## CHAPTER IV

## FINDINGS AND DISCUSSION

In this chapter writer explain about the result of the study discussion

## A. The Presentation of Data

In this section, it would be describe the obtained data of improvement students' vocabulary after and before taught by using advertisement. The present data consists of distribution of pre-test score of pre experiment class.

## 1. Distribution of pre-test of pre experiment class

The pre-test of the pre experiment class is present in the following table

Table 4.1
Score of pre-test of the data achieved by the students

| No | Name | Score |
| :--- | :--- | :--- |
| 1. | R 01 | 61.4 |
| 2. | R 02 | 45.7 |
| 3. | R 03 | 47.1 |
| 4. | R 04 | 37.1 |
| 5. | R 05 | 28.6 |
| 6. | R 06 | 62.8 |
| 7. | R 07 | 45.7 |
| 8. | R 08 | 68.5 |
| 9. | R 09 | 62.8 |
| 10. | R 10 | 60 |
| 11. | R 11 | 48.6 |
| 12. | R 12 | 57.1 |
| 13. | R 13 | 40 |
|  |  |  |


| 14. | R14 | 62.8 |
| :--- | :--- | :--- |
| 15. | R15 | 27.1 |
| 16. | R16 | 64.2 |
| 17. | R17 | 50 |
| 18. | R18 | 65.7 |
| 19. | R19 | 50 |
| 20. | R20 | 57.1 |
| 21. | R21 | 55.8 |
| 22. | R22 | 58.5 |
| 23. | R23 | 37.1 |
| 24. | R24 | 28.6 |
| 25. | R25 | 48.6 |
| 26. | R26 | 42.8 |
| 27. | R27 | 61.4 |
| 28. | R28 | 65.7 |
| 29. | R29 | 68.5 |
| 30. | R30 | 50 |
|  |  |  |

Table above describe the score of each student and show the student who passed and failed the test. It shows, there are 11 students who passed the test or about $36.67 \%$ in percentage and there are 19 students who failed the test or about $63.33 \%$ in percentage.

Based on the data above, it can be see that the student's highest score is 68.5 and the student's lowest score is 27.1 . However, based on the evaluation standard of English subject, there are 19 students who failed, they get fewer than 60 .

Table 4.2
The Frequency Distribution of Pre-test score

| No | Score (X) | Frequency <br> (f) | Fx |
| :--- | :--- | :--- | :--- |
| 1. | 68.5 | 2 | 137 |
| 2. | 65.7 | 2 | 131.4 |
| 3. | 64.2 | 1 | 64.2 |
| 4. | 62.8 | 3 | 188.4 |
| 5. | 61.4 | 2 | 122.8 |
| 6. | 60 | 1 | 60 |
| 7. | 58.5 | 1 | 58.5 |
| 8. | 57.1 | 2 | 114.2 |
| 9. | 55.8 | 1 | 55.8 |
| 10. | 50 | 3 | 150 |
| 11. | 48.6 | 2 | 97.2 |
| 12. | 47.1 | 1 | 47.1 |
| 13. | 45.7 | 2 | 91.4 |
| 14. | 42.8 | 1 | 42.8 |
| 15. | 40 | 1 | 40 |
| 16. | 37.1 | 2 | 74.2 |
| 17. | 28.6 | 2 | 57.2 |
| 18. | 27.1 | 1 | 27.1 |
|  | TOTAL | $\sum f=30$ | $\sum f x=1.559 .3$ |

The distribution of students' pre-test score can also be see in the following figure :

Figure 4.1
Histogram of Frequency Distribution of Pre-test


The table and figure above show the students' pre-test score of the pre experiment class. It could be see that there is 1 student get score 27.1 . There are 2 students get score 28.6 . There are 2 students get score 37.1 . There is 1 student get score 40 . There is 1 student get score 42.8 . There are 3 students get score 50 . There is 1 student get score 55.8 . There are 2 students get score 57.1 . There is 1 student get score 58.8. There is 1 student get score 60 . There are 3 students get score 62.8 . There is 1 student get score 64.2 . There are 2 students get score 65.7 . There are 2 students get score 68.5. In this case, many students get score under 60 .

Table 4.3

## The Calculation of Mean of Pre-Test Score

The next step, the writer tabulated the score into the table for calculation mean as follows:

