## CHAPTER IV

## THE RESULT OF THE RESEARCH

## A. The Description of the Data Research

In this chapter, the writer would like to present the description of data obtained. As the writer stated at the previous chapter that the population of the students SMPN 2 Kota Serang and the subject of this research are the second grade students. In this research, the writer divided them into two classes, 34 studnts are experiment class, its from clas VIII D, and 34 students as control class, its from class VIII B.

To find the effectiveness to use short story through audio material, the writer identified some result, they are: the score of students before treatment, the score students after treatment.

To know increasing speaking skill using short story through audio material, the writer gave the test to students as the sample both at the experimental class and at the control class. the test used in this research divided in two types, there are pre-test and posttest. the pre-test is the test that giving before treatment and the post-test is given after giving treatment. The maximum score of grammar was 20 , the maximum score of vocabulary was 20 , the maximum score of comprehension was 20 , the maximum score of fluency was 20 , the maximum score of pronunciation was 20 . The highest of total score all criteria is 100 .

The writer described the result of pre-test at experimental class by the table bellows:

Table 4.1

The students score of pre-test at experimental class

| NO | NAME | ASPECT |  |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | G | V | C | F | P |  |
| 1 | S1 | 5 | 5 | 5 | 5 | 5 | 25 |
| 2 | S2 | 5 | 5 | 10 | 5 | 5 | 30 |
| 3 | S3 | 5 | 5 | 10 | 10 | 5 | 35 |
| 4 | S4 | 5 | 10 | 10 | 10 | 5 | 40 |
| 5 | S5 | 5 | 10 | 10 | 10 | 10 | 45 |
| 6 | S6 | 5 | 5 | 10 | 10 | 10 | 40 |
| 7 | S7 | 5 | 10 | 5 | 5 | 5 | 30 |
| 8 | S8 | 5 | 5 | 5 | 5 | 10 | 30 |
| 9 | S9 | 5 | 5 | 5 | 5 | 5 | 25 |
| 10 | S10 | 5 | 5 | 5 | 5 | 5 | 25 |
| 11 | S11 | 5 | 10 | 5 | 5 | 5 | 30 |
| 12 | S12 | 5 | 5 | 10 | 5 | 5 | 30 |
| 13 | S13 | 5 | 10 | 10 | 5 | 5 | 35 |
| 14 | S14 | 5 | 5 | 5 | 5 | 5 | 25 |
| 15 | S15 | 5 | 5 | 5 | 5 | 5 | 25 |
| 16 | S16 | 5 | 5 | 5 | 5 | 5 | 25 |
| 17 | S17 | 5 | 5 | 5 | 5 | 10 | 30 |


| 18 | S18 | 5 | 10 | 10 | 5 | 5 | 35 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | S19 | 5 | 5 | 10 | 5 | 10 | 35 |
| 20 | S20 | 10 | 5 | 10 | 5 | 10 | 40 |
| 21 | S21 | 5 | 10 | 10 | 10 | 10 | 45 |
| 22 | S22 | 5 | 5 | 5 | 5 | 5 | 25 |
| 23 | S23 | 5 | 5 | 5 | 5 | 5 | 25 |
| 24 | S24 | 5 | 5 | 5 | 10 | 5 | 30 |
| 25 | S25 | 5 | 5 | 10 | 10 | 5 | 35 |
| 26 | S26 | 5 | 5 | 5 | 5 | 5 | 25 |
| 27 | S27 | 5 | 5 | 5 | 5 | 5 | 25 |
| 28 | S28 | 5 | 10 | 10 | 5 | 5 | 35 |
| 29 | S29 | 5 | 5 | 10 | 10 | 5 | 35 |
| 30 | S30 | 5 | 5 | 10 | 5 | 5 | 30 |
| 31 | S31 | 5 | 5 | 5 | 5 | 5 | 25 |
| 32 | S32 | 5 | 5 | 5 | 5 | 10 | 30 |
| 33 | S33 | 5 | 5 | 5 | - | 5 | 20 |
| 34 | S34 | 5 | 5 | 10 | 5 | 10 | 35 |
|  | N=34 |  |  |  |  |  | $\Sigma \mathbf{1 0 5 5}$ |
|  |  | Average |  |  |  | $\mathbf{3 1 , 0 2}$ |  |

the table 4.1 above showed about explain speaking scale criteria, there are:

$$
\begin{aligned}
& \mathrm{G}=\text { grammar } \\
& \mathrm{V}=\text { vocabulary }
\end{aligned}
$$

$$
\begin{aligned}
& \mathrm{C}=\text { comprehension } \\
& \mathrm{F}=\text { fluency } \\
& \mathrm{P}=\text { pronounciation }
\end{aligned}
$$

The table 4.1 above showed that the result of the students pre-test score on the criteria speaking skill at the experimental class. that the data showed the maximum score was 45 , and the minimum score was 20 . Two students who got maximum score and one student who get minimum score. The avarage score pretest was 31,02 .

