

## CHAPTER IV

### THE RESULT OF THE RESEARCH

#### A. Data Description

To know the improving of the students' sentence translation comprehension by using Google Translate, the writer gave the data pre-test and post-test would be used as data in this research. The translation comprehension of pre-test divide 1 (one) item of question, that related multiple choice question. Post-test that same question such as pre-test, are include 1 (one) item, that related multiple choice question.

The pre-test and post-test for both experiment and control, it consist of question. The correct score answer was given 10 (ten) points and incorrect answer was given zero (0) point.

#### 1. The score of Pre-Test and Post-Test of Experiment Class

The students in X IPS B Class as experiment class obtain mean score 44,67 for pre-test, 72,34 for post-test.

The score that they got in these test would be described in following table:

Table 4.1

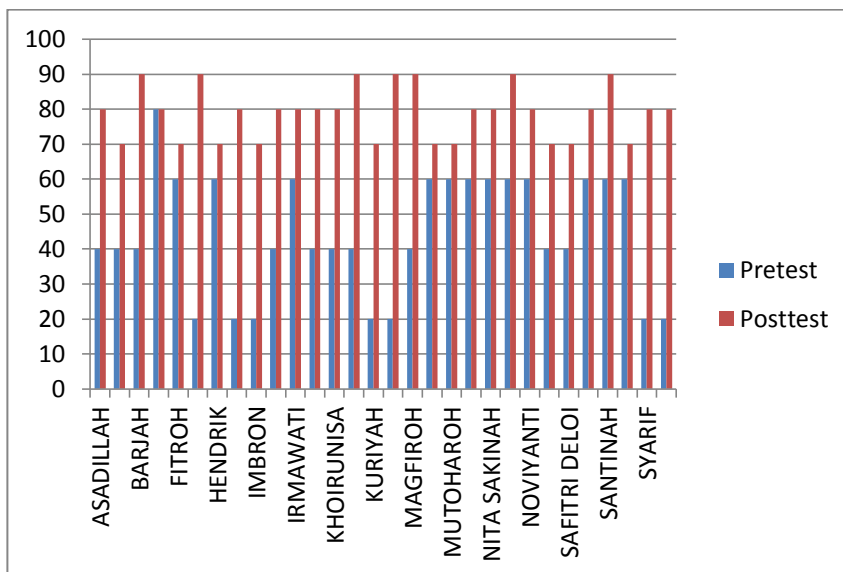
## The Result of Experiment Class

No	Students	Pre-Test ( $X_1$ )	Post-Test ( $X_2$ )
1	ASADILLAH	40	80
2	ASIQOH	40	70
3	BARJAH	40	90
4	FARAH	80	80
5	FITROH	60	70
6	HALPAH	20	90
7	HENDRIK	60	70
8	IKHWAN	20	80
9	IMBRON	20	70
10	INAYAH	40	80
11	IRMAWATI	60	80
12	JUSYANTI	40	80
13	KHOIRUNISA	40	80
14	KHOLILAH	40	90

15	KURIYAH	20	70
16	LAILA	20	90
17	MAGFIROH	40	90
18	MEGA	60	70
19	MUTOHAROH	60	70
20	NIRMALA	60	80
21	NITA SAKINAH	60	80
22	NOVITASARI	60	90
23	NOVIYANTI	60	80
24	ROLHATUL JANAH	40	70
25	SAFITRI DELOI	40	70
26	SANDI	60	80
27	SANTINAH	60	90
28	SOIMAH	60	70
29	SYARIF	20	80
30	YANTI ROSYANTI	20	80
		$\Sigma X_1 = 1340$	$\Sigma X_2 = 2370$
		$M = 44,67$	$M_1 = 79$

Graphic 4.1

## Score Pre-Test and Post-Test at Experiment Class



Based on graphic above could be seen that score of post-test experiment group increased. The total score of pre-test experiment group before treatment was 1340. The highest score was 60 and the lowest score is 20. After the research gave treatment, translation comprehension of students' sentence by Google-Translate strategy is increased. The total score of post-test in experiment class is 2370. It could be seen from result of posttest that highest score was 90 and the lowest score was 70.

