

CHAPTER IV

FINDING AND DISCUSSION

This chapter focused on presenting the result of data analysis. The main topics will be discussed in this part covering into description data, testing hypothesis and discussion.

A. Description of Data

The researcher presented the data of the researcher was the students' vocabulary achievement of the control and the experiment group before taught by using Voice of American News (VOA) and after taught by using Voice of America News (VOA). The researcher used Quasi research design by using experiment class and control class with pre-test and post-test. There were 12 class of tenth grade of MAN Trenggalek. The research had two classes which used for doing research. Those were IIK 2 as experiment class and IIS 2 as control class. The experiment class was consisted of 35 students and the control class was consisted of 36 students.

For collecting data the researcher used test as the instrument. The test was consisted of 20 questions. The questions were consisted of two types. Those were questions of the matching the definition of the word and 15 questions of multiple-choice. The questions consisted of vocabulary on report text of tenth grade material. The research used pre-test and post-test which applied to two group samples.

The researcher conducted four meetings. First meeting was administering pre-test on the experiment and control class. The second and the third were giving the treatment by using Voice of America News (VOA) to teach vocabulary on the experiment class. The last meeting the researcher conducted post test on the experiment and control class. From conducting pre test and post-test, the researcher got score from the students. The students' Achievement both pre and post test from experiment and control class were presented in the follows:

1. The students Achievement taught by Voice of America (VOA) News in the teaching vocabulary

The researcher got two data of student's achievement from the experimental class the data were:

a. Pre-test of experiment class

Experiment class is the class which taught by using Voice of America (VOA) News in the teaching vocabulary. Before taught vocabulary the researcher gave the students in the experiment class pre-test to know the students vocabulary achievement. The subject of pre-test in the experiment class consisted of 35 students. The highest score was 90 and the lowest was 30. By using SPSS program 23 version, it was known that the mean is 52.00 and the standard deviation was 15.681. The data were presented below:

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
students' pre test score of experiment class	35	30	90	52.00	15.681
Valid N (listwise)	35				

The 4.1 Descriptive Statistic of Pre Test in experiment class

From table 4.1 showed the highest score were 90 and the lowest was 30 from 35 students. The data valid N (listwise) was 35. By using SPSS program 23 version, it was known that the mean is 52.00 and the standard deviation was 15.681.

students' pre test score of experiment class

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 30	1	2.9	2.9	2.9
35	4	11.4	11.4	14.3
40	5	14.3	14.3	28.6
45	8	22.9	22.9	51.4
50	5	14.3	14.3	65.7
55	4	11.4	11.4	77.1
65	1	2.9	2.9	80.0
75	3	8.6	8.6	88.6
80	3	8.6	8.6	97.1
90	1	2.9	2.9	100.0
Total	35	100.0	100.0	

Table 4.2 Frequency of Pre Test in Experiment Class

According to table 4.2, the table showed that the frequency, percent, valid percent, and cumulative percent of the students' pre test score of experiment class. Table 4.2 showed that the modus of the students' pre test score of experiment class was 45 which got by 8 students, the percent was 22.9, the valid percent was

22.9 and the cumulative percent was 51.4. There were a student have got score 30, 65, and 90. 35 and

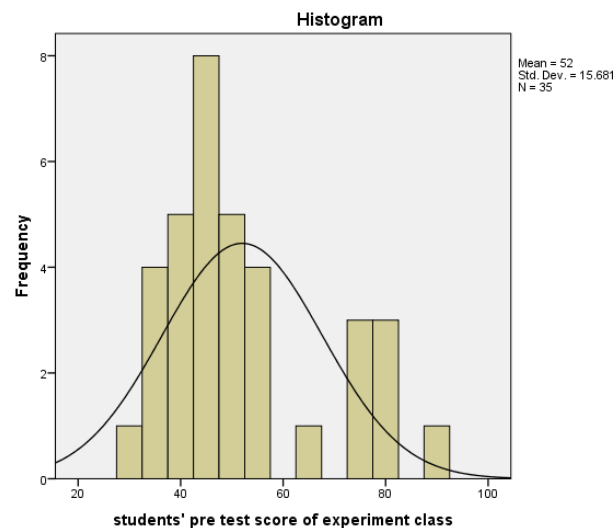


Table 4.3 Histogram Students' Pre Test of Experiment Class

Table 4.3 showed that the higher frequency of student's pre test of experiment class was 45 with 8 students. The lower frequency of students' pre test of experiment class was 30, 55, and 90, which gotten by one student every score. The mean of the students' pre test score of experiment class was 52, and the std. Deviation was 15.681. The subject was 35 students.

