

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter describe about finding that include the significant difference, the description of data, data analysis, hypothesis testing and discussion.

A. The Significant Difference

The t-test was used to know the differences between the two means the alternative hypothesis of this there is an effective of Generating Interaction between Schemata and Text (GIST) strategy on students' reading comprehension. The null hypothesis there is no an effective of Generating Interaction between Schemata and Text (GIST) strategy on students' reading comprehension.

The t-test as follow:

Table 4.1 Paired Samples Test

Paired Samples Test									
	Paired Differences					t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1 nilai_PreTest- nilai_PostTest	-14.061	8.131	1.416	-16.944	-11.177	-9.933	32	.000	

From the table above, the obtained t-test was 9.933 whereas the t-table 1.694 at the degree freedom (df) = 32 at the significance level was 0.05. The obtained of t-test (9.933) higher that t-table (1.694) could be marked (see appendix 9). So the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) could be accepted. As formulated on chapter I, it means that there is an effective of Generating Interaction between Schemata and Text (GIST) strategy on students' reading comprehension.

B. The Description of Data

In this research, the researcher wants to know the Effectiveness of GIST Strategy to Students Reading Comprehension Ability for class VII at SMPN 5 Tulungagung. The sample of the study consisted of 33 students. To obtain the data, the post test was given to the experimental class. The effectiveness can be seen from the significant different score of students reading comprehension ability before and after taught by using GIST strategy.

The pre-test in experimental group was given by asking students to answer the question about descriptive text. The number of questions given were 20 and test were in the forms of multiple choice and essay. The test was done before treatment process by giving GIST strategy in teaching reading descriptive text comprehension. This test was intended to know the students reading achievement before the students got treatment. The data of the students' achievement before being taught by using GIST strategy could be seen in the appendix 5.

From the presentation of the results of pre-test, the students' score could be categorized into the following table of criteria students' score could be seen in appendix 2.

The students' score above then were computed by using SPSS. The result was shown in the Table 4.2 below.

Tabel 4.2. Descriptive Statistic of Pre-Test

Statistics

Pre_test		
N	Valid	33
	Missing	0
Mean		57.64
Median		56.00
Mode		52.00
Std. Deviation		10.080

Based on the table 4.2 above, we can be seen that there are 33 students as a subject or participant. The mean of students score in pre-test is 57.64. It means that the average of 33 students score in pre-test was 58. Based on the criteria of students' achievement in the table above, the student means 58 was in the category of average score. Then the median score was 56. It means that the middle score of pre-test above was 56 in 33 students. And the mode is simply that value which has the highest frequency. It means that the

most frequent students' score is 52 indicated that many students got poor score. And the standard deviation is 10.080, it means that the value of standard deviation smaller than the value of mean. Then the value of mean can be used as a representation of the whole data.

The frequency of pre-test were presented on the appendix 6.

From the appendix 6 frequency of pre-test, if it was suitable with the criteria of students' score, it was found that student who got score 36 and 38 showed that their ability of reading comprehension was categorized as very poor. Meanwhile, Students who got score 46, 48, 50, 52 and 54 were categorized as poor. On the other hand, the students who got score 56, 58, 60, 62, 64, 70, and 74 were categorized as average. finally, the students who got score 76 and 82 they were categorized as good.

The post-test was given by asked the student to answer the questions about descriptive text. The questions were 20 in the form of multiple choice and essay. It was done after treatment process by giving GIST strategy. This test was intended to know the students reading achievement after being taught using GIST strategy. The data of students' achievement of post-test could seen in the appendix.

The students' score above then were computed by using SPSS. The result was shown in the Table 4.3 below.

Table 4.3. Descriptive Statistic of Post-Test

Statistics

post_test

N	Valid	33
	Missing	0
Mean		71.64
Median		72.00
Mode		68
Std. Deviation		6.566

Based on the table 4.3 above, we can be seen that there are 33 students as a subject or participant. The mean score in pre-test is 71.64. It means that the average 33 students score in pre-test was 71.6. Based on the criteria of students' achievement in table above, the student means 71.6 was in the category average score. Then the median score was 72. It means that the middle score of post-test above was 72 in 33 students. And the mode is simply that value which has the highest frequency. It means that the most frequent students' score is 68 indicated that many students get average score. And the standard deviation is 6.566, it means that the value of standard deviation smaller than the value of mean. Then the value of mean can be used as a representation of the whole data.

The frequency of post-test were presented in appendix 7.

From the table appendix 7 frequency of post-test, if it was suitable with the criteria of students; score, it was found that students who got score 60 – 74 showed that their ability of reading comprehension was categorized as average qualification. On the other hand, the students who got score 76 – 84 laid in categorized as good.

