CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter covers about research findings and discussion that include data of research findings, hypothesis testing, the result of normality and homogeneity testing, and discussion.

A. The Description of Data

In this chapter, the researcher presented the data of mean score in vocabulary between students' taught by LINE Webtoon Application and those taught by using conventional method. The participants of the research consisted of two classes, they were X IPS 1 as Experimental class and X IPS 2 as Control class. The purpose of the research was to know the effectiveness of using LINE Webtoon Application on the first grade students' vocabulary mastery at MAN Kota Blitar. The data were collected from students' score in pre-test and post-test of the two classes. Then, to determine the significance different whether using LINE Webtoon Application was effective or not, the researcher did not use individual scores for comparison. However, it used the results of class scores or mean of the scores in vocabulary. The data were presented as follow:

1. The Data of Experimental Class

The table below showed the students' score of pre-test and post – test of Experimental class that consisted of 35 students' of the first grade at MAN Kota Blitar. The test was multiple choices consisted of 20 items about part of

speech. The students' score of pre-test and post-test can be seen on Table 4.1 as follows:

Table 4.1 The Students' Scores of Experimental Class (Using LINE Webtoon Application)

No.	Student's Name	Pre – Test	Post – Test
1.	AR	55	80
2.	AHC	60	85
3.	AA	90	95
4.	ABI	90	90
5.	APS	50	80
6.	APS	50	85
7.	AFC	85	95
8.	AIPS	45	80
9.	ABA	40	80
10.	BLR	90	90
11.	DG	95	100
12.	FAK	60	85
13.	FAL	70	90
14.	FT	70	85
15.	HSR	75	90
16.	IFN	80	90
17.	IPD	80	90

18.	IA	80	95
19.	JRS	65	70
20.	MAGS	60	80
21.	MRN	55	80
22.	MDMA	90	95
23.	MITP	85	95
24.	MIH	50	90
25.	MN	75	90
26.	OCN	70	85
27.	PEA	60	80
28.	PAW	65	70
29.	RW	85	90
30.	RAF	80	90
31.	SSAG	50	80
32.	SNA	65	80
33.	TM	75	95
34.	VI	70	85
35.	WSN	70	90

As stated above, the table showed the students' individual scores. In this research the researcher did not use individual scores for comparison the result, but used the results of class scores or mean of the scores in vocabulary. To know

the result of class scores in pre-test the researcher used SPSS 16.0 for windows to know the students' vocabulary achievement at Experimental class, especially in their basic vocabulary.

The result can be seen on the Table 4.2 below:

Table 4.2 Descriptive Statistic Pre-test of Experimental Class

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pre-Test Experiment	35	40	95	2435	69.57	14.771
Valid N (listwise)	35					

According to the result of pre-test from the table above, it shown that the sum of data was 2435. The lowest score of pre-test was 40 and the highest score was 95. The mean of data was 69.57. After the researcher gave the treatment by using story from LINE Webtoon Application in teaching vocabulary for two weeks, the researcher administered post-test. The data in the post-test is showed in the Table 4.3 below:

Table 4.3 Descriptive Statistic Post-test of Experimental Class

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Post-TestExperiment	35	70	100	3030	86.57	7.047
Valid N (listwise)	35					

According to the result of post-test from the table above, it shown that the sum of data was 3030. The lowest score of post-test was 70 and the highest score was 100. The mean of data was 86.57.

Based on descriptive statistic pre-test and post-test of Experimental class, it shown that the *Sum* of data pre-test was 2435 and the *Sum* of data post-test was 3030. *Mean* of pre-test score was 69.57 and the *Mean* of post-test score was 86.57. Then, it can be concluded that the gained score between pre-test and post-test was 595 and the gained of mean score was 17.

2. The Data of Controlled Class

The table below showed the students' score of pre-test and post - test of Control class that consisted of 35 students of first grade of MAN Kota Blitar. The test was multiple choices consisted 20 items about part of speech. Students' score of pre-test and post-test can be seen on Table 4.4 as follows:

Table 4.4 The Students' Scores of Controlled Class (Without Using LINE Webtoon Application)

No.	Student's Name	Pre – Test	Post – Test
1.	ADM	40	70
2.	ARS	40	55
3.	AR	90	50
4.	AR	50	45
5.	AZM	35	60

6.	AON	70	75
7.	AKN	65	60
8.	AQNF	60	65
9.	BSW	70	45
10.	BK	40	50
11.	BLB	40	50
12.	DY	45	50
13.	FKR	65	75
14.	HEMR	50	45
15.	IO	35	30
16.	LAN	70	75
17.	MRR	45	55
18.	MYA	35	60
19.	MAK	50	55
20.	MFA	60	60
21.	NPI	85	70
22.	N	65	65
23.	NAS	35	50
24.	RRS	40	45
25.	RLN	45	40
26.	SAR	60	55
27.	SRF	55	70

