CHAPTER IV

FINDING AND DISCUSSION

In this chapter related with finding and discussion of the research. Finding research showed the result of the data obtained during the research. In discussion of the research analyzed the data in finding of the research.

4.1 Research Finding

This part described and analyzed the data before and after treatment. The data of this research were taken using test into two points, namely pre-test and post-test. Pre-test and post-test were given in the experimental group and the control group. Pre-test was done before giving treatment by using test taking teams technique through mime game. Post-test given after giving the treatment to determine the final results of learning in English learning.

4.1.1 The Calculation of Trying Out Instrument

The researcher collected the data from students' pre-test and post-test scores on Wednesday, July 29th 2020 until Thursday, July 6th 2020. It was given to know improving students' vocabulary at tenth grade of SMA Negeri 1 Mayong in academic year 2020/2021. It was conducted in class of X MIPA 2 and X IPS 2. There were consist 40 items of multiple choice questions about vocabulary. After giving the test, the researcher analyzed the validity and reliability.

4.1.1.1.Validity

The researcher measured vocabulary mastery validity using *IBM SPSS statistics 24.* The items was valid if *r-count > r-table* with significant level 0,05. The result of the validity in instrument can be seen in the table below:

Table 5 Validity of Trying Out Instrument

Criteria	Numbers of Items	Total Items
Valid	3, 4, 6, 7, 8, 10, 13, 14, 17, 18, 19, 22, 23, 24, 27, 30, 33, 35, 36, 39.	20 items
Invalid	1, 2, 5, 9, 11, 12, 15, 16, 20, 21, 25, 26, 28, 29, 31, 32, 34, 37, 38, 40.	20 items

Based on the result of trying out data analysis showed that significant level of validity was 0,05. From 40 items which tried out, it was found not all of the items were valid. It found that there were 20 items valid and 20 items were invalid.The valid items number were 3, 4, 6, 7, 8, 10, 13, 14, 17, 18, 19, 22, 23, 24, 27, 30, 33, 35, 36, and 39. Then, the invalid items number were 1, 2, 5, 9, 11, 12, 15, 16, 20, 21, 25, 26, 28, 29, 31, 32, 34, 37, 38, and 40. So, the resesarcher used 20 items as the instrument in pre-test and post-test. The complete result of try-out test validity can be found in the appendix.

4.1.1.2.Reliability

To find out the reliability of the instrument, the researcher used *Cronbach's Alpha* formula in *IBM SPSS Statistics24*. It was aimed to know that the instrument was reliable or not. The result of Cronbach's Alpha formula in examining the reliability of the instrument can be seen in the table below:

Table 6 Reliability of Instrument

Reliability Statistics	
Cronbach's Alpha	N of Items
,623	40

Based on the table above, it showed that reliability of Cronbach's Alpha in this research was 0,623> 0,60. It could be concluded that the vocabulary test in this research was reliable.

4.1.2. Normality and Homogeneity Testing
4.1.2.1. Normality

Normality test is conducted to determine that is going to be analyzed whether both groups have normal distribution or not. The researcher used *IBM SPSS 24 Statistics* by the value of significance (α) = 0,05.The result of normality data test in pre-test and post-test score as follows:

1. **The Normality of Pre-Test Score**

The result of normality testing in pre-test of experimental and control groups can be seen in the table below:

Table 7 Normality of Pre-Test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Experimental	,157	34	,034	,957	34	,197
Control	,122	34	,200[*]	,967	34	,381

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the table above, it can be seen significance value of experimental group was 0,197 and in control group was 0,381 > 0,05. It showed that both of the data in pre-test were distributed normally.

2. **The Normality of Post-Test Score**

The result of normality testing in post-test of experimental and control group can be seen in the table below:

Table 8 Normality of Post-Test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Experimental	,172	34	,012	,959	34	,232
Control	,195	34	,002	,951	34	,135

a. Lilliefors Significance Correction

Based on the table above, it can be seen significance value of experimental group was 0,232 and in control group was 0,135 > 0,05. It showed that both of the data in post-test were distributed normally.

4.1.2.2. Homogeneity

Homogeneity test is conducted to determine whether experimental group and control group that were decided, population that has relatively same variant or not. The researcher used *IBM SPSS 24 Statistics* by the value of significance (α) = 0,05. The result of normality data test in pre-test and post-test score as follows:

1. **The Homogeneity of Pre-Test Score**

    The analysing of homogeneitytesting in pre-test score of experimental and control groups can be seen in the table below:

Table 9 Homogeneity of Pre-Test

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
,123	1	66	,727

Based on the table above, it can be seen significance value of homogeneity variances was 0,727 and it was bigger than 0,05 (0,727 > 0,05). It can be concluded that the both of the data variances in pre-test were homogenous.

2. **The Homogeneity of Post-Test Score**

    The analysing of homogeneity testing in post-test score of experimental and control groupcan be seen in the table below:

Table 10 Homogeneity of Post-Test

Test of Homogeneity of Variances

NILAI

Levene Statistic	df1	df2	Sig.
1,402	1	66	,241

Based on the table above, it can be seen significance value of homogeneity variances was 0,241 and it was bigger than 0,05 (0,241> 0,05). It can be concluded that the both of the data variances in post-test were homogenous.