Table 4.2

The students score of post-test at experimental class

| NO | NAME | ASPECT |  |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | G | V | C | F | P |  |
| 1 | S1 | 10 | 15 | 15 | 10 | 10 | 60 |
| 2 | S2 | 10 | 20 | 10 | 15 | 10 | 65 |
| 3 | S3 | 10 | 15 | 20 | 15 | 10 | 70 |
| 4 | S4 | 15 | 15 | 15 | 15 | 15 | 75 |
| 5 | S5 | 15 | 15 | 20 | 15 | 15 | 80 |
| 6 | S6 | 15 | 15 | 20 | 10 | 10 | 70 |
| 7 | S7 | 10 | 15 | 15 | 15 | 20 | 75 |
| 8 | S8 | 5 | 15 | 15 | 10 | 15 | 60 |
| 9 | S9 | 5 | 10 | 15 | 10 | 10 | 50 |


| 10 | S10 | 5 | 10 | 15 | 20 | 10 | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | S11 | 10 | 20 | 20 | 10 | 10 | 70 |
| 12 | S12 | 10 | 10 | 20 | 15 | 10 | 65 |
| 13 | S13 | 5 | 15 | 20 | 10 | 10 | 60 |
| 14 | S14 | 5 | 10 | 20 | 20 | 10 | 65 |
| 15 | S15 | 10 | 20 | 20 | 10 | 10 | 70 |
| 16 | S16 | 5 | 15 | 15 | 15 | 10 | 60 |
| 17 | S17 | 10 | 15 | 20 | 15 | 10 | 70 |
| 18 | S18 | 10 | 15 | 20 | 15 | 15 | 75 |
| 19 | S19 | 10 | 10 | 15 | 20 | 10 | 65 |
| 20 | S20 | 10 | 15 | 15 | 15 | 15 | 70 |
| 21 | S21 | 15 | 20 | 20 | 10 | 10 | 75 |
| 22 | S22 | 10 | 10 | 15 | 15 | 10 | 60 |
| 23 | S23 | 5 | 15 | 20 | 10 | 10 | 60 |
| 24 | S24 | 5 | 10 | 20 | 15 | 15 | 65 |
| 25 | S25 | 5 | 15 | 20 | 15 | 15 | 70 |
| 26 | S26 | 10 | 15 | 20 | 10 | 15 | 70 |
| 27 | S27 | 10 | 10 | 20 | 5 | 15 | 60 |
| 28 | S28 | 15 | 15 | 20 | 15 | 10 | 75 |
| 29 | S29 | 10 | 10 | 10 | 15 | 15 | 60 |
| 30 | S30 | 5 | 10 | 10 | 15 | 20 | 60 |
| 31 | S31 | 5 | 20 | 15 | 10 | 15 | 65 |
| 32 | S32 | 15 | 10 | 20 | 10 | 15 | 70 |
| 33 | S33 | 5 | 15 | 15 | 20 | 10 | 65 |
| 34 | S34 | 10 | 10 | 20 | 15 | 15 | 70 |
|  | N=34 |  |  |  |  |  | $5 \mathbf{2 2 6 0}$ |


| Average | $\mathbf{6 6 , 4 7}$ |
| :---: | :---: |

The table 4.2 above showed that the result of the students post-test score on the criteria speaking skill at the experimental class. that the data showed the maximum score was 80 , and the minimum score was 50 . One studnt who got the maximum and one student who got the minimum score. The avarage post-test was 66,47

Based on the explanation above, it showed the result of post test at experimental class got the significant improvement after giving treatment, it seen from the avarage of post-test was better than the avarage of pre-test, that $31,02<66,47$.

## Graphic 4.1

The comparison of grammar in pre-test and post-test at the experimental class


From the graphic above, the writer concluded that the students score in grammar of speaking assessment was lack in pretest. most fo students had can speak english but not understand of grammar. But in post-test, there was improvement in grammar. They can speak english short story and they had understod grammar.