| No | Score (X) | Frequency <br> (f ) | Fx | Fkb | Fka |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | 68.5 | 2 | 137 | 30 | 1 |
| 2. | 65.7 | 2 | 131.4 | 28 | 3 |
| 3. | 64.2 | 1 | 64.2 | 27 | 5 |
| 4. | 62.8 | 3 | 188.4 | 24 | 6 |
| 5. | 61.4 | 2 | 122.8 | 22 | 9 |
| 6. | 60 | 1 | 60 | 21 | 11 |
| 7. | 58.5 | 1 | 58.5 | 20 | 12 |
| 8. | 57.1 | 2 | 114.2 | 18 | 13 |
| 9. | 55.8 | 1 | 55.8 | 17 | 15 |
| 10. | 50 | 3 | 150 | 14 | 16 |
| 11. | 48.6 | 2 | 97.2 | 12 | 19 |
| 12. | 47.1 | 1 | 47.1 | 11 | 21 |
| 13. | 45.7 | 2 | 91.4 | 9 | 22 |
| 14. | 42.8 | 1 | 42.8 | 8 | 24 |
| 15. | 40 | 1 | 40 | 7 | 25 |
| 16. | 37.1 | 2 | 74.2 | 5 | 26 |
| 17. | 28.6 | 2 | 57.2 | 3 | 28 |
| 18. | 27.1 | 1 | 27.1 | 2 | 30 |
|  | TOTAL | $\sum f=30$ | $\sum f x=1.559 .3$ |  |  |

From the table above, the data could be interest in the formula of mean. In simple explanation, X is score of students, f is total students who get the score, Fx is multiplication both X and $\mathrm{f}, \mathrm{Fkb}$ is the comulative students calculate from under to the top, in other Fka is the comulative students calculate from the top to under.

## a. Mean

$$
\mathbf{M}=\frac{\sum f x}{N}
$$

$$
\begin{aligned}
& M=\frac{1.559 .3}{30} \\
& M=51.97667 \\
& M=51.97
\end{aligned}
$$

The calculation above shows of mean value is 51.9

The last step, the writer tabulated the scores of pre-test of Pre experimental class into the table for the calculation of standard deviation and the standard error as follows

Table 4.4
The Calculation of the Standard Deviation and Standard Error of the
Pre-test Score

| No | Score (X) | Frequency <br> $(\mathbf{f})$ | $\mathbf{F x}$ | $\mathbf{X}$ | $\boldsymbol{X}^{\mathbf{2}}$ | $\boldsymbol{f x}^{\mathbf{2}}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | 68.5 | 2 | 137 | 16.6 | 275.56 | 551.12 |
| 2. | 65.7 | 2 | 131.4 | 13.8 | 190.44 | 380.88 |
| 3. | 64.2 | 1 | 64.2 | 12.3 | 151.29 | 151.29 |
| 4. | 62.8 | 3 | 188.4 | 10.9 | 118.81 | 356.43 |
| 5. | 61.4 | 2 | 122.8 | 9.5 | 90.25 | 180.5 |
| 6. | 60 | 1 | 60 | 8.1 | 65.61 | 65.51 |
| 7. | 58.5 | 1 | 58.5 | 6.6 | 43.56 | 43.56 |
| 8. | 57.1 | 2 | 114.2 | 5.2 | 27.04 | 27.04 |
| 9. | 55.8 | 1 | 55.8 | 3.9 | 15.21 | 15.21 |
| 10. | 50 | 3 | 150 | -1.9 | 3.61 | 10.83 |
| 11. | 48.6 | 2 | 97.2 | -3.3 | 10.89 | 21.78 |
| 12. | 47.1 | 1 | 47.1 | -4.8 | 23.04 | 23.04 |
| 13. | 45.7 | 2 | 91.4 | -6.2 | 38.44 | 76.88 |
| 14. | 42.8 | 1 | 42.8 | -9.1 | 82.81 | 82.81 |
| 15. | 40 | 1 | 40 | -11.9 | 141.61 | 141.61 |
| 16. | 37.1 | 2 | 74.2 | -14.8 | 219.04 | 438.08 |
| 17. | 28.6 | 2 | 57.2 | -23.3 | 542.89 | $1,085.78$ |
| 18. | 27.1 | 1 | 27.1 | 24.8 | 615.04 | 615.04 |
|  | TOTAL | $\sum f=30$ | $\sum f x=1.55$ |  |  | $\sum_{f x} 2$ |


|  |  |  | 9.3 |  |  | 4294.53 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

The table above used for calculate standard deviation and standard error by calculate standard deviation first. The process of calculation uses formula below:

## a. Standard Deviation

$$
\begin{aligned}
& \mathrm{SD}=\sqrt{\frac{\sum_{f x} 2}{N}} \\
& \mathrm{SD}=\sqrt{\frac{4294.53}{30}} \\
& \mathrm{SD}=\sqrt{143.151} \\
& \mathrm{SD}=11.9645727044470752 \\
& \mathrm{SD}=12.1
\end{aligned}
$$

## b. Standard Error

$S E M_{D}=\frac{S D_{D}}{\sqrt{N-1}}$
$S E M_{D}=\frac{11.9645727044470752}{\sqrt{30-1}}$
$S E M_{D}=\frac{11.9645727044470752}{\sqrt{29}}$
$S E M_{D}=\frac{11.9645727044470752}{5.38516480713}$
$S E M_{D}=2.2217$

The result of calculation shows the standard deviation of pre-test score is 12.1 and the standard error of pre-test is 2.2217.