From the data the student's answer of posttest in experiment class from lower score to higher score as follow:

The result post -test experimental class

70 70 70 70 70 70 70 70 70 70  
 80 80 80 80 80 80 80 80 80 80  
 80 80 80 90 90 90 90 90 90 90

Based on the data above, it can be made the assessment table find out mean standard of deviation:

Table 4.2

Assistant Table

$X_2$	F	$(F.X_2)$	$X_2 (X_2 - \mu)$	$X^2$	$(F.X_2^2)$
70	10	700	-9	81	810
80	13	1040	1	1	13
90	7	630	11	121	847
	$\sum F =$ 30	$\sum FX_2 =$ 2370			$\sum FX_2^2 =$ 1670

	$\mu$	79			
	SD				

**Note:**

$X_2$  = score from post-test in experiment class

$\Sigma f$  = total score

$\mu$  = determine mean

$M_2$  = the average score of experiment

a. Determine mean ( $\bar{X}$ ) by formula:

$$\bar{X} = \frac{\Sigma fx}{\Sigma f} = \frac{2370}{30} = 79$$

b. Account of standard deviation (SD) by using formulate:

$$SD = \sqrt{\frac{\Sigma fx^2}{\Sigma f}} = \sqrt{\frac{1670}{30}} = \sqrt{55,67} = 7,46$$

Based on computation above, it can be concluded that  $\mu$  (mean) = 79 and SD (Standard Deviation) = 7,46

## 2. Score of Pre-Test and Post-Test of Control Class

The student in X IPS A Class as control class obtained mean score 45,6 for pre-test and 58 for post-test.

The score that got in these would be described in following table:

Table 4.3

## The Result of Control Class

No	Student	Pre-Test (Y <sub>1</sub> )	Post-Test (Y <sub>2</sub> )
1	AMINAH	40	50
2	AMSAH	40	50
3	ANITA	50	60
4	ANWAR	30	40
5	ARYANI	50	50
6	DEWI NUR	40	60
7	ENIFAH TUNNUFUS	40	60
8	FAID	40	50
9	INAYATUL MAFRUKOH	40	70
10	JUNIYAH	50	70
11	KHOLIYAH	40	50

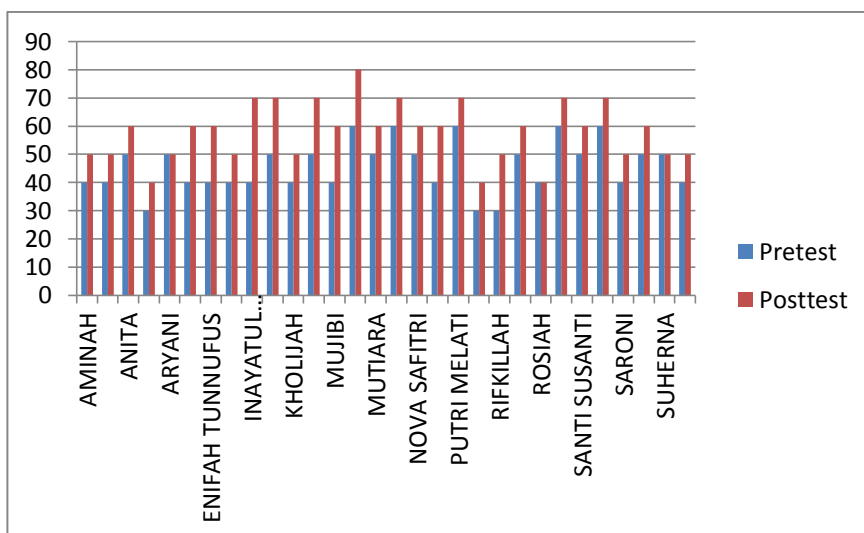
12	MASROFAH	50	70
13	MUJIBI	40	60
14	MUTHOHAROH	60	80
15	MUTIARA	50	60
16	NENGSIH	60	70
17	NOVA SAFITRI	50	60
18	NURFAIJAH	40	60
19	PUTRI MELATI	60	70
20	RAFI	30	40
21	RIFKILLAH	30	50
22	RIRIS	50	60
23	ROSIAH	40	40
24	SAKINAH	60	70
25	SANTI SUSANTI	50	60
26	SARI	60	70
27	SARONI	40	50
28	SITI HAMIDAH	50	60
29	SUHERNA	50	50



