

## CHAPTER IV

### RESEARCH FINDING AND DISCUSSION

This chapter presents the results of the research to answer the problem and to test the hypothesis proposed in Chapter I. This part initiated by presenting the process of teaching vocabulary using Hello English application, finding and discussion of the teaching vocabulary using Hello English application at the tenth grade students o SMAN 1 Durenan.

#### A. Description of Data

This part presents the obtained data taken from two tests of both experimental class and control class. Because we already had result of students before using this application so the researcher direct use post test after finishing treatment.

##### 1. Data results of Experimental class

In the experimental class, the mean of post-test were resulted 85.66 with the highest score was 92 and the lowest score was 79. The result can be seen in table 4.1 below.

**Table 4.1 Student's scores of Experimental Class**

No.	Name	Post Test
1	AS	79
2	ASWNR	85
3	ANR	88
4	AAN	88

5	CNF	85
6	DAA	92
7	DMN	88
8	DFBS	88
9	EYS	80
10	EAF	85
11	FRA	88
12	GCK	88
13	GAD	79
14	HGA	85
15	HZZ	85
16	HIF	89
17	HAP	88
18	HNA	83
19	JAW	81
20	MZR	89
21	NYN	88
22	NAY	85
23	NS	85
24	OQA	83
25	PNK	85
26	RHS	83
27	RP	88
28	SMJS	-
29	SO	79
30	SO	80

31	SASW	88
32	SFZ	88
33	TIF	88
34	WPR	92
35	WKNK	85
36	WEY	88
	$\Sigma$	2998
	<b>Mean</b>	85.66
	<b>Maximum score</b>	92
	<b>Minimum score</b>	79

**Table 4.2 Descriptive Statistic of Post-test**

**Statistics**

posttest Eksperimen

N	Valid	35
	Missing	1
Mean		85.66
Median		85.00
Mode		88
Std. Deviation		3.506
Sum		2998

As the result of the Table 4.2 above shows that there were 35 students as subjects or participants. The mean of students' score in

post-test was 85.66; the median was 85.00; and the mode was 88.

The standard deviation was 3.506 and the sum was 2998.

The frequency distribution of student's score was presented on the following table below:

**Table 4.3 Frequency of Post-test**

**posttest Eksperimen**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	79	3	8.3	8.6	8.6
	80	2	5.6	5.7	14.3
	81	1	2.8	2.9	17.1
	83	3	8.3	8.6	25.7
	85	9	25.0	25.7	51.4
	88	13	36.1	37.1	88.6
	89	2	5.6	5.7	94.3
	92	2	5.6	5.7	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Based on the data of the table 4.3, it showed that 3 students get score 79, 2 students get score 80, 1 student get score 81, 3 students get score 83, 9 students get score 85, 13 students get score 88, 2 students get score 89 and 2 students get score 92.

## 2. Data results of Control class

The mean score in the control class resulted from post-test was 78.17 with the higher score was 88 and the lowest score was 71. The student's score of the control class can be seen on the following table:

**Table 4.4 Student's score of Control Class**

No.	Name	Post Test
1	AR	80
2	ADP	80
3	AAW	79
4	CSM	72
5	DNBP	80
6	DAU	74
7	EYAP	79
8	EZN	75
9	FES	75
10	FDM	76
11	FNNA	76
12	FYP	80
13	HM	79
14	IDS	81
15	LSDS	80
16	MW	79
17	MEP	76
18	MS	72

19	MGAR	81
20	MFA	80
21	MWA	72
22	NGGP	79
23	NNKD	75
24	NMS	74
25	NDA	80
26	PYMF	71
27	PA	78
28	QHZ	72
29	RNA	88
30	RDN	80
31	SRS	81
32	SPA	84
33	TS	88
34	TO	79
35	UMD	80
36	YCF	79
	$\Sigma$	2814
	<b>Mean</b>	78.17
	<b>Maximum score</b>	88
	<b>Minimum score</b>	71

**Table 4.5 Descriptive Statistic of Post-test****Statistics**

posttest control

N	Valid	36
	Missing	0
Mean		78.17
Median		79.00
Mode		80
Std. Deviation		4.032
Sum		2814

As shown on the Table 4.9 above shows that there were 36 students as subjects or participants. The mean of students score in post-test was 78.17; the median 79.00; and the mode was 80. The standard deviation was 4.032 and the sum was 2814.