b. Post-test of experiment class

Administering a post test in teaching vocabulary for experiment class was done to know the students vocabulary score after taught by using Voice of America (VOA) News. The data will be showed bellow:

	N	Minimum	Maximum	Mean	Std. Deviation
students' post test score of experiment class	35	50	95	75.57	11.554
Valid N (listwise)	35				

Table 4.4 Descriptive Statistic of Post Test

According to the table 4.4, the table showed that the subject of post test in experiment class consisted of 35 students. The highest was 95 and the lowest was 50. The highest score was gotten four students and the lowest score was gotten a student. The mean of the post test was 75.57 and the standard deviation was 11.554.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 50	1	2.9	2.9	2.9
55	2	5.7	5.7	8.6
60	1	2.9	2.9	11.4
65	5	14.3	14.3	25.7
70	3	8.6	8.6	34.3
75	7	20.0	20.0	54.3
80	8	22.9	22.9	77.1
85	3	8.6	8.6	85.7
90	1	2.9	2.9	88.6
95	4	11.4	11.4	100.0
Total	35	100.0	100.0	

Table 4.5 Frequency of Post Test

Table 4.5 showed that the frequency every score which students got in the post test of experiment class was the student which got 50, 60, 90 was only a students. The score which higher frequency was 80 which gotten by 8 students.

The percent of the higher score was 22.9, valid percent was 22.9 and the cumulative percent was 77.1.

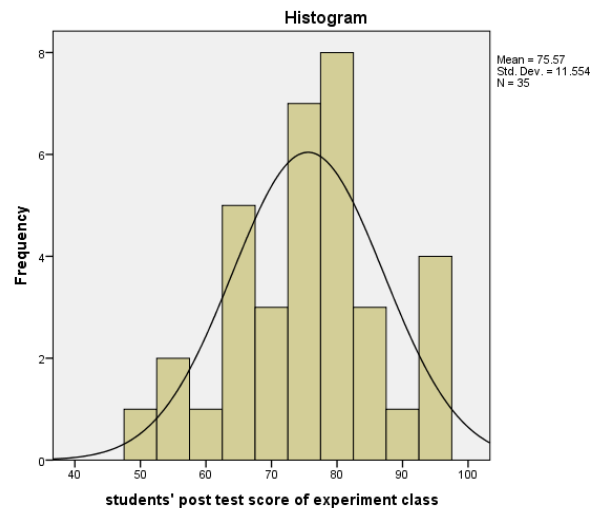


Table 4.6 Histogram Students' Post Test of Experiment Class

Table 4.6 showed that the higher frequency of student's post test of experiment class was 80 with 8 students. The lower frequency of students' post test of experiment class was 50, 60, and 90, which gotten by one student every score. The mean of the students' post test score of experiment class was 75.57, and the std. Deviation was 11.554. The subject was 35 students.

2. The students Achievement which was not taught by using Voice of America (VOA) News

The researcher got two data of student's achievement from the control class the data were:

a. Pre-test of control class

Control class is a class which taught without using Voice of America (VOA) News, the researcher gave pre test to know the students score. The subject was consisted of 36 students.

	N	Minimum	Maximum	Mean	Std. Deviation
score pre test control class	36	35	80	55.14	10.855
Valid N (listwise)	36				

Table 4.7 Descriptive Statistic of Pre-test Control class

The table 4.7 showed that the subject was consisted of 36 students. The maximum score was 80 which are gotten by a student and the minimum score was 35 which gotten by three students. From the data, the researcher got the mean of the student's pre test score that was 55.14 and the standard deviation was 10.855.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 35	3	8.3	8.3	8.3
45	8	22.2	22.2	30.6
50	2	5.6	5.6	36.1
55	7	19.4	19.4	55.6
60	8	22.2	22.2	77.8
65	4	11.1	11.1	88.9
70	2	5.6	5.6	94.4
75	1	2.8	2.8	97.2
80	1	2.8	2.8	100.0
Total	36	100.0	100.0	

Table 4.8 Frequency of Pre test Control Class

Table 4.8 showed that the lower frequency every score which students got in the pre test of control class was the student which got 75 and 80 was only a students. The score which higher frequency was 55 which gotten by 7 students. The percent of the higher score was 19.4, valid percent was 19.4 and the cumulative percent was 55.6.