The maximum score in grammar of speaking assessment was 20 and the minimum score in grammar of speaking assessment is 5 . In pre-test the maximum score was 10 have gotten by one student and the minimum score was 5 has gotten by 33 students. In pos-test score was 15 has gotten by 6 students, score was 10 has gotten by 16 students and minimum score was 5 has gotten by 12
students. And all of number of sample in the experimental class was 34 students. And then, there is significant score between pretest and post-test.

## Graphic 4.2

The comparison of vocabularie in pre-test and post-test at the experimental class

from the graphic above, the writer concluded that the students score of vocabulary of speaking assessment was lack in pre-test. most of students had unable to identify the meaning of words and it used based on the context. Most of students had can identify the meaning of words and its use according to the context with fairly precise and accurate. The maximum score in vocabulary of speaking assessment was 20 and the minimum was 5 . In pre-test
has gotten score 5 there are 26 students and has gotten score 10 there are 8 students. In post-test has gotten score 10 there are 12 students, has gotten score 15 there are 17 students, and score was 20 there are 5 students. Finally there is significant score between pre-test and post-test.

## Graphic 4.3

The comparison of comprehension in pre-test and post-test at the experimental class

from the graphic above, the writer concluded that the students score in comprehension of speaking assessment was lack in pre-test. Most of students not understand what meaning of short story. But in post-test, there was improvement in their comprehension and the purpose of short story. The maximum score in comprehension of speaking assessment was 20 and the
minimum score was 5 . In pre-test has gotten score 5 there are 18 students, has gotten score 10 there are 16 students. In post-test the students has gotten score 10 there are 3 students, the students has gotten score 15 there are 12 students and students has gotten score 20 there are 19 students. Actually there is significant between pretest and post-test.

## Graphic 4.4

The comparison of fluency in pre-tets and post-test at the experimental class


From the graphic above, the writer concluded that students score in fluency of speaking assessment was lack in pre-test. Most of students can not speak english well and do not remember what will say. But after giving treatment and post-test the students had can remember what will say and them can tell short story very well.

The maximumm score in fluency of speaking assessment was 20 and the minimum score was 5 . In pre-test the student has gotten score 5 there are 25 students, has gotten score 10 there are 8 students. But in post-test the students score has gotten 5 there are 1 srudent, has gotten score 10 there are 12 students, has goten score 15 there are 17 students, has gotten score 20 there are 4 students. Actually there is significant score between pre-test and post-test.

## Graphic 4.5

The comparison of pronunciation in pre-test and post-test at the experimental class


From the graphic above, the writer concluded that students score in pronunciation of speaking assessment was lack in pre-test. Most of students had can't to pronun their short story. But in posttest, there was improvement in the pronunciation. Most of students had can to pronun their short story. The maximum score in pronunciation of speaking assessment was 20 and the minimum was 5 . In pre-test the students has gotten score 5 there are 25 students and has gotten score 109 students. But in post-test the tsudents has gotten score 10 there are 19 students, the student has got score 15 there are 13 students and the students has got score 20 there are 2 students. And then, there significant score between pretest and post-tets.

Tabel 4.3
The student score of pre-test at the control class

| NO | NAME |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | TOTAL |  |  |  |
|  |  | G | V | C | F | P |  |
| 1 |  | 5 | 5 | 5 | 5 | 5 | 25 |
| 2 |  | 5 | 5 | 10 | 5 | 5 | 30 |
| 3 |  | 5 | 5 | 5 | 5 | 5 | 25 |
| 4 | S4 | 5 | 5 | 5 | 5 | 5 | 25 |
| 5 | S5 | 5 | 5 | 5 | 5 | 5 | 25 |
| 6 | S6 | 5 | 5 | 5 | 5 | 5 | 25 |
| 7 | S7 | 5 | 10 | 5 | 5 | 5 | 30 |
| 8 | S8 | 5 | 10 | 10 | 5 | 5 | 35 |
| 9 | S9 | 5 | 10 | 10 | 10 | 5 | 40 |


