CHAPTER IV

DATA PRESENTATION AND ANALYSIS

A. The Overview of Junior High School 10 Tapung

Junior High School 10 Tapung is one of the schools which uses Curriculum 2013 as guidance in teaching and learning process. There are 19 classes here, 6 classes of first grade with the number of students are 173, 7 classes of second grade consist of 210 students, and 6 classes of third grade consist of 175 students. The number of teachers who teach are 30 teachers, 4 of them are English teachers. All of the English teachers had completed their undergraduate degree. In this school, English is taught in all grades. It is taught twice a week. The facility also supports the process of teaching such as projector, speakers, etc.

B. Description of the Data

The data of the research is data about the classroom observation and the score of students' pre-test and post-test. Classroom observation was done in order know the process of teaching conducted by using Flashcards. Data of students' test was taken from two classes, experimental and control classes. Class VII E was the experimental class and VII F was the control class. The purpose of the research was to know whether there is a significant effect of using flashcards on students' ability in using prepositions and to know on which kinds of preposition have the biggest effect.

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C. The Data Presentation

1. The Classroom Observation

Observation was conducted in order to know whether the media used had been applied as well as the procedure and to collect the data about the implementation of using flashcards. The writer had a list of observational items observed in experimental class during the teaching and learning process. It can be seen in the data presented below:

Table IV.1
The Implementation of Flashcards

No	The Implementation of Flashcards	Observation Times					
		1	2	3	4	5	6
1	The teacher introduces the material that will be discussed	√	√	√	√	√	√
2	The teacher shows a flashcard and asks the students some questions to make sure that they know the object, for example, the flashcard shows that there are two books on the table	√	√	√	√	√	√
3	The teacher states one sentence about the picture on the flashcard and repeats it twice while the students listen carefully	√	√	√	√	√	√
4	The teacher asks the whole class to repeat and then asks one of the students (randomly) to repeat the sentence. The purpose of this is to make sure that all students pay attention to the teacher	√	√	√	√	-	√
5	The teacher then shows another flashcard with different picture which tells another preposition, for example, there are two books under the table	√	√	√	√	√	√
6	The teacher continues teaching the prepositions by showing the flashcards and asking the students what the picture tells about	√	√	√	√	√	√
7	The teacher keeps showing flashcards and repeating the word of preposition until the students know the difference among the preposition	√	√	√	√	-	√
8	After that, the teacher starts writing the words of preposition every time she shows the flashcards so that the students will also know how to spell the words	√	√	√	-	√	√
9	The teacher gives some exercises by showing flashcards for each preposition to be written by the students	√	√	√	√	√	-
	Total	**9**	**9**	**9**	**8**	**7**	**8**

Based on table 4.1 the implementation of flashcards in the learning process there are several aspects that are not implemented, from the first, second and third meetings all aspects are implemented. While, in the fourth and sixth meetings there is one aspect that is not implemented. And at the fourth meeting there were two aspects that were not implemented.

2. Students' ability in using Preposition

The data of students ability in using English preposition was collected from the pre-test and post-test given to both control and experimental class.

a) Students' ability in using Preposition of Control Class

The data of students' ability in using preposition of the control class were gotten from pre-test and post-test of VII E. The data can be seen from the table below:

Table IV. 2
The Score of Students' ability in using Preposition of Control Class

Number	Students	Score			
		Pre-Test	Category	Post-Test	Category
1	Student 1	55	Good	50	Good
2	Student 2	55	Good	55	Good
3	Student 3	40	Good	55	Good
4	Student 4	40	Good	60	Very good
5	Student 5	20	Enough	40	Good
6	Student 6	50	Good	70	Very good
7	Student 7	40	Good	55	Good
8	Student 8	35	Enough	40	Good
9	Student 9	40	Good	30	Enough
10	Student 10	25	Enough	75	Very good
11	Student 11	30	Enough	70	Very good
12	Student 12	35	Enough	60	Very good
13	Student 13	40	Good	80	Excellent
14	Student 14	40	Good	80	Excellent
15	Student 15	35	Enough	65	Very good