30	WINDI TRIAFNA	40	50
		$\Sigma Y_1 =$ 1370	$\Sigma Y_2 =$ 1740
		M= 45,6	M <sub>2</sub> = 58

Graphic 4.2

## Score Pre-Test and Post-Test at Control Class



Based on graphic above could be seen that score post-test control group is low.

The score of post-test in control class is 1740 is lower than score of pre-test in control class 1370. The

highest score of pre-test control group is 60 and the lowest score was 30. It could be seen from the result of post-test that the highest score 80 was and the lowest was 40.

From the data students answer of post-test in control class from lower score to higher score as follow:

#### The Result of Post-Test in Control Class

40 40 40 50 50 50 50 50 50 50  
 50 50 60 60 60 60 60 60 60 60  
 60 60 70 70 70 70 70 70 70 80

Based on the data above, it can be made the assessment table of find out mean standard of deviation:

Table 4.4

Assistant table

Y <sub>2</sub>	F	(F. Y <sub>2</sub> )	Y <sub>2</sub> (x <sub>2</sub> - μ)	Y <sup>2</sup>	(F. Y <sub>2</sub> <sup>2</sup> )
40	3	120	-18	324	972
50	9	450	-8	64	576
60	10	600	2	4	40

70	7	490	12	144	1008
80	1	80	22	484	484
	$\Sigma F =$ 30	$\Sigma F.$ $X_2 = 1740$			$\Sigma F.$ $X_2^2 =$ 3080
$\mu$		58			
SD					

**Note:**

$Y_2$  = Score from Post-Test in control class

$\Sigma F$  = Total of students

$\mu$  = Determine mean

$M_2$  = The average score of control class

a. Determine mean ( $X$ ) by formula:

$$x = \frac{\Sigma f_j}{\Sigma x} = \frac{1740}{30} = 58$$

b. Account of Standard Deviation (SD) by using  
formulate:

$$SD = \sqrt{\frac{\sum fx^2}{\sum f}} = \sqrt{\frac{3080}{30}} = \sqrt{102,67} = 10,132$$

Based on computation above, it can be concluded that  $\mu$  (mean) = 58 and SD (Standard Deviation) = 10,132

After getting the data from the post-test of two classes, the writer analyzes it by using formula.

Table 4.5

The Calculation Scores each Student of The Experiment and Control Class

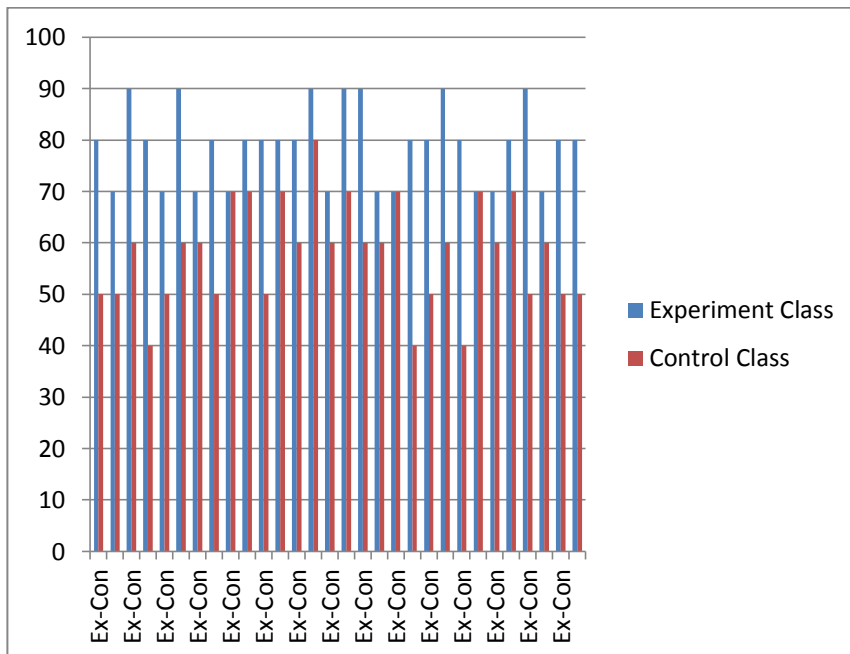
No	X <sub>2</sub>	Y <sub>2</sub>	X <sub>2</sub> - M <sub>1</sub>	Y <sub>2</sub> - M <sub>2</sub>	(X <sub>2</sub> - M <sub>2</sub> ) <sup>2</sup>	(Y <sub>2</sub> - M <sub>2</sub> ) <sup>2</sup>
1	80	50	1	-8	1	64
2	70	50	-9	-8	81	64
3	90	60	11	2	121	4
4	80	40	1	-18	1	324
5	70	50	-9	-8	81	64
6	90	60	11	2	121	4
7	70	60	-9	2	81	4
8	80	50	1	-8	1	64