4.1.3. The Statistical Analysis Result

4.1.3.1. Scoring the Students' Answer in Pre-Test and Post-Test

The researcher conducted pre-test and post-test in experimental and control group. The pre-test of experimental group was given on Wednesday, July 29th 2020 and in the post-test was given on Wednesday, August 5th 2020. The purpose of pre-test was to know students' vocabulary mastery before the students was given the treatment. After giving pre-test, the students was given post-test to knowstudents' vocabulary mastery after the researcher implemented the treatment by using test taking teams technique through mime game.

The researcher conducted pre-test and post-test in control group. The pre-test was given on Thursday, July 30th 2020 and in the post-test was given on Thursday, August 6th 2020. In the

control group, the students were taught by the researcher with same material but without using test taking teams technique through mime game. The following table below showed students' score of experimental group and control group in pre-test and post-test.

Table 11 The Students' Score of Experimental and Control Group

NO.	NAME	PRE-TEST	POST-TEST	NO.	NAME	PRE-TEST	POST-TEST
1.	AHA	65	80	1.	AAP	60	75
2.	ASS	-	-	2.	AFH	60	90
3.	AMAI	70	75	3.	ARWF	65	70
4.	ANS	60	80	4.	AR	70	75
5.	AZ	80	95	5.	ANJ	65	75
6.	CSA	50	70	6.	AS	60	50
7.	CAJ	75	75	7.	ASW	55	85
8.	DN	70	80	8.	AS	55	75
9.	DBJ	50	95	9.	AAR	70	75
10.	DBJ	75	85	10.	DAS	80	85
11.	EYCP	60	90	11.	DMS	70	65
12.	FRR	65	80	12.	DR	70	80
13.	HS	65	75	13.	DPA	55	60
14.	IAL	60	90	14.	FA	50	70
15.	KAS	70	85	15.	FAS	70	60

16.	KA	45	75	16.	FSZ	60	75
17.	MSAA	70	95	17.	GRK	75	65
18.	MRA	65	90	18.	IRA	-	-
19.	MSS	75	80	19.	IJ	50	75
20.	MFF	65	90	20.	KS	70	65
21.	MRA	60	85	21.	KR	75	80
22.	MDTR	70	75	22.	MSU	80	75
23.	MNS	80	80	23.	MNA	60	65
24.	RM	75	85	24.	MA	40	70
25.	RMS	70	90	25.	MIR	85	75
26.	RBR	75	80	26.	MIM	65	60
27.	RAA	55	65	27.	MRSP	80	65
28.	SIP	65	90	28.	MAY	70	60
29.	SAP	70	85	29.	NRM	60	50
30.	SS	60	80	30.	NAF	65	65
31.	SA	85	100	31.	NK	65	60
32.	SA	75	80	32.	NTR	-	-
33.	TSNA	70	85	33.	PABM	70	85
34.	TC	75	95	34.	RF	60	75
35.	VM	60	80	35.	RANR	80	80
36.	WAA	-	-	36.	SDJ	65	75
SUM		2.280	2.840	SUM		2.230	2.410
MEAN		67,06	83,53	MEAN		65,59	70,88

4.1.3.2. The Classification of students' Pre-Test Score

The pre-test score was analyzed through statistical computation in *IBM SPSS Statistics 24.* The result of pre-test was described as follows:

Table 12 Pre-Test Result

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Experimental	34	45	85	67,06	9,055
Control	34	40	85	65,59	9,906
Valid N (listwise)	34				

Based on the table above, it was shown differences between both of groups that can be seen from students score. In the experimental group of lowest score was 45, while in highest score was 85. It meant the researcher found that the mean score of pre-test was 67,06 and the standard deviation was 9,055. In control group of lowest score was 40 and the highest score was 85. From the calculation was found that the mean score of pre-test in control group was 65,59 and the standard deviation was 9,906.

To see detail explanation about pre-test in experimental and control group, the researcher used the T-test to examine whether there was significant difference between experimental group and control group. The researcher used *Independent Samples Test* to know the significant score between pre-test and post-test. The

result of *Independent Samples Test*in experimental and control group, it can be seen in the table below:

Table 13 The Result of T-Test in Pre-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
Hasil Belajar	Equal variances assumed	,123	,727	,639	66	,525	1,471	2,302	-3,125	6,066
	Equal variances not assumed			,639	65,475	,525	1,471	2,302	-3,126	6,067

The header "Independent Samples Test" spans the table.

From the table above, the level of significance (p) 0,05 and degree of freedom (df) = N–1 = 36–2 = 34. It was showed that Sig. (2-tailed) was bigger than the level of significance 0,05 (0,525 > 0,05). The conclusion that there was no significant difference in students' score pre-testbefore giving the treatment in experimental group which taughtusing test taking teams technique through mime game and without using test taking teams technique through mime game in control group. In other words, the result of of pre-test the students' score was weak. It concluded

that H_0 was accepted and H_a was rejected. So, the hypothesis of the research was rejected.