Number	Students	Score			
		Pre-Test	Category	Post-Test	Category
16	Student 16	35	Enough	55	Good
17	Student 17	45	Good	45	Good
18	Student 18	35	Enough	50	Good
19	Student 19	45	Good	65	Very good
20	Student 20	30	Enough	75	Very good
21	Student 21	35	Enough	60	Very good
22	Student 22	20	Enough	70	Very good
23	Student 23	30	Enough	45	Good
24	Student 24	25	Enough	50	Good
25	Student 25	20	Enough	80	Excellent
26	Student 26	25	Enough	50	Good
27	Student 27	45	Good	50	Good
28	Student 28	15	Bad	55	Good
29	Student 29	30	Enough	40	Good
	Total	1015		1675	
	Mean	35		57.75	

From the table IV.2, the researcher found that the total score of
pre-test in control class was 1015 and the mean score was 35. The
highest score was 55 and the lowest was 15. The total score of post-test
in control class was 1675 and the mean score was 57.75 while the
highest was 80 and the lowest was 30.

Table IV. 3
Students' Classification Score of
Pre-Test of Control Class

No	Category	Frequency	Percent
1	Bad	1	3.4
2	Enough	16	55.1
3	Good	12	41.3
4	Very Good	0	0
5	Excellent	0	0
Total		29	100.0

Based on table IV.3 above, it can be seen that there was 1
student who got bad category (3.4%), 16 students who got enough
category (55.1%), 12 students who got good category (41.3%), no one

got very good and excellent category (0%), and the total of students is 29.

Table IV. 4
Students' Classification Score of
Post-Test of Control Class

No	Category	Frequency	Percent
1	Bad	0	0
2	Enough	1	3.4
3	Good	15	51.7
4	Very Good	10	34.4
5	Excellent	3	10.3
Total		29	100.0

Based on table IV.4 above, it can be seen that there was no student who got bad category (0%), 1 students who got enough category (3.4%), 15 students who got good category (51.7%), 10 students who got Very Good category (34.4%), and 3 students who got excellent category (10.3%). The total of students is 29.

Furthermore, the frequency score of pre-test and post-test in control class can be seen below:
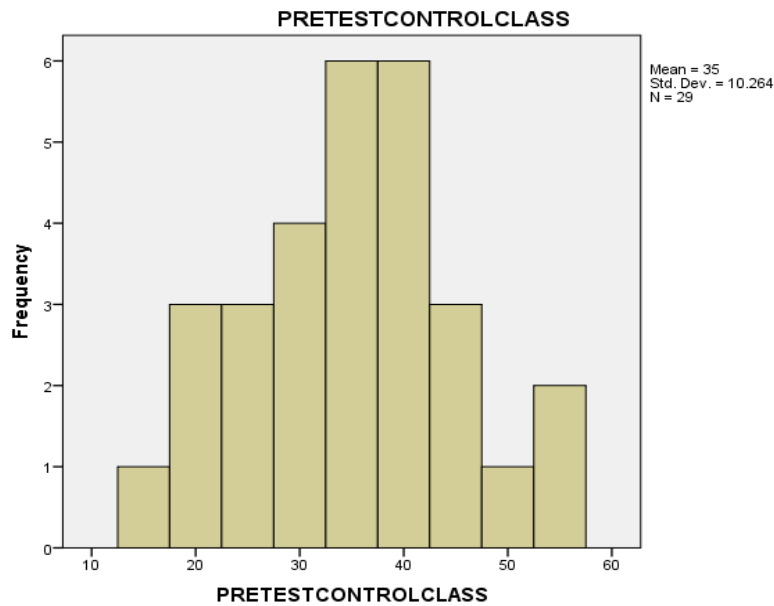
Table IV. 5
Distribution of Frequency of Students'
Pre-Test Score of Control Class

No	Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	15	1	3.4	3.4	3.4
2	20	3	10.3	10.3	13.8
3	25	3	10.3	10.3	24.1
4	30	4	13.8	13.8	37.9
5	35	6	20.7	20.7	58.6
6	40	6	20.7	20.7	79.3
7	45	3	10.3	10.3	89.7
8	50	1	3.4	3.4	93.1
9	55	2	6.9	6.9	100.0
	Total	29	100.0	100.0	