The writer also calculated the data calculation of pre-test score of preexperiment class using SPSS 18.0 program. The result statistic table as follows:

## Table 4.5

The Frequency Distribution of Pre-test Score using SPSS 18.0 Program

## Statistics

Pretest


## Pretest

|  |  |  | Valid | Cumulative |
| :---: | :--- | :--- | :--- | :--- |
|  | Frequency | Percent | Percent | Percent |
| 28.6 | 2 | 6.3 | 3.3 | 3.3 |
| 37.1 | 2 | 6.7 | 6.7 | 16.7 |
| 40.0 | 1 | 3.3 | 3.3 | 20.0 |
| 42.8 | 1 | 3.3 | 3.3 | 23.3 |
| 45.7 | 2 | 6.7 | 6.7 | 30.0 |



The table above shows the result of pre-test scores achieved by the experiment class using SPSS 18.0 program. It could be see there is 1 student who get score 27.1 $(3.3 \%)$. There are two students who get score 28.6 (6.7\%). There are 2 students who get score $37.1(6.7 \%)$. There is 1 student who get score $40(3.3 \%)$. There is 1 student who get score 42.8 (3.3\%). There are 2 students who get score 45.7 (6.7\%).There is 1 student who get score 47.1 (3.3\%). There are 2 students who get score 48.6 (6.7\%).There are 3 students who get score $50(10.0 \%)$ There is 1 student who get
score $58.5(3.3 \%)$. And there is 1 student who get score 60 (3.3\%).There are 2 students who get score $61.4(6.7 \%)$. There are 2 students who get score 62.8 $(10.0 \%)$.There is 1 student who get score $64.2(3.3 \%)$.There are 2 students who get score $65.7(6.7 \%)$. And there are 2 students who get score 68.5 (6.7\%).

The next step, the writer calculated the scores of mean, standard deviation of mean of pre-test in experiment class using SPSS as follows:

Table 4.6

The Table of Calculation of Mean, and Standard Deviation of Mean of Pre-test Scores Using SPSS 18.0 Program

## Descriptive Statistics

|  |  |  |  |  | Std. |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | N | Minimum | Maximum | Mean | Deviation |
| Pretest | 30 | 27.1 | 68.5 | 51.977 | 12.1689 |
| Valid | N | 30 |  |  |  |
| (listwise) |  |  |  |  |  |

The table shows the result of mean calculation was 51.9. The result of standard deviation is 12.1

## 2. Distribution of post-test of pre experiment class

The post-test of the pre experiment class is present in the following table
Table 4.7
Score of post-test of the data achieved by the students

| No | Name | Score |
| :--- | :--- | :--- |
| 1. | R01 | 80 |
| 2. | R02 | 74.2 |
| 3. | R03 | 74.2 |
| 4. | R04 | 68.5 |
| 5. | R05 | 72.8 |
| 6. | R06 | 77.1 |
| 7. | R07 | 75.7 |
| 8. | R08 | 78.5 |
| 9. | R09 | 77.1 |
| 10. | R10 | 77.1 |
| 11. | R11 | 64.2 |
| 12. | R12 | 78.5 |
| 13. | R13 | 78.5 |
| 14. | R14 | 70 |
| 15. | R15 | 77.1 |
| 16. | R16 | 85.7 |
| 17. | R17 | 64.2 |
| 18. | R18 | 74.2 |
| 19. | R19 | 74.2 |
| 20. | R20 | 82.8 |
| 21. | R21 | 71.4 |
| 22. | R22 | 88.5 |
| 23. | R23 | 74.2 |
| 24. | R24 | 87.1 |
| 25. | R25 | 68.5 |
| 26. | R26 | 77.1 |
| 27. | R27 | 77.1 |
| 28. | R28 | 72.8 |
| 29. | R29 | 80 |
| 30. | R30 | 77.1 |
|  |  |  |

Table above describe the score of each students and show the student who passed and failed in the test. It shows, all of students who passed the test or about $100 \%$ in percentage.

Based on the data above, it can be see that student's highest score is 88.5 and the student's lowest score is 64.2.However, based on evaluation standard of English subject, no one students who failed, they get fewer than 60 .

Table 4.8
The Frequency Distribution of the Post-test

| No | Score (X) | Frequency <br> (f) | Fx |
| :--- | :--- | :--- | :--- |
| 1. | 88.5 | 1 | 88.5 |
| 2. | 87.1 | 1 | 87.1 |
| 3. | 85.7 | 1 | 85.7 |
| 4. | 82.8 | 1 | 82.5 |
| 5. | 80 | 2 | 160 |
| 6. | 78.5 | 3 | 235.5 |
| 7. | 77.1 | 7 | 539.7 |
| 8. | 75.7 | 1 | 75.7 |
| 9. | 74.2 | 5 | 371 |
| 10. | 72.8 | 2 | 145.6 |
| 11. | 71.4 | 1 | 71.4 |
| 12. | 70 | 1 | 70 |
| 13. | 68.5 | 2 | 137 |
| 14. | 64.2 | 2 | 128.4 |
|  | TOTAL | $\sum f=30$ | $\sum f x$ |
|  |  |  | $=2278.41$ |

The distribution of student's post-test score can also be see in the following figure.