4.1.3.3. The Classification of students' Post-Test Score

The post-test score was analyzed through statistical computation in *IBM SPSS Statistics 24.* The result of post-test was described as follows:

Table 14 Post-Test Result

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Experimental	34	65	100	83,53	7,932
Control	34	50	90	70,88	9,651
Valid N (listwise)	34				

Based on the table above, it was shown differences between both of groups that can be seen from students score. In the experimental group of lowest score was 65, while in highest score was 100. It meant the researcher found that the mean score of post-test was 83,53 and the standard deviation was 7,932. In control group of lowest score was 50 and the highest score was 90. From the calculation was found that the mean score of post-test in control group was 70,88 and the standard deviation was 9,651.

To see detail explanation about post-test in experimental and control group, the researcher used the T-test to examine whether there was significant difference between experimental

group and control group. The researcher used *Independent Samples Test* to know the significant score between pre-test and post-test. The result of *Independent Samples Test* in experimental and control group, it can be seen in the table below:

Table 15 Table 4.11 The Result of T-Test in Post-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
Hasil Post Test	Equal variances assumed	1,402	,241	5,903	66	,000	12,647	2,142	8,370	16,925
	Equal variances not assumed			5,903	63,616	,000	12,647	2,142	8,367	16,928

From the table above, the level of significance (p) 0,05 and degree of freedom (df) = N–1 = 36–2 = 34. It was showed that Sig. (2-tailed) was lower than the level of significance 0,05 (0,000 < 0,05). The conclusion that there wasa significant difference in students' score post-testafter giving the treatment in experimental group which taughtusing test taking teams technique through mime game and without using test taking teams technique through mime game in control group. In other words, the result of

post-test the students' score was increasing to moderate level. It concluded that H_0 was rejected and H_a was accepted. So, the hypothesis of the research was accepted.

4.2 Discussion

The result of the research showed statistically significant difference before and after the researcher implemented the treatment by using test taking teams technique through mime game and without using test taking teams technique through mime game. It showed that the use of test taking teams through mime game to improve students' vocabulary mastery was effective in learning English. Amaal & Majeda (2014: 115) said that games add diversion to the regular classroom activities, "break the ice", but they are also used to introduce new. It meant playing the game is the effective method for students. The students who were taught by using test taking teams technique through mime game, they could learn more interesting and enjoyable.

Barkley (2016: 200) defined Test-Taking Teams technique is active, not passive, requiring students give and take when they help one another in efforts gain knowledge or understanding. From that technique Test-Taking Teams helped assess and improved understanding they were to matter while they teach one another. As stated by Lambdin in Firdausi (2015), that mime game uses the creative instrument everyone has our body. It is a great way to check students' understanding of new language, they are inherently fun and silly that concluded using mime game is effective to teach English. The students could share words with their

friends that related with the topic. So, most of the students were more active in learning process. The result of statistical analysis in experimental and control group, it can be seen in the table below:

Table 16 The Result of Statistical Analysis in Pre-Test and Post-Test

Group	Pre-Test		Post-Test	
	Mean	Std. Deviation	Mean	Std. Deviation
Experimental	67,06	9,055	83,53	7,932
Control	65,59	9,906	70,88	9,651
T-test Sig. (2-tailed)				
Pre-Test		Post-Test		
0,525 > 0,05 H_0 was accepted H_a was rejected		0,000 < 0,05 H_0 was rejected H_a was accepted		

Based on the result of statistical analysis, the students' score of experimental group were higher than control group. It found the explanation that the mean score of pre-test in experimental group was 67,06 and in control group was 65,59. The mean score of post-test in experimental group was 83,53 and in control group was 70,88. The standard deviation of pre-test in experimental group was 9,055 and in control group was 9,906. Thenthe standard deviation in post-test of experimental group was 7,932 and in control group was 9,651.

From the T-test explanation that the result of pre-test the students' score was weak. It was showed that Sig. (2-tailed) was bigger than the level of significance 0,05 (0,525 > 0,05).The conclusion that there was no significant difference in students' score pre-test before giving the treatment. It concluded that H_0 was accepted and H_a was rejected. So, the hypothesis of the research was rejected. In the result of post-test was showed that Sig. (2-tailed) was lower than the level of significance 0,05 (0,000 < 0,05). The conclusion that there was a significant difference in students' score post-test after giving the treatment, the result of post-test the students' score was increasing to moderate level. It concluded that H_0 was rejected and H_a was accepted. So, the hypothesis of the research was accepted.

It could be concluded that the use of test taking teams technique through mime game to improve students' vocabulary mastery at tenth grade students of SMA Negeri 1 Mayong was effective and also could encourage students' motivation in learning English vocabulary especially in descriptive text. Perveen, Muhammad, and Sidra (2016) stated that games result in fun and motivation for students making them learn new items effortlessly. It can be seen that there was significant difference of post-test after giving the treatment in experimental group which taught using test taking teams technique through mime game and without using test taking teams technique through mime game in control group. According to Fadillah (2015), the use of mime game was significantly improve the students' vocabulary. It could be seen after giving the

treatment the researcher knew that there was improvement of students'
vocabulary mastery based on the students' score in English vocabulary
were increasing.