28.	SGA	45	70
29.	SIZ	35	50
30.	SRH	40	65
31.	URA	55	80
32.	WNF	50	55
33.	WAA	50	60
34.	YLP	70	70
35.	YLB	75	80

As stated above, the table showed the students' individual scores. In this research the researcher did not use individual scores for comparison the result, but it used the results of class scores or mean of the scores in vocabulary. To know the results of class score in pre-test the researcher used SPSS 16.0 for windows to know the students' vocabulary achievement at Control class. The result can be seen on the Table 4.5 below:

Table 4.5 Descriptive Statistic Pre-test of Controlled Class

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pre-TestControl	35	35	85	1820	52.00	13.460
Valid N (listwise)	35					

According to the result of pre-test from the table above, it shown that the sum of data was 1820. The lowest score of pre-test was 35 and the highest score was 85. The mean of data was 52.00. And after the researcher teaching vocabulary using conventional method, the researcher gave the students post-tes scores. The data in the post-test were showed on the Table 4.6 below:

Table 4.6 Descriptive Statistic Post-test of Controlled Class

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Post-TestControl	35	30	80	2055	58.71	12.026
Valid N (listwise)	35					

According to the result of post-test from the table above, it shown that the sum of data was 2055. The lowest score of post-test was 30 and the highest score was 80. The mean of data was 58.71.

Based on descriptive statistic pre-test and post-test of Control class, it shown the *Sum* of data pre – test was 1820 and the *Sum* of data post – test was 2055. *Mean* of pre-test score was 52.00 and the *Mean* of post-test score was 58.71. Then, it can be conclude that the gained score between pre-test and post-test was 235 and the gained of mean score was 6.71.

B. The Result of Normality and Homogeneity Testing

1. The Result of Normality Testing

Normality testing is conducted to determine whether the gained data was normal distribution or not. The researcher used SPSS *16.0 One Sample Kolmogorov-Smirnove test* by the value of significance (α) = 0.05. The result can be seen in table below:

Table 4.7 The Result of Normality Testing

One-Sample Kolmogorov-Smirnov Test

		Pre - Test	Post - Test	Unstandardized Residual
N		35	35	35
Normal Parameters[a]	Mean	69.57	86.57	.0000000
	Std. Deviation	14.771	7.047	4.94121175
Most Extreme Differences	Absolute	.103	.201	.156
	Positive	.084	.139	.097
	Negative	-.103	-.201	-.156
Kolmogorov-Smirnov Z		.608	1.189	.925
Asymp. Sig. (2-tailed)		.854	.118	.359

a. Test distribution is Normal.

a. H_0: Data is in normal distribution

b. H_1: Data is not in normal distribution

The standard significant of education is 0.05 ($\alpha = 5\%$). To determine data was normal distribution or not it can be seen from the result of data normality testing. Based on the output from SPSS above is known that the significance value from pre-test was

0.854 and from the post-test was 0.118. Both value from pre-test and post-test were bigger than 0.05.

The sig/p value on pre-test is 0.854 and it is bigger than 0.05 (0.854>0.05). It means that H_0 is accepted and H_1 rejected, so the data is in normal distribution. Then, for post-test score value of sig/p is 0.980 and that is bigger than 0.05 (0.118>0.05). It also means that H_0 is accepted and H_1 is rejected and the data is in normal distribution. Thus, it can be interpreted that both of data (pre-test and post-test score) are in normal distribution.

2. The Result of Homogeneity Testing

Homogeneity testing is conducted to know whether the gained data has a homogeneous variance or not. To know the homogeneity, the researcher used *Test of Homogeneity of Variances* with SPSS 16.0 by the value of significance (α) = 0.050. The result can be seen below:

Table 4.8 The Result of Homogeneity Testing

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.271	1	68	.604

a. H_0: Data is homogeny

b. H_1: Data is not homogeny

The standard significant of education is 0.05 (α =5%). Based on the output from SPSS above is known that the test called homogeny if the significant score more than 0.05. According to the table above, the test is homogen because 0.604>0.05 and it means that H_0 is accepted and H_1 is rejected. So, it can be conclude that students' of X IPS 1 has homogeny of variances.

C. Hypothesis Testing

The hypothesis testing of this study as follow:

1. H_0 (null hypothesis): There is no significant difference mean score in vocabulary of the students taught by using LINE Webtoon Application and those taught by using conventional method of the first grade at MAN Kota Blitar.
2. H_a (alternative hypothesis): There is significant difference mean score in vocabulary of the students taught by using LINE Webtoon Application and those taught by using conventional method of the first grade at MAN Kota Blitar.

The hypothesis testing of this study followed the rule as follows:

1. If the significant value is less than 0.05, the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) accepted.

2. If the significant value is more than 0.05, the alternative hypothesis (H_a) is rejected and null hypothesis (H_0) is accepted.

To know whether there were any significance different students' vocabulary achievement between the students' taught by using story from LINE Webtoon Application and those taught by using conventional method, the calculating result should show whether H_0 is rejected meanwhile H_a is accepted. To analyzed data the researcher used SPSS 16 *for windows*, the result can be seen on Table 4.7 below:

Table 4.9 Descriptive Statistic of Post-test in Two Groups

Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Experimental Class	35	70	100	3030	86.57	7.047
Control Class	35	30	80	2055	58.71	12.026
Valid N (listwise)	35					

Based on the table above, it showed there were two classes, experimental class and control class. Experimental class showed there were 35 students', Mean of score experimental class was 86.57, Standard Deviation for experimental class was 7.047. Meanwhile, in the control class, showed there were 35 students', Mean of score control class was 58.71, Standard Deviation for control class was 12.026.

