4. By scanning, it saves me a lot of time to find the correct answer to the questions without reading all through the articles.	13 (34.21%)
5. Using clues from the context to guess the meanings of unfamiliar words helps me not to panic when encountering unknown words.	12 (31.58%)
6. I improve my correctness in guessing the meanings of unfamiliar words from context, and this improves my comprehension of texts.	10 (26.32%)

7. Making predictions helps me to activate the background knowledge for better comprehension.	7 (18.42%)
8. Making inferences helps me to have more critical thinking while reading.	6 (15.79%)
9. I can remember better the words I have tried to guess from the context.	3 (7.89%)
10. Doing self-monitor during reading helps me to use appropriate strategies and I know my thinking process clearly.	2 (5.26%)

As listed in Table 4.11, the three benefits reported most frequently are the improved reading comprehension ability, the improved grades on reading comprehension tests, and the improved reading speed as well as the improved grasp of main ideas. Most of the participants (65.79%) recognized that the strategy instruction helped improve their reading comprehension ability, and many of the participants (57.89%) emphasized the effects of the treatment on their reading comprehension grades. Besides, some of the participants (39.47%) agreed the effects of learning the strategy “skimming for the main idea” on their improved reading speed and grasp of main ideas. 34.21% of the participants emphasized the effect of learning “scanning for important information” on their improved reading speed and efficiency. The benefits of learning to guess the meanings of unfamiliar words from context are also highlighted by some of the participants. 31.58% of the participants felt that they became more confident in face of unfamiliar words, and 26.32% of the participants stressed that they could have more correct guessing for the meanings of unknown words. All the participants’ comments listed are positive reinforcement to the central idea of this study that the explicit strategy instruction is beneficial to promoting high school students’ reading ability.