So, there are differences data presentation between before being taught by using GIST strategy and after being taught by using GIST strategy. The data present that the score after being taught by using GIST strategy better and higher that before using GIST strategy.

C. Data Analysis

Table 4.4 Paired Sample Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	nilai_PreTest	57.45	33	10.491	1.826
	nilai_PostTest	71.52	33	6.558	1.142

Based on the table 4.4, the data presented are the performance scores of the members of one group which the students who were taught before and after using Generating Interaction between Schemata and Text (GIST) in reading comprehension. Output paired sample statistics shows that

there are mean scores differences between pre-test and post-test. The mean score of pre-test is 57.45 and the mean score of post-test is 71.52. So, the mean score of post-test is higher than the mean score of pre-test. It means that the student's score increase e after being taught using Generating Interaction between Scemata and Text (GIST) in reading comprehension. The number of subjects or respondents of each sample (N) is 33 students.

Meanwhile, standard deviation of pre-test is (10.49) and standard deviation of post-test is (6.558). Mean standard error for pre-test is (1.826), while mean standard error for post-test is (1.142). So, we can conclude that the value increases after being taught using Generating Interaction between Scemata and Text (GIST) in reading comprehension

Table 4.5 Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	nilai_PreTest & nilai_PostTest	33	.632	.000

Based on the table 4.5, output *paired samples correlation* shows the large correlation between samples, where can be seen numeral both correlation is (0.632) and numeral significance (0.000). For interpretation of decision based on the result of probability achievement, that is:

- a. If the probability > 0.05 then the hypothesis null accepted
- b. If the probability < 0.05 then the hypothesis null rejected

The large of numeral significant (0,000) smaller from (0,05). It means that the hypothesis clarify there is no significant different score using Generating Interaction between Schemata and Text (GIST) as a technique on the students' reading achievement at the seventh grade of SMPN 5 Tulungagung is rejected. The other word, taught using Generating Interaction between Scemata and Text (GIST) is effective on the students' reading achievement in teaching reading.

Table 4.6 Paired Samples Test

Paired Samples Test									
		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	nilai_PreTest- nilai_PostTest	-14.061	8.131	1.416	-16.944	-11.177	-9.933	32	.000

Based on table 4.6, output paired samples test shows the result of compare analysis with using T-test. The difference mean score of pre-test and post-test is -14.061. Standard deviation is 8.131, mean standard error is 1.416, the lower different is -16.944, while upper different is -11.177. The result of t_{count} is -9.933 (symbol minus in this matter ignored) with df is 32 and significance (2-tailed) is 0.000.

The significance value is 0.00 and the significance level is 0.05. It means that the significance value is smaller than significance level ($0.00 < 0.05$). So, the alternative hypothesis (H_a) is accepted and null hypothesis (H_o) is rejected.

Then the researcher gave interpretation to t_{table} . First the researcher considered the $df = N-1$ with df was 32. At the significance level of 0.05, the score of t_{table} was 1.694. By comparing the t count and t_{table} it was found that t count was bigger than $t_{table} = (9.933 > 1.694)$. So, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected.

Because the t_{count} was bigger than t_0 the alternative hypothesis (H_a) saying that there is significant before and after being taught by using Generating Interaction between Schemata and Text (GIST) strategy of the seventh grade students of SMPN 5 Tulungagung is accepted and the null hypothesis (H_0) saying that there is no significant different score of the students' reading descriptive text comprehension ability before and after being taught by using Generating Interaction between Schemata and Text (GIST) strategy of the seventh grade students at SMPN 5 Tulungagung was rejected. It means that there was significant different score before and after being taught by using Generating Interaction between Schemata and Text (GIST) strategy on students' reading comprehension ability at seventh grade students of SMPN 5 Tulungagung. It could be concluded that the GIST strategy was effective used in teaching reading descriptive text comprehension.

D. Hypothesis Testing

The hypothesis in this research as follow as:

1. Alternative hypothesis (Ha)

The significant level $<$ the standard level of significant 0.05, the alternative hypothesis (Ha) is accepted and the null hypothesis is rejected.

It means that, there is different score of students' achievement before and after taught using GIST strategy.

2. Null hypothesis (Ho)

The significant level $>$ the standard level of significant 0.05, the null hypothesis (Ha) is accepted and the alternative hypothesis is rejected.

It means that, there is no significant different score of students' achievement before and after taught using GIST strategy.

E. Discussion

As discussed of research method in chapter III, the teaching and learning process was divided into three steps. First step is giving pre-test for the students to know the students' reading ability before taught by using GIST strategy. The second steps are giving treatment for the student. The treatment applying GIST strategy in teaching reading descriptive text which the students finding the main idea and summarize each sentence or main idea. The class is divided into 7 groups. Each group consists of 4-5 students. The third steps are giving post-test for the students to know the students' reading ability after they gave a treatment by using GIST strategy.