## Figure 4.2

## Histogram of Frequency Distribution of Post-test Score



The table and figure above show the students' post-test score. It could be see that there are 2 students who get score 64.2 . There are 2 students who got score 68.5 . There is 1 students who get score 72.8 . There is 1 student who get score 71.4 . There are 2 students who get score 72.8 . And there are 5 students who get score 74.2.There is 1 student who get score 75.7 . There are 7 students who get score 77.1 . There are 3 students who get score 78.5 . There are 2 students who get score 80 . There is 1 student who get score 82.8.There is 1 student who get score 85.7. There is 1 student who get score 87.1 and There is 1 student who get score 88.5.

The next step, the writer tabulated the score into the table for the calculation mean as follows:

Table 4.9

## The Calculation of Mean of Post-test score

The next step, the writer tabulated the score into the table for the calculation mean as follows:

| No | Score (X) | Frequency <br> (f) | Fx | Fkb | Fka |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | 88.5 | 1 | 88.5 | 30 | 2 |
| 2. | 87.1 | 1 | 87.1 | 29 | 3 |
| 3. | 85.7 | 1 | 85.7 | 28 | 4 |
| 4. | 82.8 | 1 | 82.5 | 27 | 5 |
| 5. | 80 | 2 | 160 | 25 | 6 |
| 6. | 78.5 | 3 | 235.5 | 22 | 8 |
| 7. | 77.1 | 7 | 539.7 | 15 | 11 |
| 8. | 75.7 | 1 | 75.7 | 14 | 18 |
| 9. | 74.2 | 5 | 371 | 9 | 19 |
| 10. | 72.8 | 2 | 145.6 | 7 | 24 |
| 11. | 71.4 | 1 | 71.4 | 6 | 26 |
| 12. | 70 | 1 | 70 | 5 | 27 |
| 13. | 68.5 | 2 | 137 | 3 | 28 |
| 14. | 64.2 | 2 | 128.4 | 1 | 30 |
|  | TOTAL | $\sum f=30$ | $\sum f x$ |  |  |
|  |  |  | $=2278.41$ |  |  |

From the table above, the data could be inserted in the formula of mean. In simple explanation, X is score of students, f is total students who get the score, Fx is multiplication both X and f , fkb is the comulative students calculate from under to the top, in other side fka is the comulative students calculate from the top to under. The process of calculation used formula below.

## a. Mean

$$
\mathbf{M}=\frac{\sum f x}{N}
$$

$$
\begin{aligned}
& \mathrm{M}=\frac{2278.41}{30} \\
& \mathrm{M}=75.947 \\
& \mathrm{M}=75.94
\end{aligned}
$$

The calculation above show of mean value is 75.9
The last step, the writer tabulated the score of post-test into the table for the calculation of standard deviation and standard error as follows:

Table 4.10
The Calculation of the Standard Deviation and Standard Error of
Post-test

| No | Score (X) | Frequency <br> (f) | Fx | X | $X^{2}$ | $f x^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 88.5 | 1 | 88.5 | 12.6 | 158.76 | 158.76 |
| 2. | 87.1 | 1 | 87.1 | 11.2 | 125.44 | 125.44 |
| 3. | 85.7 | 1 | 85.7 | 9.8 | 96.04 | 96.04 |
| 4. | 82.8 | 1 | 82.5 | 6.9 | 47.61 | 47.61 |
| 5. | 80 | 2 | 160 | 4.1 | 16.81 | 33.63 |
| 6. | 78.5 | 3 | 235.5 | 2.6 | 6.76 | 20.28 |
| 7. | 77.1 | 7 | 539.7 | 1.2 | 1.44 | 10.08 |
| 8. | 75.7 | 1 | 75.7 | -0.2 | 0.04 | 0.04 |
| 9. | 74.2 | 5 | 371 | -1.7 | 2.89 | 14.45 |
| 10. | 72.8 | 2 | 145.6 | -3.1 | 9.61 | 19.22 |
| 11. | 71.4 | 1 | 71.4 | -4.5 | 20.25 | 20.25 |
| 12. | 70 | 1 | 70 | -5.9 | 34.81 | 34.81 |
| 13. | 68.5 | 2 | 137 | -7.4 | 54.76 | 109.52 |
| 14. | 64.2 | 2 | 128.4 | -11.7 | 136.89 | 273.78 |
|  | TOTAL | $\sum f=30$ | $\sum_{=2278.41} f x$ |  |  | $\sum_{f x} 2=963.9$ |

The table above used for calculate standard deviation and standard error by calculate standard deviation first. The process of calculation use formula below:

## a. Standard Deviation

$$
\begin{aligned}
& \mathrm{SD}=\sqrt{\frac{\sum_{f x} 2}{N}} \\
& \mathrm{SD}=\sqrt{\frac{963.9}{30}} \\
& \mathrm{SD}=\sqrt{32.13} \\
& \mathrm{SD}=5.666833308883073553 \\
& \mathrm{SD}=5.76
\end{aligned}
$$

b. Standard Error

$$
\begin{aligned}
& S E M_{D}=\frac{S D_{D}}{\sqrt{N-1}} \\
& S E M_{D}=\frac{5.6666833308883073553}{\sqrt{29}} \\
& S E M_{D}=\frac{5.666833308883073553}{5.385164807134504} \\
& S E M_{D}=1.052304527 \\
& S E M_{D}=1.052
\end{aligned}
$$

The result of calculation show the standard deviation of post-test is 5.76 and the standard error of post-test score is 1.052 .

Table 4.11
The Frequency Distribution of Post-test Scores Using SPSS 18.0 Program

## Statistics

|  |  | Pretest | Posttest |
| :--- | :--- | :--- | :--- |
| N | Valid | 30 | 30 |
|  | Missing | 0 | 0 |

## Posttest

|  |  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 64.2 | 2 | 6.7 | 6.7 | 6.7 |
|  | 68.5 | 2 | 6.7 | 6.7 | 13.3 |
|  | 70.0 | 1 | 3.3 | 3.3 | 16.7 |
|  | 71.4 | 1 | 3.3 | 3.3 | 20.0 |
|  | 72.8 | 2 | 6.7 | 6.7 | 26.7 |
|  | 74.2 | 5 | 16.7 | 16.7 | 43.3 |
|  | 75.7 | 1 | 3.3 | 3.3 | 46.7 |
|  | 77.1 | 7 | 23.3 | 23.3 | 70.0 |
|  | 78.5 | 3 | 10.0 | 10.0 | 80.0 |
|  | 80.0 | 2 | 6.7 | 6.7 | 86.7 |
|  | 82.8 | 1 | 3.3 | 3.3 | 90.0 |
|  | 85.7 | 1 | 3.3 | 3.3 | 93.3 |
|  | 87.1 | 1 | 3.3 | 3.3 | 96.7 |
|  | 88.5 | 1 | 3.3 | 3.3 | 100.0 |
|  | Total | 30 | 100.0 | 100.0 |  |

The table above shows the result of post-test scores achieved by the experiment class using SPSS 18.0 program. It could be see there are 2 students who get score 64.2 ( $6.7 \%$ ). There are 2 students who get score 68.5 ( $6.7 \%$ ). There is 1 student who get score 70 (3.3\%). There is 1 student who get score 71.4 (3.3\%) There are 2 students who get score $72.8(6.7 \%)$. There are 5 students who get score 74.2 (16.7). There is 1 student who get score 75.7 (3.3\%). There are 7 students who get score $77.1(23.3 \%)$. There are 2 students who get score 78.5 ( $6.7 \%$ ). There are 2 students who get score 80 (6.7\%). There is 1 student who get score 82.8 (3.3\%). There is 1 student who get score 85.7 (3.3\%). There is 1 student who get score 87.1 (3.3\%). And there is 1 student who get 88.5 (3.3\%).

The next step, the writer calculated the scores of mean, standard deviation of mean of post-test using SPSS as follows.

Table 4.12

## The Table of Calculation of Mean, Standard Deviation, and Standard Error of Mean of Post-test Scores Using SPSS 18.0 Program

## Descriptive Statistics

|  |  |  |  |  | Std. |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | N | Minimum | Maximum | Mean | Deviation |
| Posttest | 30 | 64.2 | 88.5 | 75.947 | 5.7650 |
| Valid | N | 30 |  |  |  |
| (listwise $)$ |  |  |  |  |  |

The table shows the result of mean calculation is 75.94 . The result of standard deviation is 5.76

## Table 4.13

The Table of Different score pre and post test

| No | Pre test Score | Post test Score | Description of Score |
| :---: | :---: | :---: | :---: |
| 1. | 61.4 | 80 | Increased |
| 2. | 45.7 | 74.2 | Increased |
| 3. | 47.1 | 74.2 | Increased |
| 4. | 37.1 | 68.5 | Increased |
| 5. | 28.6 | 72.8 | Increased |
| 6. | 62.8 | 77.1 | Increased |
| 7. | 45.7 | 75.7 | Increased |
| 8. | 68.5 | 78.5 | Increased |
| 9. | 62.8 | 77.1 | Increased |
| 10. | 60 | 77.1 | Increased |
| 11. | 48.6 | 64.2 | Increased |
| 12. | 57.1 | 78.5 | Increased |
| 13. | 40 | 78.5 | Increased |
| 14. | 62.8 | 70 | Increased |
| 15. | 27.1 | 77.1 | Increased |
| 16. | 64.2 | 85.7 | Increased |
| 17. | 50 | 64.2 | Increased |
| 18. | 65.7 | 74.2 | Increased |
| 19. | 50 | 74.2 | Increased |
| 20. | 57.1 | 82.8 | Increased |
| 21. | 55.8 | 71.4 | Increased |
| 22. | 58.5 | 88.5 | Increased |
| 23. | 37.1 | 74.2 | Increased |
| 24. | 28.6 | 87.1 | Increased |
| 25. | 48.6 | 68.5 | Increased |
| 26. | 42.8 | 77.1 | Increased |
| 27. | 61.4 | 77.1 | Increased |
| 28. | 65.7 | 72.8 | Increased |


| 29. | 68.5 | 80 | Increased |
| :--- | :--- | :--- | :--- |
| 30. | 50 | 77.1 | Increased |