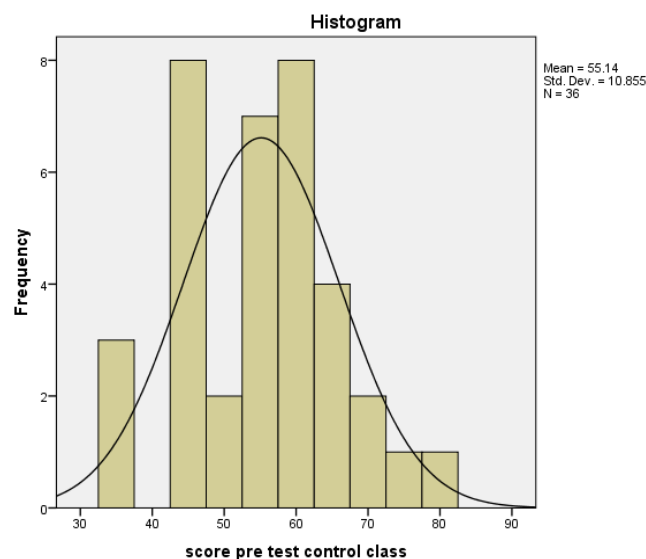


Table 4.9 Histogram of Pre-test of Control Class

Table 4.9 showed that the higher frequency of student's pre test of control class was 55 with 7 students. The lower frequency of students' pre test of control class was 75 and 80, which gotten by one student every score. The mean of the students' pre test score of control class was 55.14, and the std. Deviation was 10.855. The subject was 36 students.

b. Post-test of control class

Administering a post test in teaching vocabulary for control class was to know the improvement of the student's vocabulary achievement without taught by using Voice of America (VOA) News as media teaching.

	N	Minimum	Maximum	Mean	Std. Deviation
students post test score of control class	36	45	85	64.44	10.336
Valid N (listwise)	36				

Table 4.10 Descriptive Statistic of Post Test

According to table 4.10 showed that the students which done post test of control class was 36 students. The highest score was 85 and the lowest was 45. The highest score were gotten by a student and the lowest were gotten by two students. From the data, the researcher got the students mean of students post test score in control class that was 64.44 and the standard deviation was 10.336.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 45	2	5.6	5.6	5.6
50	4	11.1	11.1	16.7
55	3	8.3	8.3	25.0
60	5	13.9	13.9	38.9
65	8	22.2	22.2	61.1
70	6	16.7	16.7	77.8
75	4	11.1	11.1	88.9
80	3	8.3	8.3	97.2
85	1	2.8	2.8	100.0
Total	36	100.0	100.0	

Table 4.11 Frequency of Students Score in Control

Table 4.11 showed that the lower frequency every score which students got in the post test of control class was the student which got 85 was only a students. The score which higher frequency was 65 which gotten by 8 students. The percent of the higher score was 22.2, valid percent was 22.2 and the cumulative percent was 61.1.

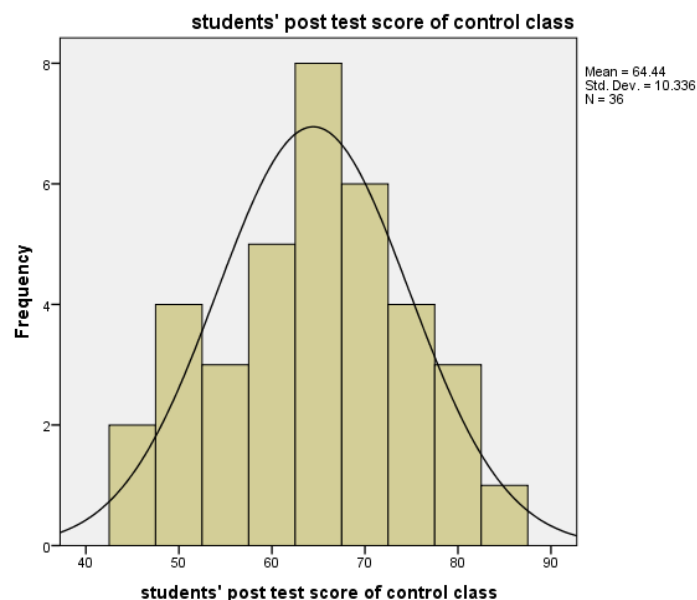


Table 4.12 Histogram of Post-test of Control Class

Table 4.12 showed that the higher frequency of student's post test of control class was 65 with 8 students. The lower frequency of students' post test of control class was 85, which gotten by a student every score. The mean of the students' pre test score of control class was 64.44, and the std. Deviation was 10.336. The subject was 36 students.

