

CHAPTER IV

FINDING AND DISCUSSION

A. Findings

The researcher intends to provide the findings of this study in this subchapter after collecting and analyzing the data. Primarily, the purpose of this study was to examine the effectiveness of semantic mapping strategy to improve students reading comprehension on descriptive text. The researcher will describe giving of the finding this study the following lines.

1. How is students reading comprehension ability before give treatment?

This study was began by giving pre-test to the control groups and experimental groups in the eighth grade of SMP It Al-Baroqah Pandeglang. The pre-test given was in the form of twenty-five multiple choice questions because it was easy to administer. Before giving the pre-test question, the researcher had consulted about the test question to the advisor and English teacher for its effectiveness of the questions for students. After giving the pre-test, the researcher can checked the answer to the question and calculate the average of the experimental class and control class.

Based on the data from class room observation interview there are several features that can affect the low ability of students in reading comprehension such as; 1) some students were not interested in Learning English. 2) Some student do not have enough vocabulary it can make students difficult to understanding the meaning the content of text. 3) Some students have difficulty distinguishing the main idea and supporting paragraph. 4) Some student's difficulty to find specific information from text. 5) Some students fell bored learning English in class.

Students score pre-test (X1) and pre-test (X2)

Table 4.1

No	Participant	Experimental	Control
1	ASR	56	72
2	ARY	60	60
3	HRS	60	58
4	HRM	64	76
5	IS	60	62
6	MIA	64	60
7	MRR	52	52
8	MIR	68	68
9	MSAF	56	60
10	MY	52	56

11	MH	56	64
12	MNA	60	60
13	MRRS	60	60
14	MAM	68	68
15	NRM	56	56
16	RJR	72	60
17	RMY	76	76
18	RA	60	68
19	AS	64	68
20	MRR	68	60
21	AA	64	68
22	HL	68	48
23	IFY	68	68
24	DK	68	60
25	RZ	76	60
26	RYH	64	64
27	NM	80	52
28	MH	60	60
29	HP	60	72
30	ML	72	68
	Σ	1912	1884
	Average Score	63,73	62,80

The pre-test of result showed test the means score for experimental groups was 63, 73 Meanwhile, the means score for control groups was 62, 80 it means below from both groups was below the minimum completeness criteria was 78.

2. How is the implementation of semantic mapping teaching reading comprehension on descriptive text?

The implementation of teaching reading comprehension on descriptive text the researcher using semantic mapping strategy. Semantic mapping is means teacher teaching with happy environment and making students enjoy while teaching while learning. In experimental class teacher using semantic mapping strategy while in the control class teacher uses the same method that teacher usually use that is conventional method.

In experimental class teacher using semantic mapping in the implementation of learning activity and the implementation in the class can be described as follows; the first, teacher divides students into six groups, each groups consist five people, after that teacher give descriptive text to each groups. Teacher asks students to read text that has been given for 10 minutes. Secondly, teacher begins to implement semantic mapping strategy by announcing the topic text and draw a large ovals on the blackboard and then write the topic in it. Third, teacher asks

students to think of related ideas for this topic according to the text that has been given then write it in on blackboard. Fourth, during discussion, teacher asked several students to take turns in turn to dress in front to complete the maps. And the last teacher asks the student to copy the semantic mapping that have been written and discussed on the blackboard into their respective books they have.

In the last is activities, this activity teacher share a resume of the materials, teacher provides information related to learning that will be discussed next week and then teacher and students end the lesson with a prayer. While in the control groups English teacher teaches using conventional method.

In the teaching process for five meetings there are several challenges faced by the teacher which can be described such as;

The first meeting, the students did not understand descriptive text, starting from the definition, generic structure, language features and the purpose of descriptive text. In addition, the students also did not know about the semantic mapping strategy. They do not know how to use this strategy in the learning process because they usually use conventional learning methods in the classroom.