Increase in value experienced by all students in grade VII-b, it can be seen post test score higher than pre test score, minimum score of pre-test was 27.1, minimum score of post-test was 64.2 , maximum score of pre-test was 68.5 and maximum score of post-test was 88.5.

## Table 4.14

The Table of Different Calculation of Mean, Standard Deviation, and Standard Error of Mean between Pre-test and Post-test Scores

| No | N | Minimum | Maximum | Mean | Std. <br> Deviation | Std. <br> Error |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pre-test | 30 | 27.1 | 68.5 | 51.977 | 12.1 | 2.2217 |
| Post-test | 30 | 64.2 | 88.5 | 75.947 | 5.7650 | 1.052 |

## B. Testing Normality and Homogeneity

Definition of Homogeneity of Variance is when all the variables in statistic data have the same finite or limited variance. When homogeneity of variance is equal for a statistical model. A simple computation approach to analysis the data can be
used due to a low level of uncertainty in the data. ${ }^{1}$ This equality is homogeneity or homoscedasticity.

## 1. Testing Normality

Table 4.15
Tests of Normality

|  | Kolmogorov-Smirnov $^{\text {a }}$ |  |  |  | Shapiro-Wilk |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Statistic | Df | Sig. | Statistic | Df | Sig. |  |
|  | .130 | 30 | $.200^{*}$ | .931 | 30 | .053 |  |

a. Lilliefors Significance Correction
*. This is a lower bound of the true significance.

## a. Test distribution is Normal.

The criteria of the normality test pre-test and post-test is if the value of (probability value/critical value) is higher than or equal to the level of significance alpha defined $(r=a)$, it means that, the distribution is normal. Based on the calculation using SPSS 18.0 above, the value of $r$ (probably value/critical value) from pre-test and post-test of the experiment class in Kolmogorov-Smirnov table is higher than level of significance alpha used or r $=0.053>0.05$ (Pre-test) and $\mathrm{r}=0.200>0.05$ (Post-test) so that the distributions are normal. It meant that the students' score of in pre-test and post-test had a normal distribution.

[^0]
## 2. Testing Homogeneity

Table 4.16
Test of Homogeneity of Variances

| Levene <br> Statistic | df1 | df2 | Sig. |
| :--- | :--- | :--- | :--- |
| 1.983 | 6 | 16 | .128 |

Table 4.16
ANOVA

|  | Sum of <br> Squares  | Df |  | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Between | 1573.282 | 13 | 121.022 | . 712 | . 729 |
| Groups |  |  |  |  |  |
| Within Groups | 2721.072 | 16 | 170.067 |  |  |
| Total | 4294.354 | 29 |  |  |  |

The criteria of the homogeneity test pre-test and post-test was if the value of (probability value/critical value) is higher than or equal to the level of significance alpha defined $(r=a)$, it means that, the distribution is homogeneity. Based on the
calculation using SPSS 18.0 above, the value of (probably value/critical value) from pre-test and post-test of the experiment class on Homogeneity of Variances in sig column is known that p -value was 0.128 . The data in this study fulfilled homogeneity since the p value is higher $0.128>0.05$.

## C. Testing Hypothesis using $\boldsymbol{T}_{\text {test }}$

The writer chose the significance level on 5\%, it means the significance level of refusal of null hypothesis on $5 \%$. The writer decided the significance level at 5\% due to the hypothesis type stated on non-directional (two-tailed test). It means that the hypothesis can't direct the prediction of alternative Hypothesis. Alternative Hypothesis symbolized by " 1 ". This symbol could direct the answer of hypothesis, " 1 " can be ( $>$ ) or ( $<$ ). The answer of hypothesis could not be predicted whether on more than or less than.

To test the hypothesis of the study, the writer used t-test statistical calculation. Firstly, the writer calculated the standard deviation and the error of $X_{1}$ and $X_{2}$ at the previous data presentation. In could be seen on this following table:

## Table 4.17

The Standard Deviation and Standard Error of $\mathbf{X}_{1}$ and $\mathbf{X}_{2}$

| Variable | The Standard <br> Deviation | The Standard Error |
| :--- | :--- | :--- |
| $\mathrm{X}_{1}$ | 12.1689 | 2.2217 |
| $\mathrm{X}_{2}$ | 5.7650 | 1.0525 |

$$
\begin{array}{ll}
X_{1} & =\text { Score of pre-test } \\
X_{2} & =\text { Score of Post-test }
\end{array}
$$

The table shows the result of the standard deviation calculation of $X_{1}$ is 12.1689and the result of the standard error mean calculation is 2.2217 . The result of the standard deviation calculation of $X_{2}$ is 5.7650 and the result of the standard error mean calculation is 1.0525 .