3. The Difference of statistical data post test experiment and post test control class

The researcher compared students' post test score of both classes that consisted of the highest, the lowest and the mean score in teaching vocabulary. After that the researcher found out the score each class from the students post test score as like in the table below:

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
students' post test score of experiment class	35	50	95	75.57	11.554
students' post test score of control class	36	45	85	64.44	10.336
Valid N (listwise)	35				

Table 4.12 Descriptive statistic of post test of experiment and control class

Based on the table above, it can be seen the difference of students post test score of experiment and control class. In the experiment class, it can be seen that the mean was 75.57 and the mean of control class was 64.44. It meant that the mean score of the class which taught by using Voice of America (VOA) News (experiment class) was higher than the mean score of the class which taught without using Voice of America (VOA) News. The subject of the experiment class was 35 students and the subject of control class was 36 students. Based that the researcher also got the standard deviation of experiment class and control class, the standard deviation of experiment class was 11.554 and in the control class was 10.336.

B. The result of Normality and Homogeneity testing

1. Normality testing

Normality test is one of requisite in the analyze data, it means that before conducting the real analysis, the researcher should test the data of the research to know the normality of the distribution. The Good data was data in normal distribution. According to Priyanto (2012) “It is important to get the normality data because the data can be considered to represent to population when it is normal distribution”. From the data try out, the researcher got the data. The researcher used the data for testing the normality of the research instrument. In this research, the researcher used SPSS 23 to test the normality of data with One-Sample Kolmogorov-Smirnov Test on the SPSS 23. The normality was done toward pre-test and post-test score. The data is presented in the table below:

	Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	Df	Sig.
students post test score	experiment class	.137	35	.092	.958	35	.204
	control class	.133	36	.111	.966	36	.321

a. Lilliefors Significance Correction

Table 4.13 The Normality of testing

The hypothesis for testing normality was:

H₀: The score are normal distribution

H₁: The score are not normal distribution.

From the data above, the researcher got the significant differences of the test normality of the data. The significant difference on the kolmogorov-smimov of experiment class was 0.092 and the significant difference of control class was 0.111, and the significant differences of Shapiro-Wilk of experimental class were 0.204 and the control class was 0.321.

1. When the significant differences (P -value) < 0.05 , it mean that the null hypothesis is rejected and the alternative hypothesis is not rejected.
2. When the significant differences (p -value) > 0.05 , it mean that the null hypothesis is not rejected and the alternative hypothesis is rejected.

From the data on table 4.13 normality of testing, the researcher got the significant differences of kolmogorov-smimov and Shapiro-Wilk testing was more than 0.05. The researcher made interpreted that the null hypothesis cannot be rejected and the alternative hypothesis is rejected. It meant that the data are normally distributed.

2. Homogeneity testing

Homogeneity testing is used to show that two or more group of data sample come from population which having in the same variance. To test variance of the homogeneity, the researcher used SPSS 23. The data was presented in e table below:

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
students post test score	Based on Mean	.209	1	69	.649
	Based on Median	.244	1	69	.623
	Based on Median and with adjusted df	.244	1	67.750	.623
	Based on trimmed mean	.229	1	69	.634

Table 4.14 Homogeneity testing

The hypotheses of Homogeneity testing were presented below:

H_0 : The score are homogeneous

H_1 : The score are not homogeneous

Based on the table 4.14, the researcher got some result from analysis students' post test score. The results are the Levene statistic and the significant of students' post test score. There are some the significant of students' post test score. Those are based on Mean was 0.649, based on the median was 0.623, based on the Median and with adjusted df was 0.623, and based on trimmed mean was 0.634. The score of Levene Statistic of homogeneity testing, there were some scores, those were the Levene statistic based on Mean was 0.209, based on the Median was 0.244, based on the Median with adjusted df was 0.244 and based on trimmed mean was 0.229.

1. When the significant value (*P-Value*) < 0.05 , it means that null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is not rejected.
2. When the significant value (*P-Value*) > 0.05 , it means that null hypothesis (H_0) cannot be rejected, and the alternative hypothesis (H_1) is rejected.

It can be interpreted that the Levene statistic and the significant differences for testing the homogeneity of the students' score were more than 0.005. It meant that the null hypothesis cannot be rejected, so the conclusion is the score is on the same variance or the scores are homogeneous.

C. Hypothesis Testing

The hypotheses testing of this research can be identified as follows:

$H_0: \mu_1 \leq \mu_2$ the mean of experiment class was smaller than or equal to the mean of control class

The null hypothesis stated that The mean of class which taught by using Voice of America (VOA) News is smaller than or equal to the mean of the class which taught without using Voice of America (VOA) News.