Second meeting the students had difficulty understanding the content of the text because their vocabulary was still low and they needed

a long time to understand. They have difficulty in determining the main idea and supporting paragraphs in the text. Third meeting is still the same as the last meeting, namely students still cannot understand the content of the text as a whole because of low vocabulary. In this section the teacher describes about people and do not know clearly what is usually used in describing people or animals. Students do not know what is meant by reference

Forth meeting the students do not understand how to find the important points in the text.

Fifth meeting, students do not understand what is meant by implied and explicit expressions, some students still have difficulty finding main ideas and supporting paragraphs and finding specific information in the text.

The progress is given by the teacher when in the teaching and learning process can be described such as:

The first meeting, teacher explaining the definition, generic structure, language feature used and its purpose and then explaining semantic mapping as a strategy that will be used to facilitate them in the process of understanding the text. The last, create maps on the blackboard by writing a generic structure and purpose in the text. Then

the teacher explains to the students which parts are included in the identification and description sections of the text.

Second meeting, teacher and students both translate the text as a whole and tell about vocabulary that is foreign to them. Explain in detail the difference between the main idea and the supporting paragraph in the text. To make it easier for them to understand, the teacher makes maps on the blackboard and group them into several branches, determines, main ideas and supporting paragraphs on Maps.

Third meeting, teachers explain and translate the text so they have started to understand the content of the text as a whole. The teacher explains to the students that if describing people and an animal is not far away, it will explain the physical characteristics and physical personality by them. Then explain what is meant by reference. After that the teacher makes maps on the blackboard related to the text.

Forth meeting, this meeting explains to students what they need to do to be able to find the important points in each text. After finding it, the teacher makes Maps on the blackboard and makes several branches so that the important points can be understood by students.

The last meeting, Explaining what is meant by implied and explicit expressions, explaining again the section on finding the main idea and

supporting paragraphs and Explaining what is meant by specific information.

Students score post-test (X1) and post-test (X2)

Table 4.2

No	Participant	Experimental	Control
1	AH	76	76
2	ANH	84	64
3	AR	80	64
4	DI	80	80
5	FM	72	68
6	HW	88	68
7	JF	72	64
8	LA	88	76
9	NH	80	60
10	NAR	76	68
11	NZA	80	72
12	NSF	76	68
13	RJP	80	76
14	RH	88	72
15	SBM	80	60
16	LR	92	64
17	SB	92	80
18	SG	76	76
19	SM	88	72
20	SMH	84	68

21	SR	88	76
22	SM	80	52
23	SSN	88	72
24	SVN	84	64
25	SU	84	68
26	TT	76	72
27	TA	92	60
28	UNA	80	76
29	WJ	76	80
30	YA	88	76
	Σ	2468	2092
	Average Score	82,26	69,73

The table above results from the post-test of the two classes, the experimental class and the control class. The greatest results were shown in the experimental class with a total average score of 82.26 while the control class with a total average score of 69.73. From the two classes each consist 30 students, it showed that the experimental class met the scores above the completeness criteria given by the English teacher.

3. Does semantic mapping strategy effect on students reading comprehension at the eighth of SMP IT Al-Barokah Pandeglang?

Before examines the effectiveness of semantic mapping in learning reading comprehension on descriptive text by using normality test by using T-test. The researcher conducted normality test to examine.

a. Normality Test

The normality test is used to demonstrate that the sample data come from normality distribution. The researcher examined the normality of the post-test data from both classes by using the Liliefors formula. To determine the effectiveness of semantic mapping to improve reading comprehension o descriptive text, the researcher utilized a normality test before using t-test. The result of the normality test are shown in the table below:

From the data above, it can be made an assistant table to find out standards derivation from experimental class as follows;

Table 4. 3
Assist table of experimental groups

Respondent	X	F	FX	X1	X ²	FX ²
1	72	2	144	-10,26	105,2676	210,5352
2	76	6	456	-6,26	39,1876	235,1256
3	80	8	640	-2,26	5,1076	40,8608
4	84	4	336	1,74	3,0276	12,1104

5	88	7	616	5,74	32,9476	230,6332
6	92	3	276	9,74	94,8676	284,6028
	Total	30	2468			1013,868
	μ		82,26			
	SD		5,8			