The frequency distribution of student's score was presented on the following table:

**Table 4.6 Frequency of Post-test****Post-test control**

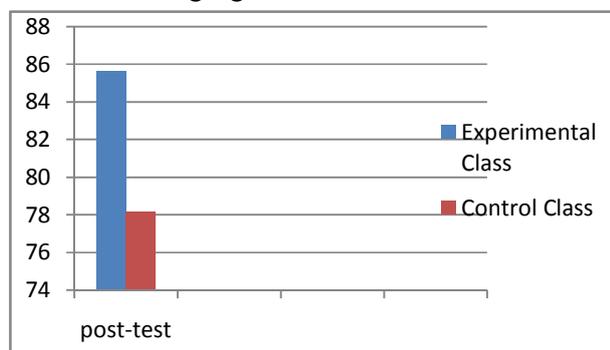
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 71	1	2.8	2.8	2.8
72	4	11.1	11.1	13.9
74	2	5.6	5.6	19.4
75	3	8.3	8.3	27.8

76	3	8.3	8.3	36.1
78	1	2.8	2.8	38.9
79	7	19.4	19.4	58.3
80	9	25.0	25.0	83.3
81	3	8.3	8.3	91.7
84	1	2.8	2.8	94.4
88	2	5.6	5.6	100.0
Total	36	100.0	100.0	

Based on the data of table 4.6 above, it showed that 1 student get score 71, 4 students get score 72, 2 students get score 74, 3 students get score 75, 3 students get score 76, 1 student get score 78, 7 students get score 79, 9 students get score 80, 3 students get score 81, 1 student get score 84 and 2 student get score 88.

### 3. Overview of the Data Results

As the result had been described in descriptive statistics, it was the compared to get the overview of the score between the classes after receiving treatment and seeing the progress achieved in each class. It can be seen with the following figures.



**Figure 4.1 Overview of Both Classes Scores Comparison**

Figure 4.1 above shows the chart of post-test mean score. In the post-test of experimental class and the control class shows very prominent differences. In the experimental class the value was higher than in the control class, and the differences are very far.

## B. Data Analysis

In the data analysis part, the collected scores of post test from two classes are analyzed statistically by using T-test. The result of T-test is called the inferential statistic. However, prior to calculating the result by T-test, the researcher had to determine whether the data collected are distributed normally or not and to determine if the research samples variances are homogeneous. All forms of data analyzing and calculation were done by using SPSS 16.0 for windows.

### 1. Normality Testing

Normality distribution test intended to show that the sample data come from a normally distributed population. To know the normality, the researcher used SPSS 16.0 using the *Kolmogorov-Smirnov* as parametric test by the value of significance ( $\alpha$ ) = 0.05. The result of normality testing can be seen in the table below:

**Table 4.7 Normality Test of Experimental Class and Control Class**

		Tests of Normality		
		Kolmogorov-Smirnov <sup>a</sup>		
Kelas		Statistic	Df	Sig.
Hasil	experimental class	.130	35	.143

control class	.094	36	.200*
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a. Lilliefors Significance Correction

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

Based on the table above it was known that the significant value from experimental class was 0.143 and in control class was 0.200. The value of sig/p in experimental class was 0.143 and that was bigger than 0.05 ( $0.143 > 0.05$ ) means that the data was in normal distribution. Then, in control class the value of sig/p was 0.200 and that was bigger than 0.05 ( $0.200 > 0.05$ ) means that the data was in normal distribution. It also means that  $H_0$  was accepted and  $H_a$  was rejected. So, it can be interpreted that both of class were in normal distribution.

## 2. Homogeneity Testing

To calculate the homogeneity test, the researcher refers to *Levene statistic* test. The homogeneity test result in post-test of both classes showed 0.599 as the significance of the data, which higher than 0.05 ( $0.599 > 0.05$ ). Therefore, based on the post-test results, both of the classes had homogeneous variance. The result was shown in table 4.8 below.

**Table 4.8 Homogeneity Test Results**  
**Test of Homogeneity of Variances**

Post Test

Levene Statistic	df1	df2	Sig.
.278	1	69	.599

Based on the table above, it was known that the significance value was 0.599, it means that the significant value was more than 0.05 ( $0.599 > 0.05$ ). It means that  $H_0$  was accepted and  $H_a$  was rejected. So, it can be interpreted that the homogeneity testing of variance in both class in this research showed that the data had homogeneous variance.

### 3. Statistical Hypothesis Testing

As the collected data have been proved its normality and homogeneity, the data was further analyzed to examine the research hypothesis by using T-test. After examining the hypothesis, the result of the T-test gave answer to the research question whether Hello English application was effective in this research.

In performing the T-test calculation, the score of the post test of experimental class and control class were being compared. The result is presented in the following table.

In table 4.9 it shows the result of T-test analysis of post test score in experimental class and control class after the experimental class was given treatment with Hello English application and the control group with lecturing and using conventional method. *The equal variance assumed* is used to read the result and refer to a significance level of  $\text{sig } a = 0.05$  (5%).