The next step, the writer calculated the standard error of the differences mean between $X_{1}$ and $X_{2}$ as follows:

Standard error of mean of score difference between Variable I and Variable II

$$
\begin{array}{ll}
\mathrm{SE}_{\mathrm{M} 1}-\mathrm{SE}_{\mathrm{M} 2} & =\mathrm{SE}_{\mathrm{M} 1}^{2}+\mathrm{SE}_{\mathrm{M} 2}^{2} \\
\mathrm{SE}_{\mathrm{M} 1}-\mathrm{SE}_{\mathrm{M} 2} & =\sqrt{(2.2217)+(1.0525)^{2}} \\
\mathrm{SE}_{\mathrm{M} 1}-\mathrm{SE}_{\mathrm{M} 2} & =\sqrt{4.93595089+1.10775625} \\
\mathrm{SE}_{\mathrm{M} 1}-\mathrm{SE}_{\mathrm{M} 2} & =\sqrt{6.04370714} \\
\mathrm{SE}_{\mathrm{M} 1}-\mathrm{SE}_{\mathrm{M} 2} & =2.4583952367347281 \\
\mathrm{SE}_{\mathrm{M} 1}-\mathrm{SE}_{\mathrm{M} 2} & =2.458
\end{array}
$$

The calculation above shows the standard error of the differences mean between $\mathrm{X}_{1}$ and $\mathrm{X}_{2}$ is 2.458 . Then, it was inserted to thet ${ }_{0}$ formula to get the value of t observed as follows:

$$
\begin{aligned}
& t_{o}=M_{D} / S E_{M D} \\
& t_{o}=\frac{75.947-51.977}{2.458} \\
& t_{o}=\frac{23.97}{2.458} \\
& t_{o}=9.75183 \\
& t_{o}=9.751
\end{aligned}
$$

Which the criteria:

If t -test $(\mathrm{t}$-observed $) \geq \mathrm{t}$-table, Ha is accepted and Ho is rejected

If t -test $(\mathrm{t}$-observed) $<\mathrm{t}$-table, Ha is rejected and Ho is accepted

Then, the writer interpreted the result of t-test; previously, the writer accounted the degree of freedom (df) with the formula:

$$
\begin{aligned}
\mathrm{Df} & =\mathrm{N}-1 \\
& =30-1 \\
& =29
\end{aligned}
$$

$$
\begin{array}{lll}
5 \% & t_{\mathrm{o}} & 1 \% \\
2.04 & \langle 9.751\rangle & 2.76
\end{array}
$$

The writer chose the significant levels at $5 \%$, it means the significant level of refusal of null hypothesis at 5\%. The writer decided the significance level at 5\% due to the hypothesis. It meant that the hypothesis can't direct the prediction of alternative hypothesis. Alternative hypothesis symbolized by " 1 ". This symbol could direct the answer of hypothesis, " 1 " can be (>) or (<). The answer of hypothesis could not be predicted whether on more than or less than.

The calculation above shows the result of t-test calculation as in the table follows:

| Variable | T observed | T table |  | Df/db |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 5\% | 1\% |  |
| $\mathrm{X}_{1}-\mathrm{X}_{2}$ | 9.751 | 2.04 | 2.76 | 29 |

Where:
$\mathrm{X}_{1} \quad=$ Score of pre-test
$\mathrm{X}_{2} \quad=$ Score of post-test

T observe $=$ the calculated Value

T table $\quad=$ the distribution of t value
$\mathrm{Df} / \mathrm{db} \quad=$ Degree of freedom

Based on the result of hypothesis test calculation, it is find that the value of $\mathrm{t}_{\text {observed }}$ is greater than the value of $\mathrm{t}_{\text {able }}$ at $1 \%$ and $5 \%$ significance level or $2.04<9.751$ >2.76. It means $\mathrm{H}_{\mathrm{a}}$ is accepted and $\mathrm{H}_{0}$ is rejected.

It is interpreted based on the result of calculation that $H_{a}$ stating that the students taught vocabulary by advertisement vocabulary size is accepted. It means that taught by advertisement have given effect in teaching vocabulary size at the seventh students of MTs An-NurPalangka Raya.

## D. Testing Hypothesis using SPSS 18.0 ( One Sample $\mathbf{T}_{\text {test }}$ )

The Standard Deviation and the Standard Error of X using SPSS 18.0.