Determining mean of experiment group (X1) by using formula as follows:

$$\bar{X} = \frac{\sum FX}{\sum F}$$

$$\bar{X} = \frac{2468}{30} = 82,26$$

Counting standard deviation of experiment group (X1) by using formula as follows:

$$SD = \sqrt{\frac{\sum FX^2}{\sum F}}$$

$$SD = \sqrt{\frac{1013,868}{30}}$$

$$SD = \sqrt{33,79} = 5,8$$

Furthermore, the data above are used to test of normality by using Lilliefors method as follows;

Table 4.4

NO.	X1	Z	F(Z)	S(Z)	(F(Z)-S(Z)
1	72	-1,71	0,04301	0,03	0,01301446
2	72	-1,71	0,04301	0,06	0,01698554
3	76	-1,03	0,1515	0,23	0,07850361
4	76	-1,03	0,1515	0,26	0,10850361
5	76	-1,03	0,1515	0,23	0,07850361
6	76	-1,03	0,1515	0,26	0,10850361
7	76	-1,03	0,1515	0,23	0,07850361
8	76	-1,03	0,1515	0,26	0,10850361
9	80	-0,34	0,36567	0,56	0,19433075
10	80	-0,34	0,36567	0,53	0,16433075
11	80	-0,34	0,36567	0,56	0,19433075
12	80	-0,34	0,36567	0,53	0,16433075

13	80	-0,34	0,36567	0,56	0,19433075
14	80	-0,34	0,36567	0,53	0,16433075
15	80	-0,34	0,36567	0,56	0,19433075
16	80	-0,34	0,36567	0,53	0,16433075
17	80	-0,34	0,36567	0,56	0,19433075
18	84	0,34	0,63433	0,66	0,02566925
19	84	0,34	0,63433	0,7	0,06566925
20	84	0,34	0,63433	0,66	0,02566925
21	84	0,34	0,63433	0,7	0,06566925
22	88	1,03	0,8485	0,86	0,01149639
23	88	1,03	0,8485	0,9	0,05149639
24	88	1,03	0,8485	0,86	0,01149639
25	88	1,03	0,8485	0,9	0,05149639
26	88	1,03	0,8485	0,86	0,01149639
27	88	1,03	0,8485	0,9	0,05149639
28	92	1,71	0,95699	1	0,04301446

29	92	1,71	0,95699	0,96	0,00301446
30	92	1,71	0,95699	1	0,04301446

Determining Z score by using formula as follows:

$$Z = \frac{X1 - \bar{X}}{SD}$$

$$Z = \frac{72 - 82,26}{5,8} = 1,71$$

On the table 4.4 above, it can be concluded that mean score was 82, 29 and standard deviation was 5, 8. Moreover, show the L_0 score (0,1943) $< L_t$ (0.161). It means that the sample data of experiment group has normal distribution and can be used for research data.

In addition, for control group, the table below show the calculation of normality test as follows:

From the table above, it can be made an assistant table to find out standards derivation from Control groups class as follows:

Assistant Table for Control Groups

Table 4.5

Respondent	X	F	FX	X2	X ²	FX ²
1	52	1	52	-17,73	314,47111	314,4711
2	60	3	180	-9,73	94,737778	284,2133
3	64	5	320	-5,73	32,871111	164,3556
4	68	6	408	-1,73	3,0044444	18,02667
5	72	5	360	2,27	5,1377778	25,68889
6	76	7	532	6,27	39,271111	274,8978
	80	3	240	10,27	105,40444	316,2133
	total	30	2092		594,89778	1397,867
	μ		69, 73			
	SD		6,9			

Det

etermining mean of experiment group (X1) by using formula as follows:

$$\bar{X} = \frac{\sum FX}{\sum F}$$

$$\bar{X} = \frac{2092}{30} = 69,73$$

Counting standard deviation of experiment group (X1) by using formula as follows:

$$SD = \sqrt{\frac{\sum FX}{\sum F}}$$

$$SD = \sqrt{\frac{1397,867}{30}}$$

$$SD = 46,59 = 6,9$$

Furthermore, the table above were used to test of normality by using Lilliefors method as follows:

Table 4. 6

NO.	X1	Z	F(Z)	S(Z)	(F(Z)-S(Z))
1	52	-2,554209419	0,005321461	0,03	0,028011872
2	60	-1,401934493	0,080467405	0,13	0,052865929
3	60	-1,401934493	0,080467405	0,13	0,052865929
4	60	-1,401934493	0,080467405	0,13	0,052865929
5	64	-0,82579703	0,20445962	0,3	0,09554038
6	64	-0,82579703	0,20445962	0,3	0,09554038

7	64	-0,82579703	0,20445962	0,3	0,09554038
8	64	-0,82579703	0,20445962	0,3	0,09554038
9	64	-0,82579703	0,20445962	0,3	0,09554038
10	68	-0,249659567	0,401425314	0,5	0,098574686
11	68	-0,249659567	0,401425314	0,5	0,098574686
12	68	-0,249659567	0,401425314	0,5	0,098574686
13	68	-0,249659567	0,401425314	0,5	0,098574686
14	68	-0,249659567	0,401425314	0,5	0,098574686
15	68	-0,249659567	0,401425314	0,5	0,098574686
16	72	0,326477896	0,627968595	0,7	0,038698072
17	72	0,326477896	0,627968595	0,7	0,038698072
18	72	0,326477896	0,627968595	0,7	0,038698072
19	72	0,326477896	0,627968595	0,7	0,038698072
20	72	0,326477896	0,627968595	0,7	0,038698072
21	76	0,902615359	0,816634964	0,9	0,083365036
22	76	0,902615359	0,816634964	0,9	0,083365036

23	76	0,902615359	0,816634964	0,9	0,083365036
24	76	0,902615359	0,816634964	0,9	0,083365036
25	76	0,902615359	0,816634964	0,9	0,083365036
26	76	0,902615359	0,816634964	0,9	0,083365036
27	76	0,902615359	0,816634964	0,9	0,083365036
28	80	1,478752822	0,930396805	1	0,069603195
29	80	1,478752822	0,930396805	1	0,069603195
30	80	1,478752822	0,930396805	1	0,069603195

Determining Z score by using formula as follows:

$$Z = \frac{X1 - \bar{X}}{SD}$$

$$Z = \frac{52 - 69.73}{6,9} = -2,55$$

From computation above, it can be conclude that mean score is 69.73 and standard derivation is 6.9. Moreover, based on assist showed that the t_0 score $(0,099) < (0.161)$ it means the sample data of experimental groups has normal distribution and can be used for research data.

b. T-Test

After testing normality and getting the data from post-test score from both groups, then the researcher analyzed the data by using t-test formula as follows:

The Calculation Scores of Experiment and Control Group

Table 4.7

No	X1	X2	X1	X2	$\sum m_1^2$	$\sum m_2^2$
1	76	76	-6,26	6,27	39,1876	39,3129
2	84	64	1,74	-5,73	3,0276	32,8329
3	80	64	-2,26	-5,73	5,1076	32,8711
4	80	80	-2,26	10,27	5,1076	105,4729
5	72	68	-10,26	-1,73	105,2676	2,9929
6	88	68	5,74	-1,73	32,9476	2,9929
7	72	64	-10,26	-5,73	105,2676	32,8329
8	88	76	5,74	6,27	32,9476	39,3129
9	80	60	-2,26	-9,73	5,1076	94,6729
10	76	68	-6,26	-1,73	39,1876	2,9929