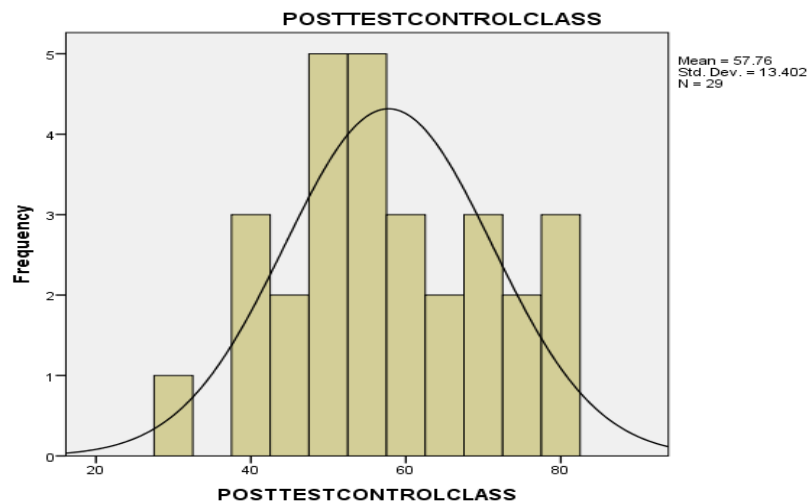**Histogram IV. 1**
Frequency of Pre-Test ofControl Class

Based on the table IV.5 and histogram IV.1 above,it could be seen that there was 1 student who obtained 15 (3.4%), 3 students who obtained 20 (10.3%), 3 students who obtained 25 (10.3%), 4 students who obtained 30 (13.8%), 6 students who obtained 35 (20.7%), 6 students who obtained 40 (20.7%), 3 students who obtained 45 (10.3%), 1 student who obtained 50 (3.4%), 2 students who obtained 55 (6.9%), and the total number of students was 29.

Table IV. 6
Distribution of Frequency of Students'
Post-Test Score of Control Class

No	Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	30	1	3.4	3.4	3.4
2	40	3	10.3	10.3	13.8
3	45	2	6.9	6.9	20.7
4	50	5	17.2	17.2	37.9
5	55	5	17.2	17.2	55.2
6	60	3	10.3	10.3	65.5
7	65	2	6.9	6.9	72.4
8	70	3	10.3	10.3	82.8
9	75	2	6.9	6.9	89.7
10	80	3	10.3	10.3	100.0
	Total	29	100.0	100.0	

Histogram IV. 2
Frequency of Post-Test of Control Class

Based on the table IV.6 and histogram IV.2 above,it could be seen that there was 1 student who obtained 30 (3.4%), 3 students who obtained 40 (10.3%), 2 students who obtained 45 (6.9%), 5 students who obtained 50 (17.2%), 5 students who obtained 55 (17.2%), 3 students who obtained 60 (10.3%), 2 students who obtained 65 (6.9%), 3 student

who obtained 70 (10.3%), 2 students who obtained 75 (6.9%), 3 students who obtained 80 (10.3%) and the total number of students was 29.

b) Students ability in using Preposition of Experimen Class

The data of students' ability in using preposition of the experimental class were gotten from pre-test and post-test of VII F. The data can be seen from the table below:

Table IV. 7
The Score of the Students' ability in using Preposition of
Experimental Class