In addition, to know the significance different score in Experimental and Control class, while used descriptive statistics the researcher also used independent sample T-test. The purpose was to know the effectiveness of LINE Webtoon

Application in vocabulary mastery. To analyze the result of t-test testing the researcher used SPSS 16.0 *for windows*. The resultcan be seen on Table 4.8 as follow:

Table 4.10 Independent Sample T-test

Independent Samples t-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
Nilai	Equal variances assumed	.271	.604	5.202	68	.000	17.571	3.378	10.831	24.312
	Equal variances not assumed			5.202	67.421	.000	17.571	3.378	10.830	24.313

The table of Independent Sample Test showed that the significant value (sig-2 tailed) was 0.000. According to the hypothesis testing rule, if the significant value is less than 0,05, the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) accepted. Meanwhile if the significant value is more than 0.05, the alternative hypothesis (H_a) is rejected and null hypothesis (H_0) is accepted. The significant value (sig-2 tailed) was 0.000 and it was smaller than 0.05 (0.00<0.05) it means that H_0 was rejected and H_a was accepted.

Thus, it can be interpreted that there was significant difference mean score in vocabulary of the students' taught by using LINE Webtoon Application and those taught by using conventional method. It means that LINE Webtoon Application was effective to teach the students' vocabulary mastery.

D. Discussion

From the research finding above, the data were analyzed with SPSS *16.0 for windows.* The students' who were taught by using LINE Webtoon Application made significant improvement, as seen from the mean score of pre-test was 69.57 and the mean score of post-test was 86.57. The gained of the mean score of experimental class between pre-test and post-test was 17. Meanwhile, the students' who were taught by using conventional method did not make significant improvement, as seen from the mean score of pre-test was 52.00, and the mean score of post-test was 58.71. The gained of the mean score of control class between pre-test and post-test was 6.71. Based on the gained

score between experimental class and control class, there are significance difference. The gained score of experimental class was 17 and the gained score of control class was 6.71. It can be concluded that the gained score of experimental class was higher than control class.

From the explanation above, experimental class has better vocabulary achievement than control class on post-test. Since the research used homogeneous selection to control extraneous variable and the result of homogeneity testing on students' pre-test on previous chapter showed that the students' have homogenous ability on vocabulary mastery. It can be concluded that LINE Webtoon Application was effective and not affected by extraneous variable.

Based on the research at MAN Kota Blitar, it can be inferenced that teaching vocabulary by using LINE Webtoon Application was better than using conventional method. Furthermore, the students' who learned vocabulary mastery through LINE Webtoon Application and who taught without LINE Webtoon having such a significant difference that the students' vocabulary scores who were taught by using story from LINE Webtoon Application was higher than those who were not. It can also be concluded that using LINE Webtoon Application was effective to teaching vocabulary.

The use of picture and text in teaching learning process has good implication such as create a welcoming atmosphere, reduce learning stress level, and connect students to content topics. Moreover, using LINE Webtoon

Application is more practical and enjoy in which the students can use their own smartphone. Furthermore, according to Asnawir and Usman teaching media is classified in three kinds, they are visual aids, audio aids, and audio visual aids. The LINE Webtoon Application is included in visual aids which served there are many kinds genre of story especially English story. By English story, the students can get many new vocabularies from the application. Because, the application is complete with pictures and text, so the students can imagine the pictures while read the story. By using this application, the students would be easy to learn.

Briefly, the vocabulary achievement in the experimental class has proven that LINE Webtoon Application is effective on students' vocabulary mastery. The finding of the present research confirms the findings of the preceding studies. The previous study written by Apriliana (2018), found that LINE Webtoon and KWL Strategy gave significant effect on students' vocabulary mastery especially for students with high reading habit. Another study is conducted by Rahmawati (2016), found that using LINE Webtoon was effective to improve students' English vocabulary. Because of the creative language skill young learners bring into the classroom, teachers have to give them a communicative atmosphere where they could express themselves. Teachers have to support the learners to encourage their vocabulary by technology. When using LINE Webtoon to teach the vocabulary for millennium learners, teachers should train students in reading and mastering the linguistic

part of language. There was improvement in the students' participation in introduction, discussion and practice. Moreover, the students were interest in communicative and active since the use of song as media in teaching vocabulary.

In inference to the findings and previous study above, the use of story especially from LINE Webtoon Application was successful to teach the students' vocabulary mastery. LINE Webtoon provides many opportunities for students to add their vocabulary. The activities also increased the students' motivation and create a relax atmosphere, so the students did not get bored. Therefore, as LINE Webtoon Application is effective, the English teacher is suggested to use it as one of alternative media in facilitating students to teach their vocabulary mastery.