9	70	70	-9	12	81	144
10	80	70	1	12	1	144
11	80	50	1	-8	1	64
12	80	70	1	12	1	144
13	80	60	1	2	1	4
14	90	80	11	22	121	484
15	70	60	-9	2	81	4
16	90	70	11	12	121	144
17	90	60	11	2	121	4
18	70	60	-9	2	81	4
19	70	70	-9	12	81	144
20	80	40	1	-18	1	324
21	80	50	1	-8	1	64
22	90	60	11	2	121	4
23	80	40	1	-18	1	324
24	70	70	-9	12	81	144
25	70	60	-9	2	81	4
26	80	70	1	12	1	144

27	90	50	11	-8	121	64
28	70	60	-9	2	81	4
29	80	50	1	-8	1	64
30	80	50	1	-8	1	64
	$\Sigma X_2 =$ 2370	$\Sigma Y_2 = 1740$			$\Sigma X_2^2 =$ 1670	$\Sigma Y_2^2 =$ 3080

Graphic 4.3

## Score Post-Test Experiment Class and Control Class



Based on the graphic above the experiment class = 2370 that the higher than control class = 1740 was had different value. The experiment class the higher than the control class. The research wrote this comparison is statistically.

From the table above, the writer got the data  $\Sigma X_2 = 2370$ ,  $\Sigma Y_2 = 1740$ ,  $\Sigma X_2^2 = 1670$ ,  $\Sigma Y_2^2 = 3080$  whereas  $N_1$  and  $N_2$  are 30. After that, the writer calculated them based on the t-test formula:

Note:

$N_1$  = the number of students of experiment class

$N_2$  = the number of students of control class

Df = degree of freedom

$$1) M_1 = \frac{\Sigma x^2}{N_1} = \frac{2370}{30} = 79$$

$$2) M_2 = \frac{\Sigma y^2}{N_2} = \frac{1740}{30} = 58$$

$$3) Df = N_1 + N_2 - 2$$

$$4) t_0 = \frac{M_1 - M_2}{\sqrt{\left\{ \frac{\Sigma x_2^2 \Sigma y_2^2}{N_1 + N_2 - 2} \right\} \left\{ \frac{N_1 + N_2}{N_1 \cdot N_2} \right\}}} = \frac{79 - 58}{\sqrt{\left\{ \frac{1670 + 3080}{30 + 30 - 1} \right\} \left\{ \frac{30 + 30}{30 \cdot 30} \right\}}} = \frac{21}{\sqrt{\left\{ \frac{4750}{58} \right\} \left\{ \frac{60}{900} \right\}}} =$$

$$\frac{21}{\sqrt{\{81,89\}\{0,7\}}}$$

$$= \frac{21}{\sqrt{57,32}} = \frac{21}{7,57} = 2,77$$

5) In degree of significant 5 % from 58  $t_t = 2,00$

In degree of significant 1 % from 58  $t_t = 2,65$

6) The research compare  $t_0$  to  $t_t$  that  $> t_t$   $H_0$  and  $H_a$  is rejected, but when  $t_0 < t_t$  means that  $H_0$  is accepted and  $H_a$  is rejected.