Number	Students	Score			
		Pre-Test	Category	Post-Test	Category
1	Student 1	55	Good	60	Very good
2	Student 2	60	Very good	55	Good
3	Student 3	50	Good	55	Good
4	Student 4	40	Good	55	Good
5	Student 5	20	Enough	50	Good
6	Student 6	45	Good	50	Good
7	Student 7	50	Good	60	Very good
8	Student 8	35	Enough	80	Excellent
9	Student 9	50	Good	85	Excellent
10	Student 10	20	Enough	75	Very good
11	Student 11	30	Enough	65	Very good
12	Student 12	40	Good	80	Excellent
13	Student 13	45	Good	75	Very good
14	Student 14	45	Good	70	Very good
15	Student 15	35	Enough	55	Good
16	Student 16	40	Good	70	Very good
17	Student 17	55	Good	65	Very good
18	Student 18	40	Good	65	Very good
19	Student 19	40	Good	80	Excellent
20	Student 20	30	Enough	70	Very good
21	Student 21	40	Good	70	Very good
22	Student 22	25	Enough	80	Excellent
23	Student 23	25	Enough	60	Very good
24	Student 24	20	Enough	65	Very good
25	Student 25	15	Bad	70	Very good
26	Student 26	25	Enough	65	Very good
27	Student 27	35	Enough	75	Very good
28	Student 28	20	Enough	60	Very good
29	Student 29	35	Enough	55	Good
	Total	**1065**		**1920**	
	Mean	**36.72**		**66.20**	

From the table IV.7, the researcher found that the total score of pre-test in experimental class was 1065 and the mean score was 36.72. The highest score was 60 and the lowest was 15. The total score of post-test in experimental class was 1920 and the mean score was 66.20 while the highest was 85 and the lowest was 50.

Table IV. 8
Students' Classification Score of
Pre-Test of Experiment Class

No	Category	Frequency	Percent
1	Bad	1	3.4
2	Enough	12	41.3
3	Good	15	51.7
4	Very Good	1	3.4
5	Excellent	0	0
Total	29	100.0	

Based on table IV.8 above, it can be seen that there was 1 student who got bad category (3.4%), 12 students who go enough category (41.3%), 15 students who got good category (51.7%), 1 students who got very good category (3.4%), no one got excellent category (0%), and the total of students is 29.

Table IV. 9
Students' Classification Score of
Post-Test of Experiment Class

No	Category	Frequency	Percent
1	Bad	0	0
2	Enough	0	0
3	Good	7	24.1
4	Very Good	17	58.6
5	Excellent	5	17.2
Total	29	100.0	

Based on table IV.9 above, it can be seen that there is no student who got bad category (0%), no student who got enough category (0%), 7 students who got good category (24.1%), 17 students who got very good category (58.6%), 5 students who got excellent category (17.2%), and the total of students is 29.

Table IV. 10
Distribution of Frequency of Students'
Pre-Test Score of Experiment Class

No	Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	15	1	3.4	3.4	3.4
2	20	4	13.8	13.8	17.2
3	25	3	10.3	10.3	27.6
4	30	2	6.9	6.9	34.5
5	35	4	13.8	13.8	48.3
6	40	6	20.7	20.7	69.0
7	45	3	10.3	10.3	79.3
8	50	3	10.3	10.3	89.7
9	55	2	6.9	6.9	96.6
10	60	1	3.4	3.4	100.0
	Total	29	100.0	100.0	

Histogram IV. 3
Frequency of Pre-Test ofExperiment Class
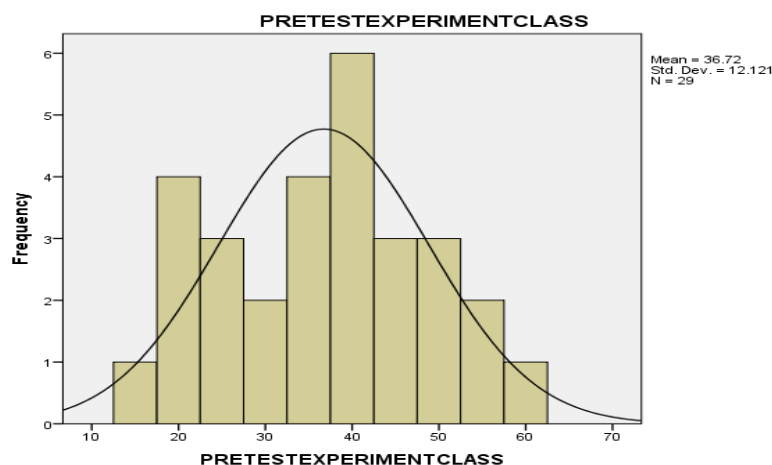
Based on the table IV.10 and histogram IV.3 above, it could be seen that there was 1 student who obtained 15 (3.4%), 4 students who obtained 20 (13.8%), 3 students who obtained 25 (10.3%), 2 students who obtained 30 (6.9%), 4 students who obtained 35 (13.8%), 6 students who obtained 40 (20.7%), 3 students who obtained 45 (10.3%), 3 student who obtained 50 (10.3%), 2 students who obtained 55 (6.9%), 1 students who obtained 60 (3.4%) and the total number of students was 29.