$H_1: \mu_1 > \mu_2$ the mean of experiment class was higher than the mean of control class.

The alternative hypothesis stated that the mean of class which taught by using Voice of America (VOA) News is higher than the mean of group which is not taught by using Voice of America (VOA) News.

To know the difference of mean on the students score, the researcher used SPSS program 23 version to analyze the data. The result was presented in below:

Group Statistics					
	Class	N	Mean	Std. Deviation	Std. Error Mean
students post test score	experiment class	35	75.57	11.554	1.953
	control class	36	64.44	10.336	1.723

Table 4.15 The Result of Analyzing Independent Sample T Test

Based on the table 4.15 above output of independent samples T test showed the post test mean score of experiment class was 75.57. The object of test given was 20 questions for 35 students. The experiment class was the class which taught by using Voice of America (VOA) News. The post test scores of experiment class were gotten after teaching using Voice of America (VOA) News. The data also showed the mean of control class which the class taught without using Voice of America (VOA) News. The mean of control class was 64.44. The object of test given was 20 questions for 36 students. The questions which given to experiment class was same with the questions which given to control group. The standard deviation also was showed on the table 4.15. The standard of experiment class was 11.554 and in the control class was 10.336. In addition to the standard deviation, the table also showed the standard error mean of

experiment and control class. The standard error mean of experiment class was 1.953 and the control class was 1.723.

To know the whether there were any difference score of students' vocabulary means which taught by using Voice of America and the students' vocabulary mean without taught by using Voice of America. Beside the table 4.15 above the researcher also analyzed the independent sample Test of experiment and control class using SPSS program 23 versions. The result can be seen on the table as below

		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
students post test score	Equal variances assumed	.209	.649	4.280	69	.000	11.127	2.600	5.940	16.314
	Equal variances not assumed			4.273	67.686	.000	11.127	2.604	5.930	16.324

Table 4.16 Independent Sample Test of Experiment and control group

Table 4.14 presented the *p-value* of t test. The SPSS output suggests that the t-value was 4.280, with $df = 69$ and the sig. (2-tailed) or *p-value* is 0.000. The

research was one-tailed so the *P-Value* was divided by two: $0.000/2 = 0.000$. It was lower than 0.05 ($0.000 < 0.05$). From the data above, it can be interpreted that the null hypothesis is rejected and the alternative hypothesis can be rejected. It means that there were significant different score of students' vocabulary means which taught by using Voice of America and the means of students' vocabulary without taught by using voice of America. The conclusion is Voice of America was effective for teaching vocabulary achievement of first grade at MAN 1 Trenggalek.

D. Discussion

This research used quasi experimental research design. The researcher chose two classes. The classes were experimental class and control class. The sample classes were given pre test and post test. The test was used for collecting data. The pre test were given before the experiment class taught by using Voice of America (VOA) News. The purpose of this researcher was to know the effectiveness of Voice of America (VOA) News to increase students' vocabulary achievement.

Pre test and post test were used for calculating the homogeneity and normality. The result of homogeneity testing was the sig. (*P-value*) was 0.209. The result was more than 0.05. That means that the null hypothesis is rejected, and the alternative hypothesis cant rejected. The conclusion was the sample was on the same variance. The sig. of normality testing was more than 0.05. The control class was 0.111 and the experiment class was 0.92. The result of normality testing

was the null hypothesis is rejected and the alternative hypothesis cannot be rejected. The conclusion was that the instrument was normal distribution. The result of the sample used was on the same variance and on the normal level.

From the data which the researcher got, the researcher also used to test the hypothesis. The result of hypothesis testing was the sig. (*P-value*) was less than or equal to 0.05. It means that the null hypothesis is rejected and the alternative hypothesis cannot be rejected. The conclusion was that the Voice of America was effective to increase the students' vocabulary achievement.

The audio visual is the instrument which helps the teacher gives stimulated thinking and makes students easier for understanding the material. Kishore (2003) stated that Audio visual aids stimulated thinking and understand. Rather (2004) also add the statement of Kishore that Audio Visual aids are those instructional devices which are used in the classroom to make easier and interesting. The material like charts, maps, models, film strip, projectors radio, television etc called instructional aids. Based that Singh (2005) also give statement that, any advice which by sight and sound increase the individuals' experience, beyond that acquired through read and described as audio visual aids.

Based on the finding and previous research above, it can be said that Audio Visual as alternative media was effective in teaching vocabulary at senior high school, especially at first grade of MAN 1 Trenggalek.