### **CHAPTER IV**

#### THE RESULT OF STUDY

### A. Description of Data

In this chapter, the writer explains the result of the research. The writer has 50 students at the First grade of SMA Al-Hidayah Rangkasbitung. The goal of the research is intended to find out the accurate data in accordance with the research title. So the sample in this study divided into two classes. They are 25 students each. Students X B as the control class and 25 students X A as the experiment class.

The writer got two data. The first data is the result of Pre-test and the second one is the result of Post-test from both classes. The result of pre-test was named variable (X) and the result of post-test was named variable (Y).

The students' different in Passive Voice has less before using contextual teaching and learning. They found the difficulties and did not have many concept or idea to change active into passive sentence. But after using Contextual teaching and learning students' has better achievement. It can be seen from the result of pre- test and post- test.

To know the effectiveness of after using Contextual teaching and learning in teaching passive voice the writer gave the test to students as the sample both at the experimental class and at the control class. The test that used in this research divided into two types, there are pre-test and post-test. The pre- test was the test that giving treatment and the post-test given after giving treatment.

To know the result of the test, the writer makes the table of the students' score for each variable as follow:

Table 4.1

Data from Pre-test and Post-test of experiment class

		Score			
NO.	Students	Pre- test	Post- test		
1	AR	75	80		
2	ARI	60	70		
3	EAF	55	65		
4	FM	65	70		
5	FFF	60	75		
6	GG	40	70		
7	HA	50	70		
8	IF	80	85		
9	IN	60	75		
10	IK	45	70		
11	IS	55	70		
12	IM	50	75		
13	MDJ	60	65		
14	MAH	55	70		
15	MS	65	70		
16	MW	70	80		
17	MSU	75	85		
18	N	55	70		

19	NR	50	70
20	RM	75	80
21	RW	40	65
22	RI	55	70
23	RA	75	75
24	ZT	50	70
25	IM	45	65
	Σ	1465	1810
	X	58.6	72.4

The table above shows the students' Passive voice at the First grade of SMA Al-Hidayah in experiment class (XB) before treatment was less. It can be known from the result of pre- test and post test from experiment class, in the score of post test there are 2 students got 85, 3 students got 80,4 students got 75, and tweleve students got 70 and 4 students got 65 and the score of pre test there are 70 until 85 numbered twenty one persons. And the lowers score of pretest thera are 1 student got 80, 4students got 75, 1 student got 70, 2 students got 65,4 students got 60, five students got 55, 4 students got 50, 2 students got 45, and 2 students got 40. . the score draws that highest score of students' passive voice is good and the lowers score is bad and the result of post- test after treatment show that students' score. There is the improvement on criteria of students' scored that the highest score is very good and the lower score is enough.

To find mean score, the writer follows the formula:

$$M1 = \frac{\sum X2}{N2}$$
$$= \frac{1810}{25}$$
$$= 72.4$$

M2 
$$=\frac{\sum X1}{N1}$$
  
 $=\frac{1465}{25}$   
 $= 58,6$ 

Note: 
$$M1 = Mean$$

X1 = Students' score (Post-test)

X2 = Students' score (Pre-test)

N = Number of students

Based on the calculation on the table 1 of pre- test and post- test assessment at experiment class, it shows that the cumulating value of assessment result before Contextual teaching and learning was 1465. The average of the pre- test was 58.6 Meanwhile, the cumulating value of assessment result after Contextual teaching and learning was 1810 the average of the post test was 72.4.

Determine mean by formula:

$$M = M1-M2$$

$$=72.4-58.6$$

= 13.8

Note: M = Mean

M1 = Mean of Post test

M2 = Mean of Pre- test

From the calculation of determine mean above, as have known that the average score of pre- test and post- test (at experiment class) increase in amount of 13.8.

To know score in teaching passive voice non contextual teaching and learning teqhnique the writer gave the test to students as the sample both at the control class class. The test that used in this research divided into two types, there are pre- test and post- test. The pre- test and post test non giving treatment.