| 10 | S10 | 5 | 5 | 10 | 10 | 10 | 40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | S11 | 5 | 5 | 10 | 5 | 5 | 30 |
| 12 | S12 | 5 | 5 | 10 | 10 | 5 | 35 |
| 13 | S13 | 5 | 5 | 10 | 5 | 10 | 35 |
| 14 | S14 | 5 | 5 | 5 | 5 | 5 | 25 |
| 15 | S15 | 5 | 5 | 5 | 5 | 5 | 25 |
| 16 | S16 | 5 | 10 | 5 | 5 | 5 | 30 |
| 17 | S17 | 5 | 5 | 5 | 5 | 5 | 25 |
| 18 | S18 | 5 | 5 | 10 | 10 | 5 | 35 |
| 19 | S19 | 10 | 5 | 10 | 5 | 5 | 40 |
| 20 | S20 | 5 | 5 | 5 | 5 | 5 | 25 |
| 21 | S21 | 5 | 5 | 5 | 5 | 5 | 25 |
| 22 | S22 | 5 | 5 | 5 | 5 | 5 | 25 |
| 23 | S23 | 5 | 5 | 5 | 5 | 5 | 25 |
| 24 | S24 | 5 | 5 | 5 | 5 | 5 | 25 |
| 25 | S25 | 5 | 5 | 10 | 10 | 10 | 40 |
| 26 | S26 | 5 | 5 | 10 | 5 | 10 | 35 |
| 27 | S27 | 5 | 5 | 5 | 5 | 10 | 30 |
| 28 | S28 | 5 | 5 | 5 | 5 | 5 | 25 |
| 29 | S29 | 5 | 5 | 5 | 5 | 5 | 25 |
| 30 | S30 | 5 | 5 | 5 | 5 | 5 | 25 |
| 31 | S31 | 5 | 5 | 5 | 5 | 5 | 25 |
| 32 | S32 | 5 | 10 | 10 | 5 | 10 | 40 |
| 33 | S33 | 5 | 5 | 10 | 5 | 5 | 30 |
| 34 | S34 | 5 | 5 | 10 | 10 | 5 | 35 |
|  | N 34 |  |  |  |  |  | $\sum \mathbf{1 0 1 5}$ |

The table 4.3 above showed that the result of the students pre-test on the speaking scale criteria at the control class. the data showed the maximum score was 40 , and the minimum score was 25. 5 students who get mmaximum and 17 students who got the minimum score.

The result above showed about the average score pre-test at the control class was 29,85 .

Table 4.4
The students score of post-test at control class

| NO |  | ASPECT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| TOTAL |  |  |  |  |  |  |  |
|  |  |  | V | C | F | P |  |
| 1 | S 1 |  | 10 | 15 | 10 | 10 | 50 |
| 2 | S2 | 10 | 5 | 10 | 10 | 15 | 50 |
| 3 | S3 | 5 | 5 | 10 | 10 | 10 | 40 |
| 4 | S4 | 5 | 5 | 10 | 5 | 10 | 35 |
| 5 | S5 | 5 | 5 | 10 | 5 | 10 | 35 |
| 6 | S6 | 5 | 5 | 10 | 10 | 10 | 40 |
| 7 | S7 | 5 | 5 | 15 | 5 | 10 | 40 |
| 8 | S8 | 5 | 10 | 20 | 15 | 10 | 60 |
| 9 | S9 | 10 | 15 | 15 | 10 | 10 | 60 |
| 10 | S10 | 10 | 15 | 15 | 10 | 15 | 65 |
| 11 | S11 | 10 | 15 | 15 | 15 | 15 | 70 |
| 12 | S12 | 10 | 15 | 15 | 15 | 15 | 70 |


| 13 | S13 | 5 | 15 | 15 | 10 | 15 | 60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | S14 | 10 | 15 | 15 | 15 | 10 | 65 |
| 15 | S15 | 10 | 15 | 20 | 15 | 10 | 70 |
| 16 | S16 | 5 | 15 | 15 | 10 | 15 | 60 |
| 17 | S17 | 5 | 10 | 15 | 10 | 10 | 50 |
| 18 | S18 | 5 | 15 | 15 | 15 | 15 | 65 |
| 19 | S19 | 10 | 10 | 15 | 5 | 10 | 50 |
| 20 | S20 | 5 | 10 | 10 | 10 | 15 | 50 |
| 21 | S21 | 10 | 10 | 10 | 5 | 15 | 50 |
| 22 | S22 | 10 | 15 | 10 | 10 | 15 | 60 |
| 23 | S23 | 10 | 15 | 15 | 10 | 10 | 60 |
| 24 | S24 | 5 | 15 | 10 | 10 | 10 | 50 |
| 25 | S25 | 5 | 20 | 15 | 10 | 15 | 65 |
| 26 | S26 | 5 | 15 | 20 | 15 | 15 | 70 |
| 27 | S27 | 5 | 15 | 15 | 15 | 10 | 60 |
| 28 | S28 | 5 | 15 | 10 | 15 | 15 | 60 |
| 29 | S29 | 10 | 15 | 15 | 10 | 15 | 65 |
| 30 | S30 | 5 | 20 | 15 | 10 | 10 | 60 |
| 31 | S31 | 5 | 10 | 15 | 10 | 10 | 50 |
| 32 | S32 | 5 | 20 | 15 | 10 | 15 | 65 |
| 33 | S33 | 5 | 10 | 20 | 15 | 10 | 60 |
| 34 | S34 | 10 | 15 | 20 | 15 | 10 | 70 |
|  | $\mathrm{N}=34$ |  |  |  |  |  | $\sum 1930$ |
| Average |  |  |  |  |  |  | 56,76 |