Table IV. 11
Distribution of Frequency of Students'
Post-Test Score of Experiment Class

No	Score	Frequency	Percent	Valid Percent	Cumulative Percent
1	50	2	6.9	6.9	6.9
2	55	5	17.2	17.2	24.1
3	60	4	13.8	13.8	37.9
4	65	5	17.2	17.2	55.2
5	70	5	17.2	17.2	72.4
6	75	3	10.3	10.3	82.8
7	80	4	13.8	13.8	96.6
8	85	1	3.4	3.4	100.0
	Total	29	100.0	100.0	

Histogram IV. 4
Frequency of Post-Test of Experiment Class

POSTTESTEXPERIMENTCLASS

Mean = 66.21
Std. Dev. = 9.879
N = 29
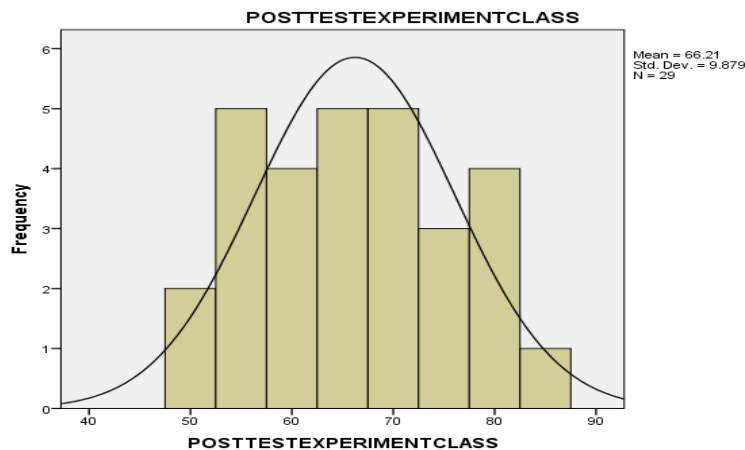
Based on the table IV.11 and histogram IV.4 above, it could be seen that there was 2 student who obtained 50 (6.9%), 5 students who obtained 55 (17.2%), 4 students who obtained 60 (13.8%), 5 students who obtained 65 (17.2%), 5 students who obtained 70 (17.2%), 3 students who obtained 75 (10.3%), 4 students who obtained 80 (13.8%), 3 student who obtained 85 (3.4%) and the total number of students was 29.

D. The Data Analysis

This part presents about analysis of data that had been collected from the research. The result of data analysis is used to answer the research questions.

1. Analysis of Classroom Observation

The result of classroom observation data can be seen below:

Table IV.12
The Implementation of Flashcards

No	The Implementation of Flashcards	Observation Times					
		1	2	3	4	5	6
1	The teacher introduces the material that will be discussed	√	√	√	√	√	√
2	The teacher shows a flashcard and asks the students some questions to make sure that they know the object, for example, the flashcard shows that there are two books on the table	√	√	√	√	√	√
3	The teacher states one sentence about the picture on the flashcard and repeats it twice while the students listen carefully	√	√	√	√	√	√
4	The teacher asks the whole class to repeat and then asks one of the students (randomly) to repeat the sentence. The purpose of this is to make sure that all students pay attention to the teacher	√	√	√	√	-	√
5	The teacher then shows another flashcard with different picture which tells another preposition, for	√	√	√	√	√	√