**Table 4.9 the result of Analyzing Independent sample T-test****Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
nilai ujian	Equal variances assumed	.962	.330	5.885	69	.000	5.094	.866	3.367	6.820
	Equal variances not assumed			5.908	65.001	.000	5.094	.862	3.372	6.816

Based on the table 4.9, the results of the independent test p-value or sig (2 tailed) = 0.000 (0%). From this results, it can be concluded that the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted because the p-value (0.000) is less than sig  $\alpha = 0.05$  (5%). This also means that there is statistical significance in the experimental class. So, Hello English application was effective to teach student's vocabulary.

### C. Discussion

From the research findings, it can be seen from the Hello English application was effectively used in learning vocabulary, because there was a significant difference result between vocabulary examination using the Hello English application and by using Conventional learning methods. The findings of this study were also carried out by previous studies conducted by Sandy Juanita (2019) and Nina Puspitaloka (2017) who were looking for applications to use Hello English as one of the learning methods that serve to improve students' vocabulary skills.

Based on data analysis, the researcher knows the result of the independent p-value sample test was less than sig  $\alpha$  ( $0,000 < 0.05$ ). This means that the alternative hypothesis ( $H_a$ ) is accepted and the null hypothesis ( $H_0$ ) is rejected.

Thus, the average of using the Hello English application had a significant effect on students' vocabulary abilities and also effective at improving vocabulary abilities of students. Using the Hello English application in vocabulary teaching was one alternative media to make students more excited, interested and make students active in the teaching and learning process, because in this activity students can communicate vocabulary with others as well as fun vocabulary games. As stated by Nusir (2013: 311) the ability of students to use media in education other than for entertainment or social activities, this might be positive Impact on education, this statement represents the use of applications in smart phone

as a medium in the learning process. So, students don't just use their smart phone in social activities but also in the learning process.

Based on the treatment that has been given in the experimental class or in the control class there are many differences. In the experimental class using media as a support in teaching vocabulary was very helpful for students in learning English especially in vocabulary. Because, students become more enthusiastic in memorize a variety of new vocabularies. The use of android based educational game gave influence towards the student's vocabulary mastery and interest in learning English (Megawati & Sultana, 2016:666). In the control class fewer students were enthusiastic because they only used the lecture method. So the treatment done in the experimental class can be said to be successful in teaching vocabulary.

Based on test results from teaching vocabulary using the Hello English application, it makes easy for students to remember and understand vocabularies. According to McCarthy (1984) who emphasizes that the purpose of vocabulary learning should include not only remembering words but also the ability to use them automatically in a wide range of language context when the need arises. Because before students begin to apply their vocabulary to write a text, students can find new vocabularies and can share or discuss with friends through the application. From the results of statistical calculations using the independent sample T-test, it shows that the score before teaching using the Hello English application was less than after being taught using the

Hello English application. The average score in the experimental class before the post test was 83.60 and for the control class 83.36 only shows a slight difference of 0.24 points. While the average score in the experimental class after the post-test was 85.66 and for the control class 78.17 it was only 7.49. From the results of the post test show a little more difference between the two averages, the results show that the post-test experimental class is better than the post-test in the control class. From the results above, it can be concluded that students get good achievements in learning vocabulary using the Hello English application.

There are any advantages and disadvantages of using the Hello English application in teaching vocabulary. It can be seen after uses of Hello English application, the advantages of this application was interesting for students, and easy to understand about the material. According to Alley (2014) the advantages from this application is “this application is completely free and we can download in our android, which is more than 250 lessons which help us to learn English with fun, There are some games for reading, writing and listening as well speaking which give us easy way for learn, We can chat with teachers or other friends for clear our doubt and get solutions of our problems in this application, This application have inbuilt dictionary for English word which help us to learn more words and spellings, There news available in English and we can learn English using this news with new words and vocabulary, This is level based application and we can learn with clear levels, it help us to

give more confidence for learn English.” In addition the advantages of the Hello English Application as an English Learning Media for Teaching Vocabulary based on test results shows that this application is can be used without using an internet connection, also easy to use in searching for vocabulary and quite helpful.

While the disadvantages of uses Hello English application is sometimes there are certain parts that cannot be heard from native speakers in the application. According to Alley (2014) “We need to purchase coins for unlock some courses available in it, we need to purchase premium to unlock some course that locked.” In addition the disadvantages of the Hello English application as a media for learning English to teach vocabulary based on the results of the test show that when you want to join a friend to play about English vocabulary you have to use an internet connection, you have to use coins to open the lessons you want to learn. Sometimes too much pronunciation is unclear so when answering questions it makes it difficult. Although there are some disadvantages in this application still makes students enthusiastic to learn to use this application.

From the explanation above, it can be concluded that in this study the use of the Hello English application was effective for teaching vocabulary to students at SMAN 1 Durenan.