The table 4.4 above showed that the result of the students post-test score on the criteria speaking scale at the control class control class. that the data showed the maximum score was 70 , and the minimum score was 35.5 students who got the maximum score and 2 students who got the minimum score.

The result above showed about the avarage score post-test at the control class was 56,76 .

Based on the explanation above, it showed the result of post-test at contro class got significant improvement after giving treatment, it seen from the avarage of post-test was better than the avarage of pre-test that $29,85<56,76$.

## B. Data Analysis

The data of the tests are compared in each group. It is done to know the improvement. To make easy in analysis of collecting data, the writer adopts the following steps:
a. Put the score into the table of data statistic
b. Put the score into the table of distribution frequency
c. Calculate the means of each group
d. Calculate the standard deviation of each group
e. Analyze the data and calculate them by using the formula of T-test

Here are the data of pre-test and post-test scores of experimental class and control class.

## 1. The mean of Experimental and Control Class

$M x=\frac{\sum x}{N x} \quad M y=\frac{\Sigma y}{N y}$
Where:
$M x \quad$ : Mean of experimental group
$\sum x$ : The Sum of Sample at Experimental Class
$N x \quad:$ The Number of Sample at Experimental Class
My : Mean of Control Class
$\Sigma y \quad:$ The Sum of Sample at Control Class
Ny : The Number of Sample at Control Class

## 2. The Standard Deviation

Standard Deviation of Experimental and Control Class

$$
M x=\sum x^{2}-\left(\frac{\sum x}{N x}\right)^{2} \quad M y=\sum y^{2}-\left(\frac{\sum y}{N y}\right)^{2}
$$

$\sum X^{2}$ : The Standard Deviation of Experimental Class
$x$ : Gain result of Experimental Class
$N x \quad$ : The Number of the Sample at Experimental Class
$\sum y^{2} \quad:$ The Standard Deviation of Control Class
$y \quad$ : Gain result of Control Class
Ny : The Number of Sample of Control Class

## 3. Significant Test ( t-test )

$$
t=\frac{M x-M y}{\sqrt{\left(\frac{\sum x^{2}+\sum y^{2}}{N x^{2}+N-2}\right)\left(\frac{1}{N x}+\frac{1}{N y}\right)}}
$$

Where:
$t \quad:$ The result of the two means
$M x \quad$ : The average of score experiment group
My : The average of score control group
$N \quad:$ The number of the subject
$x \quad$ : Deviation of each score $\mathrm{x}^{2}$ and y 1
$y \quad:$ Deviation of score $y^{2}$ and $y 1$
$\sum x^{2} \quad:$ Some of square deviation of control class
$\sum y^{2}$ : Some of squared deviation of control class
$N x \quad$ : Subject of experiment class
Ny : Subject of control class

## 4. T-Table

The writer after that found the t -count the writer calculated db ( Drajat Bersih ) or df ( Degree of Freedom ), which is formulated as follow :
$d f \quad:(\mathrm{Nx}+\mathrm{Ny}-2)$
$d f \quad:$ Degree of Freedom
$N x \quad$ : Number of the students in the Control Class
Ny : Number of the students in Experimental Class

This is the data of pre-test and post-test score of experimental class and control class