Table 4.18
The Standard Deviation and the Standard Error of X1 and X2 using SPSS 18.0 Group Statistics
One-Sample Statistics

|  |  |  | Std. | Std. Error <br> Mean |
| :--- | :--- | :--- | :--- | :--- |
| Pretest | 30 | 51.977 | 12.1689 | 2.2217 |

One-Sample Statistics

|  |  |  | Std. | Std. Error <br> Mean |
| :--- | :--- | :--- | :--- | :--- |
| Pretest | 30 | 51.977 | 12.1689 | 2.2217 |
| Posttest | 30 | 75.947 | 5.7650 | 1.0525 |

Table 4.19
The Calculation of T-test Using SPSS 18.0
One-Sample Test

|  | Test Value $=0$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T | Df | Sig. | Mean <br> Difference | 95\% Confidence Interval of the Difference |  |
|  |  |  |  |  | Lower | Upper |
| prestest | 23.395 | 29 | . 000 | 51.9767 | 47.433 | 56.521 |
| posttest | 72.155 | 29 | . 000 | 75.9467 | 73.794 | 78.099 |

The table shows the result of t-test calculation using SPSS 18.0 program. Since the result of pre test and post-test had difference score of variance, it meant the t -test calculation used at the equal variances not assumed. It found that the result of
$t_{\text {observed }}$ are 23.395 and 72.155 , the result of mean difference 51.9767 and 75.9467 and the standard error difference are 2.2217 and 1.0525.

## E. Interpretation

To examine the truth or the false of null hypothesis stating that the students taught advertisement have better vocabulary size, the result of $t$-test is interpreted on the result of degree of freedom to get the $t_{\text {able }}$. The result of degree of freedom (df) is 29 , it find from total number of the students in both class minus 1 . The following table is the result of $\mathrm{t}_{\text {observed }}$ and $\mathrm{t}_{\text {able }}$ from 29 df at $5 \%$ and $1 \%$ significance level.

Table 4.20
The Result of T-test Using SPSS 18.0

| Variable | T observed | T table |  | Df/db |
| :--- | :--- | :--- | :--- | :--- |
|  |  | $5 \%$ | $1 \%$ |  |
| $\mathrm{X}_{1}-\mathrm{X}_{2}$ | 9.751 | 2.04 | 2.76 | 29 |

The interpretation of the result of t -test using SPSS 18.0 program, it was foundthe $t_{\text {observed }}$ is greater than the $t$ table at $1 \%$ and $5 \%$ significance level or 2.04<9.751>2.76. It means that $H_{a}$ is accepted and $H_{0}$ is rejected

It could be interpreted based on the result of calculation that Ha stating that the students taught vocabulary by advertisement vocabulary size is accepted. It means
that taught by advertisement have given effect in teaching vocabulary size at the seventh students of MTs An-NurPalangka Raya.

## F. Discussion

The result of data analysis shows that the students taught by advertisement give effect to increase vocabulary at the seventh year students of MTs An-Nur ofPalangka Raya. It can be seen first from the means score between Pre-test and Posttest. The mean score of Post-test reached higher score than the mean score of Pre-test $(\mathrm{X}=51.977<\mathrm{Y}=75.94)$. It indicated that the students' score increase after conducting treatment. In other words, the students taught by advertisement given effect to increase vocabulary size at the seventh year students of MTs An-NurPalangka Raya".

Meanwhile, after the data was calculated using the $t_{\text {test }}$ formula using manual calculation shows that the $t_{\text {observed }}$ is 9.751 . By comparing the $t_{\text {observed }}$ with the $t_{\text {table }}$, it is find that the $\mathrm{t}_{\text {observed }}$ is higher than the value of $\mathrm{t}_{\text {able }}$ at $1 \%$ and $5 \%$ significance level or $2.04<9.751>2.76$. In teaching learning process, taught vocabulary by using advertisement was a tool used by the writer to teach the students. Advertisement could make a good interaction between teacher and students. From the result of analysis, it could be see from the score of students how the uses of media give positive effects for student's vocabulary size. It meant media has important role in teaching learning process. It is answer the Problem of the study which "Does the use of advertisement give effect in teaching vocabulary size of the seventh years studentsat MTs An-Nur Palangka Raya ?". It can be see from score of pre and post
test, daily score and eager to learning, students are very eager to learn English and practice in the classroom during the learning process.

Using of advertisement as media in teaching learning process to stimulate students to feel more comfortable when they are learning. Proven in my study in the VII-b of MTs An-NurPalangka Raya, the students more enthusiastic and excited when learning and practice English. It is easier to receive the lesson and new vocabulary, so the vocabulary of the students increased.The result was supported by theory at chapter II about the advantage of media in teaching learning process, Learning one new word leads to other new words, little constellations of meaning that keep the brain cells active and hungry for more. Students generally do not retain words after one listening and need multiple exposures and experiences with new vocabulary and to help learners become confident and independent readers and writers, the instruction might be coupled with the skills. Among the aforementioned strategies, some have been applied practice.


[^0]:    ${ }^{1}$ AgusIrianto, Statistik:KonsepDasardanAplikasinya, Jakarta: Prenada Media, 2004, p.62.