To know the result of the test, the writer makes the table of the students' score for each variable as follow:

Table 4.2

Data of Pre- test and Post- test from Control Class

NO.	Students	Score			
	Students	Pre- test	Post- test		
1	AJ	60	60		
2	AM	80	80		
3	AMU	55	55		
4	DJ	70	70		
5	DS	55	65		
6	DHP	55	60		
7	FN	65	65		
8	FA	50	55		
9	HN	45	60		
10	IF	60	60		
11	IFG	65	65		
12	KN	70	75		
13	LP	60	70		
14	LLM	70	70		
15	LN	55	55		
16	MS	65	65		
17	SM	65	65		
18	SJ	75	75		
19	SUH	70	70		
20	PHZ	60	75		
21	PI	65	65		
22	SS	75	80		
23	SN	80	80		
24	YA	60	65		
25	ZA	75	70		
	Σ	1605	1675		
	X	64.2	67		

The table above shows the students' writing in teaching passive voice at the First grade of SMA Al- Hidayah Rangkasbitung in control class (XA) was less because in this class not use treatment. It be known from the result of pre-test and post- test in control class, in the score of post test there are 3 students got 80 ,3 students got 75 , 5 students got 70, 7 students got 65. 4 students got 60, and 3 students got 55 and the score of pretest there are 2 students got 80 , 3 students got 75, 4 students got 70 , 5 students got 65 ,5 students got 60 ,4 students got 55,1 student got 50 , 1 students got 45, The find the mean score, the writer follows the formula:

$$M1 = \frac{\sum X2}{N2}$$

$$= \frac{1675}{25}$$

$$= 67$$

$$M2 = \frac{\sum X2}{N2}$$

$$= \frac{1605}{25}$$

$$= 64.2$$

Based on the calculation on the table 2 of pre- test and post- test assessment at control class, it shows that the cumulative value of pre-

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test is 1605. The average of the pre- test was 64.2. Meanwhile, the cumulative value of post- test was 1675. The average of the post- test result is 67.

Determine mean by formula:

$$M = M1-M2$$

= 67 - 64.2

= 2.8

Note:

M = Mean

M1 = Mean of post test

M2 = Mean of pre test

From the calculation of determine above, we have known that the average score of pre- test and post- test (at control class) increase amount of 2.8.

After writing the comparison between the score of pre- test and post- test, the writer calculates deviation and squared deviation and the result of calculation by using the formula- test can be seen at the analysis of data as follow:

# B. Analyzing the data

After getting the data from pre-test and post-test score of two classes. Then the writer analyzed it by using t-test formula with the degree of significant 5% and 1%, the writer used step as follows:

Table 4.3

The Score of Distribution Frequency

No.	x1	x2	X1	X2	X12	X2 <sup>2</sup>
1	80	60	7.6	-7	57.76	49
2	70	80	-2.4	13	5.76	169
3	65	55	-7.4	-12	54.76	144
4	70	70	-2.4	3	5.76	9
5	75	65	2.6	-2	6.76	4
6	70	60	-2.4	-7	5.76	49
7	70	65	-2.4	-2	5.76	4
8	85	55	12.6	-12	158.76	144
9	75	60	2.6	-7	6.76	49
10	70	60	-2.4	-7	5.76	49
11	70	65	-2.4	-2	5.76	4
12	75	75	2.6	8	6.76	64
13	65	70	-7.4	3	54.76	9

14	70	70	-2.4	3	5.76	9
15	70	55	-2.4	-12	5.76	144
16	80	65	7.6	-2	57.76	4
17	85	65	12.6	-2	158.76	4
18	70	75	-2.4	8	5.76	64
19	70	70	-2.4	3	5.76	9
20	80	75	7.6	8	57.76	64
21	65	65	-7.4	-2	54.76	4
22	70	80	-2.4	13	5.76	169
23	75	80	2.6	13	6.76	169
24	70	65	-2.4	-2	5.76	4
25	65	70	-7.4	3	54.76	9
Σ	1810	1675	-	-	806	1400

## Note:

x1 = Score Post- Test (Experiment Class)

x2 = Score Post- Test (Control Class)