The result of df is calculated to  $t_t$  of 5 % and 1 % by formula:

$$t_t \text{ 5 \% } < t_0 > t_t \text{ 1 \% } = 2,00 < 2,77 > 2,65$$

$$t_0 : t_t \rightarrow 2,77 > 2,00 \text{ in degree of significant 5 \%}$$

$$t_0 : t_t \rightarrow 2,77 > 2,65 \text{ in degree of significant 1 \%}.$$

It means that the alternative hypothesis is accepted. Since the  $t_0 >$  from  $t_t$ , it also meaning that are significant difference of teaching translating of sentence comprehension by Google-Translate.

## B. Hypothesis Testing

To prove it, the data obtained from the experiment class and control class are calculated with assumption as follow:

If  $t_0 > t_t$  : the alternative hypothesis is accepted. And null hypothesis is rejected. It means that there is significant influence of teaching translating of



sentence comprehension by Google-translate strategy and without using Google-Translate strategy.

If  $t_0 < t_t$  : the alternative hypothesis is rejected. And null hypothesis is accepted. It means that there is no significant influence of teaching translating comprehension by Google-translate strategy and without using Google-Translate strategy.

From the result of calculation above, the value of  $t_0$  is 2,77. The degree of freedom (df) was 58. The writer used the degree of significance of 5 %. The writer used  $df = 40$  for there is no degree of significance of 5 % is 2,02 and 1 % 2,65.

After get the data, the writer compared it with  $t_t$  both in degree of significance 5 %. The writer 1 %,  $t_0 : t_t = 2,77 : 2,02$  and  $t_0 < t_t$ . It means that  $H_a$ (alternative hypothesis) of the research is accepted and  $H_0$  (null hypothesis) is rejected. It means there is no the effectiveness of using Google-Translate strategy.

### C. Data Interpretation

In the class X IPS B as experimental class, the highest score of pre-test is 80 and the lowest score was 20. The mean highest score of post-test is 90 and the lowest score is 70. The mean of pre-test score obtained by students in this class is 44,67 and the mean of post-test is 79. The mean of pre-test and post-test score has good enough improvement it seen by  $79 > 44,67$ . The improvement caused by the experimental class have learned translating of sentence comprehension by using Google-Translate that no used by teacher before.

In the class X IPS A as control class, the highest score of pre-test 60 is and the lowest score is 30. The highest score of post-test is 80 and the lowest score is 40. The mean of pre-test and post-test in this class is 45,6 and 58. There is no significant improvement of the result in this class, it seen from the mean that is 45,6 and 58, which improved 10 score. It caused by control class did not learn using Google-Translate on sentence translation.

In the class applied method of learning translation with Google-Translate, learners will be more active inquiring about material that is not known. Its mean, learning in the class that uses the translation method with Google-Translate more focuses on the learners and explores the party's knowledge up to where the students understanding level. In such as learning, students interested in learning and eliminate the sense of laziness and saturation of learning; all students are given plenty of opportunities to ask questions about matter that they do not know. This indicates that use of translation method with Google-Translate can improve student learning outcomes, especially on the translation of sentence material compared with the use of translation with a dictionary where teacher is more active than students.

With the use of translation learning method with Google-Translate is evident that the result of students learning increased compared to the method of learning translation by using dictionary, especially on the translation of sentence material and the use of translation methods with Google-

Translate, the students are more quickly understand the material translation of sentence because most students will actively ask questions about material that have been taught and time to ask more than the use of translation method with a more active and dominant dictionary of teacher so that students feel bored and quickly satuated with the material taught.

This is seen with the result of student learning in experiment class that taught translating using Google-Translate is the most higher than the result of students in control class that be taught translating by using dictionary is 79 % and 58 %. Of the result, so it is been the difference of the learning result is the highest, 21 %.

The conclusion, there is the difference of student learning result among experiment class which is taught translating by Google-Translate and control class which is taught translating by dictionary.