11	80	72	-2,26	2,27	5,1076	5,1529
12	76	68	-6,26	-1,73	39,1876	2,9929
13	80	76	-2,26	6,27	5,1076	39,3129
14	88	72	5,74	2,27	32,9476	5,1529
15	80	60	-2,26	-9,73	5,1076	94,6729
16	92	64	9,74	-9,73	94,8676	94,6729
17	92	80	9,74	10,27	94,8676	105,4729
18	76	76	-6,26	6,27	39,1876	39,3129
19	88	72	5,74	2,27	32,9476	5,1529
20	84	68	1,74	-1,73	3,0276	2,9929
21	88	76	5,73	16	32,8329	256,0000
22	80	52	-2,27	-17,73	5,1529	314,3529
23	88	72	5,73	2,27	32,8329	5,1529
24	84	64	1,74	-5,73	3,0276	32,8329
25	84	68	1,74	-1,73	3,0276	2,9929
26	76	72	-6,26	2,27	39,1876	5,1529

27	92	60	9,74	-9,73	94,8676	94,6729
28	80	76	-2,26	6,27	5,1076	39,3129
29	76	80	-6,26	10,27	39,1876	105,4729
30	88	76	5,74	6,27	32,9476	39,3129
	$\Sigma X_1 =$	$\Sigma X_2 =$	$\Sigma X_1 = 0$	$\Sigma X_2 =$	$\Sigma X_1^2 =$	$\Sigma X_2^2 =$
	2468	2092		0	1013,68	1676,43

From the table the researcher obtained data as follows $\Sigma X_1 = 2468$, $\Sigma X_2 = 2092$, $\Sigma X_1^2 = 1013,68$ and $\Sigma X_2^2 = 1676,43$ Moreover, the researcher compared the result of post-test from both group by using t-test formula as follows:

$$t_0 = \frac{M_1 - M_2}{\sqrt{\left\{ \frac{\Sigma X_1^2 + \Sigma X_2^2}{N_1 + N_2 - 2} \right\} \left\{ \frac{N_1 + N_2}{N_1 \cdot N_2} \right\}}}$$

$$t_0 = \frac{82,26 - 69,73}{\sqrt{\left\{ \frac{1013,68 + 1676,43}{30 + 30 - 2} \right\} \left\{ \frac{30 + 30}{30 \cdot 30} \right\}}}$$

$$t_0 = \frac{12,53}{\sqrt{\left\{ \frac{269,011}{58} \right\} \{0,06\}}}$$

$$t_0 = \frac{12,53}{\sqrt{4,63}}$$

$$t_0 = \frac{12,53}{2,70} = 4,64$$

B. Discussion

After conducting preliminary research, pre-test, treatment, post-test and t-test. Finally, the researcher draws conclusion based on research problems as follows:

Basically, eighth grade students of SMP IT Al-Barokah Pandeglang have some problem on reading comprehension. The problem is caused but several factors such as: 1) some student are not interested in Learning English. 2) Some student do not have enough vocabulary it can make students difficult to understanding the meaning the content of text. 3) Some students have difficulty distinguishing the main idea and supporting paragraph. 4) Some student's difficulty to find specific information from text. 5) Some students fell bored learning English in class.

In teaching reading comprehension, the researcher used two classes, the first was an experimental class by using semantic mapping strategies and the second is a control class that uses conventional strategies. Before doing the treatment, the researcher gave a pre-test first to both classes and after that the researcher gave treatment on both classes five meeting, after doing the treatment the researcher gave post-test on both classes to know the score

before and after being given treatment. The respond from the students about this strategy make it easier for them to understand the information contained in the text so that they are not too difficult to find information such as main idea, supporting paragraph. Meanwhile the negative respond is the teacher must be active to pay attention to the difficulties faced by students in reading comprehension in classroom activity

Based on the result of t-test, the researcher obtained some data, the mean of experimental groups is 82, 26 meanwhile in control groups score is 69, 73. Besides the value of t -test is 4. 64 and t-table 1.67. Moreover, the writer compared t_t with t_0 on degree of significant 5% and the result showed t-test bigger than t-table, $t_t > t_0$ or 4, 64 > 1.67. In brief from t – test, can draw a conclusion that h_o or alternative hypothesis is accepted. Meanwhile, h_0 is rejected. It means, we can inferred that there is significant difference between groups which semantic mapping and the groups use conventional.