No	The Implementation of Flashcards	Observation Times					
		1	2	3	4	5	6
	example, there are two books under the table						
6	The teacher continues teaching the prepositions by showing the flashcards and asking the students what the picture tells about	√	√	√	√	√	√
7	The teacher keeps showing flashcards and repeating the word of preposition until the students know the difference among the preposition	√	√	√	√	-	√
8	After that, the teacher starts writing the words of preposition every time she shows the flashcards so that the students will also know how to spell the words	√	√	√	-	√	√
9	The teacher gives some exercises by showing flashcards for each preposition to be written by the students	√	√	√	√	√	-
	Total	9	9	9	8	7	8
	Percentage	100%	100%	100%	88%	77%	88%

To get the percentage of the observation, the writer used the formula discussed in chapter III. Then, the total percentage of all meetings are:

$$P = \frac{100\% + 100\% + 100\% + 88\% + 77\% + 88\%}{6} = 92\%$$

Thus, based on the category of the level of success in implementing learning process by Novia (2017) discussed in chapter III, it can be concluded that the level of success in implementing flashcards is very high.

2. Analysis of the Effect of using Flashcards on students' ability in using Prepositions

Before examining the effect of using flashcards on students' ability in using prepositions at Junior High School 10 Tapung, the researcher calculated the mean, standard deviation and standard error mean of

experimental and control class by using SPSS, can be seen in the following table:

Table IV.13
Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Score	Experimental Class	29	66.2069	9.87920	1.83452
	Control Class	29	57.7586	13.40217	2.48872

Based on the table above, the total number of students for experimental class consisted of 29 students and control class consisted of 29 students. The mean score of experimental class was 66.2069 and the mean score of control class was 57.7586, and the standard deviation of experimental class was 9.87, while standard deviation of control class was 13.40, the std. error of mean of experimental class was 1.83, while the std. error of mean of control class was 2.48. The second table determines the result of the independent sample test analysis. The table is as follows:

Table IV.14
Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Score	Equal variances assumed	2.657	.109	2.732	56	.008	8.44828	3.09180	2.25467	14.64189
	Equal variances not assumed			2.732	51.492	.009	8.44828	3.09180	2.24268	14.65387

Based on the output SPSS above, independent-sample T-Test shows Levene's Test to know the same variance. The hypotheses and testing criteria are below:

Ho: Variance Population identical

Ha: Variance Population not identical

If Probabilities >0.05, Ho is accepted

If Probabilities < 0.05, Ha is accepted

It can be seen that the sig. value of Levene's Test is 0.041. It can be stated that 0.109>0.05. It means Ho is accepted, so the variance of the population is identical. Then, to know whether there is or not the statistically difference, independent sample T-Test shows the t-test for Equality of means. The testing criteria and hypotheses are below:

If Probabilities >0.05, Ho is accepted

If Probabilities < 0.05, Ha is accepted

Ho: There is no statistically significant difference

Ha: There is statistically significant difference

From the output above, it can be seen that the sig. value is 0.008. It can be stated that 0.008<0.05. It means that null hypothesis (H_o) is rejected, while the alternative hypothesis (H_a) is accepted. Then, to identify the level of the effect of using flashcards in teaching English on students' ability in using prepositions at the Junior High School 10 Tapung, it was calculated by using eta squared formula:

$$\eta^2 = \frac{t^2}{t^2+(n_1+n_2-2)}$$

$$\eta^2 = \frac{2.732^2}{2.732^2+(29+29-2)}$$

$$\eta^2 = \frac{7.46}{7.46+56}$$

$$\eta^2 = \frac{7.46}{63.46} = 0.11$$

Based on the result above, it was clear that the effect size was 0.11.

The guidelines for interpreting this value are (Cohen, et.al 2007):

0.01   : small effect

0.06   : moderate effect

0.14   : large effect

It means that the use of flashcards in teaching English has moderate effect on students' ability in using prepositions.

In conclusion, the use of flashcards in teaching English at the Junior High School 10 Tapung has good effect on students' ability in using prepositions. Thus, there is significant effect of using flashcards in teaching English on students' ability in using prepositions at moderate level.

UIN SUSKA RIAU