 $X1^{-1}$  = The Squared Value of X1

 $X2^2$  = The Squared Value of X2

X1 = x1 - M1

X2 = x2 - M1

Df = NI + N2-2= 25+ 25- 2

$$t = \frac{M1 - M2}{\sqrt{\frac{(\sum X1^2 + X2^2)(N1 + N2)}{(N1 + N2 - 2)N1.N2}}}$$

$$= \frac{72.4 - 67}{\sqrt{\frac{(806 + 1400)(25 + 25)}{(25 + 25 - 2)25.25}}}$$

$$= \frac{5.4}{\sqrt{\frac{(2206)}{48}(\frac{50}{625})}}$$

$$= \frac{5.4}{\sqrt{(45.96)(0.08)}}$$

$$= \frac{5.4}{\sqrt{1.91}} = 2.82$$

In general, score of post-test in experiment class was better than post-test in control class. It can be seen from the table :

Table 4.4

The Score pre-test and post-test experiment class and control class

Test	Experiment Class	Control Class
Pretest	1465	1605
Post Test	1810	1675

Based on the result statistic calculation, it is obtained that the score of  $t_o$  is = 2.82 degree of freedom is (5%) and (1%). The value of 48 is mentioned in the table about 2.01 and 2.68 (as degree of significant).

To prove the hypothesis, the data obtained from the experimental class is calculated is by using t- test formula with assumption as follow:

 $\label{eq:table_the_alternative} If \ t_{observation} > t_{table} \ the \ alternative \ hypothesis \ is \ accepted. \ It \ means$  there is significant different between learning using contextual teaching and learning and students' in teaching passive voice.

If  $t_{observation} < t_{table}$  the alternative hypothesis is rejected. It means there is no significant different between learning using contextual teaching and learning and students' in teaching passive voice.

## C. Interpretation of the Data

The analysis is aimed to know is the influence of contextual teaching and learning in teaching passive voice writer has already known that the mean score of experiment class was 58.6in pre- test and 72,4 in post- test. But the mean score of control class was 64.2 in pre- test and 67 in post- test. Seeing calculation above, the experiment class

get increase on 13.8 points. It is better than the control class get increase on 2.8 points.

Before deciding the result of hypothesis, the writer proposes interpretation toward to with procedure as follow:

- a. Ha =  $t_{observation} > t_{table}$ . It means there is significant effectiveness between students' passive voice using contextual teaching and learning.
- b. Ho =  $t_{observation}$  <  $t_{table}$ . It means there is no significant effectiveness between students' in passive voice using contextual teaching and learning.

According to the data, the value of t<sub>observation</sub> is bigger than t<sub>table</sub>.

$$t_{observation} = 2.82 > t_{table} = 2.01(5\%) \text{ or}$$

$$t_{observation} = 2.82 > t_{table} = 2.68 (1\%),$$

so H<sub>o</sub> is rejected and H<sub>a</sub> is accepted.

From the result above, the writer gave conclusion that there is the influence of contextual teaching and learning in teaching passive voice. It can be seen that the students get good or better score by using contextual teaching and learning. Contextual teaching and learning used for teaching of passive voice had a positive influence on teaching different passive voice and active voice. The strategy provided several steps to make it easier to use language more freely which resulted in better writing by the Experiment Class students. The writer was more motivated to learn English especially through on Grammar. Moreover, contextual teaching and learning was very helpful to lesson the difficulties of students in different active and passive voice.

Contextual Teaching and Learning (CTL) has been defined here as a way to introduce content using a variety of active-learning techniques designed to help students connect what they already know to what they are expected to learn, and to construct new knowledge from the analysis and synthesis of this learning process. A theoretical basis for CTL has been outlined, with a focus on Connection, Constructivist, and Active Learning theories. A summary of brain activity during the learning process illustrates the physiological changes and connections that occur during educational activities. The strategies of contextual teaching and learning process can be conducted Problem-based - CTL can begin with a simulated or real problem. Students use critical thinking skills and a systemic approach to inquiry to address the problem or issue. Students may also draw upon multiple content areas to solve these problems. Using multiple contexts -Theories of situated cognition suggest that knowledge can not be separated from the physical and social context in which it develops. Drawing upon student diversity - On the whole, our student population is becoming more diverse, and with increased diversity comes differences in values, social mores, and perspectives. Supporting self-regulated learning - Ultimately, students must become lifelong learners. Using interdependent learning groups - Students will be influenced by and will contribute to the knowledge and beliefs of others. Learning groups, or learning communities. And Employing authentic assessments - CTL is intended to build knowledge and skills in meaningful ways by engaging students in real life, or "authentic" contexts.