According to the mean score, the mean score of post-test is higher than the mean score of pre-test. It also means that teaching reading comprehension using Generating Interaction between Schemata and Text (GIST) strategy is better than teaching reading taught without Generating Interaction between Schemata and Text (GIST) strategy.

Teaching reading comprehension without Generating Interaction between Schemata and Text (GIST) strategy make the students be passive teaching and sometime both teacher and students not understand about the content of text. Teaching reading comprehension using Generating Interaction between Schemata and Text (GIST) strategy makes the students more active to learn reading, understand the text easily. It could be seen in the treatment process, the students are more interested when the researcher applies this strategy. They fell enthusiasm and independent to find the main idea and summarize the text. As we know from the research findings, the students which are taught using Generating Interaction between Schemata and Text (GIST) strategy have higher than teaching without Generating Interaction between Schemata and Text (GIST) strategy.

Then by calculated of hypothesis test indicated $t_{\text{count}} > t_{\text{table}}$. Based on data analysis, the t_{count} is bigger than t_{table} , it shows that the score of t-test 9.933 and the score of the score of t_{table} in sig. level of 0.05 is 1.694. From the finding, it is known that t_{count} is bigger than t_{table} . So, the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected. It means that there is significant different of students achievement in reading

comprehension before and after being taught by using Generating Interaction between Schemata and Text (GIST) strategy at SMPN 5 Tulungagung. The null hypothesis (H_0) states that there is no significant different score of students' achievement in reading before and after being taught by using Generating Interaction between Schemata and Text (GIST) strategy is rejected.

The finding of this research stating that Generating Interaction between Schemata and Text (GIST) strategy is considered as an effective for the students' reading comprehension achievement in reading text Generating Interaction between Schemata and Text (GIST) strategy. It also could be seen in the treatment process, the students are more interested when the researcher applied this strategy.

In fact, GIST strategy can improve students' mastery in reading comprehension. When the teacher gives text to the students and asks them to read the text, they are able to understand the content of the text and the main idea in each paragraph from the text. The strategy is also useful for study groups, focusing on efforts and good by proposing questions.

The theory about the use of GIST actually known from Cunningham (1982) that Generating Interaction between Schemata and Text (GIST) is effective summarizing leads to an increase in student learning. The strategy is useful to improve students' reading comprehension and involves students' prior knowledge, Synthesizing and generalizing cognitive operation. Effective summarizing leads to an increase in student learning. Summarizing

requires students to focus on the main ideas of a text and to decide what is important without omitting key ideas. The ability to summarize has significant benefits for comprehending strategies, like 'GIST strategy', helps them learn to synthesize information, a higher-order thinking skill which includes analyzing information and identifying key concepts.

Regarding above the result of data analysis above, it's also strongly with previous study as stating that Generating Interaction between Schemata and Text (GIST) strategy is considered as an effective for the students' reading comprehension achievement in reading text. The first thesis written by Adnyani conducted a research entitled the effect of generating interaction between schemata and text and beliefs about language learning on reading comprehension of language education department students of Undiksa Singaraja. The researched conducted in pre-experimental research. The research tries to find out the effect of GIST and beliefs about language learning. The result of the research showed that Group Investigation (GI) technique can improve students' reading achievement in reading comprehension.

The second written by Junanto conducted a research entitled the effectiveness of generating interaction between schemata and text (GIST) strategy on reading descriptive text comprehension ability. The research conducted pre-experimental. This study considered the effective of this strategy. The result of the research showed that the research was effective to

help the students improving their ability in comprehending reading comprehension by using group investigation.

The implication of GIST strategy makes students easier to understand the content in descriptive text, students also interesting and motivated when reading English. This strategy also helps students to summarize and get the main idea of something. So, student are creative and quickly when thinking and doing the assignment. Finally, the students' achievements in reading descriptive text is improve better that before. From the teacher, the implication of this strategy can made one of the ways to support during teaching reading descriptive text. This strategy can be implemented in teaching learning process in order to support students more understand and easy in reading. In general, the implication of theory GIST strategy in teaching and learning can support both teacher and student in many aspects. In the aspect of time the teacher and student can save their time because of this strategy support student to think creative and systematic.

Based on the explanation above, the GIST strategy is effective for the students on reading descriptive text comprehension where their summarization of the text can make them understand the content of the text. The findings of the study proved the theory about GIST proposed by Cunningham saying that the GIST strategy is effective in teaching reading descriptive text comprehension.