Table 4.5
The difference score pre-test and post-test at Experimental Class ( x )

| No | Name | Pre-Test <br> X | Post-Test <br> x2 | Gain <br> (x) | $(\mathrm{x})^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | S1 | 25 | 60 | 35 | 1225 |
| 2 | S2 | 30 | 65 | 35 | 1225 |
| 3 | S3 | 35 | 70 | 35 | 1225 |
| 4 | S4 | 40 | 75 | 35 | 1225 |
| 5 | S5 | 45 | 80 | 35 | 1225 |
| 6 | S6 | 40 | 70 | 30 | 900 |
| 7 | S7 | 30 | 75 | 45 | 2025 |
| 8 | S8 | 30 | 60 | 30 | 900 |
| 9 | S9 | 25 | 50 | 25 | 625 |
| 10 | S10 | 25 | 60 | 35 | 1225 |
| 11 | S11 | 30 | 70 | 40 | 1600 |
| 12 | S12 | 30 | 65 | 35 | 1225 |
| 13 | S13 | 35 | 60 | 25 | 625 |
| 14 | S14 | 25 | 65 | 40 | 1600 |
| 15 | S15 | 25 | 70 | 45 | 2025 |
| 16 | S16 | 25 | 60 | 35 | 1225 |
| 17 | S17 | 30 | 70 | 40 | 1600 |
| 18 | S18 | 35 | 75 | 40 | 1600 |
| 19 | S19 | 35 | 65 | 30 | 900 |
| 20 | S20 | 40 | 70 | 30 | 900 |
| 21 | S21 | 45 | 75 | 30 | 900 |
| 22 | S22 | 25 | 60 | 35 | 1225 |


| 23 | S23 | 25 | 60 | 35 | 1225 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 24 | S24 | 30 | 65 | 35 | 1225 |
| 25 | S25 | 35 | 70 | 35 | 1225 |
| 26 | S26 | 25 | 70 | 45 | 2025 |
| 27 | S27 | 25 | 60 | 35 | 1225 |
| 28 | S28 | 35 | 75 | 40 | 1600 |
| 29 | S29 | 35 | 60 | 25 | 625 |
| 30 | S30 | 30 | 60 | 30 | 900 |
| 31 | S31 | 25 | 65 | 40 | 1600 |
| 32 | S32 | 30 | 70 | 40 | 1600 |
| 33 | S33 | 20 | 65 | 45 | 2025 |
| 34 | S34 | 35 | 70 | 35 | 1225 |
|  | $\sum$ | $\mathbf{1 0 5 5}$ | $\mathbf{2 2 6 0}$ | $\mathbf{1 1 7 5}$ | $\mathbf{4 3 7 2 5}$ |

The difference score was the result from post-test score substract pre-test score. There was significant difference score between pre-test and post-test at the experimental class, the biggest different score was 45 and the lowest difference was 25 . All of students increased in their scores.

## Graphic 4.6

The difference score between pre-test and post-test of speaking assessment at the experimental classs.


Graphic 4.1 above showed that the result of the student pretest and post-test score on criteria speaking skill at the experimental class. that the data showed pre-test score, the maximum score was 45 , and the minimum score was 20 . Two students who got the maximum and one student who got the minimum score, and post-test score, the maximum score was 80 , and the minimum score was 50 . One student who got the maximum score and 1 student who got the minimum score.

Table 4.6
The difference score between pre-test and post-test at Control Class (y)

| No | Name | Pre-Test (y) | Post- <br> Test ( $\mathrm{y}^{2}$ ) | Gain (y) | $\left(\mathrm{y}^{2}\right)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | S1 | 25 | 50 | 25 | 625 |
| 2 | S2 | 30 | 50 | 30 | 900 |
| 3 | S3 | 25 | 40 | 15 | 225 |
| 4 | S4 | 25 | 35 | 10 | 100 |
| 5 | S5 | 25 | 35 | 10 | 100 |
| 6 | S6 | 25 | 40 | 15 | 225 |
| 7 | S7 | 30 | 40 | 10 | 100 |
| 8 | S8 | 35 | 60 | 25 | 625 |
| 9 | S9 | 40 | 60 | 20 | 400 |
| 10 | S10 | 40 | 65 | 25 | 625 |
| 11 | S11 | 30 | 70 | 40 | 1600 |
| 12 | S12 | 35 | 70 | 35 | 1225 |
| 13 | S13 | 35 | 60 | 25 | 625 |
| 14 | S14 | 25 | 65 | 40 | 1600 |
| 15 | S15 | 25 | 70 | 45 | 2025 |
| 16 | S16 | 30 | 60 | 30 | 900 |
| 17 | S17 | 25 | 50 | 25 | 625 |
| 18 | S18 | 35 | 65 | 25 | 625 |
| 19 | S19 | 40 | 50 | 10 | 100 |
| 20 | S20 | 25 | 50 | 25 | 625 |
| 21 | S21 | 25 | 50 | 25 | 625 |
| 22 | S22 | 25 | 60 | 35 | 1225 |


| 23 | S23 | 25 | 60 | 35 | 1225 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 24 | S24 | 25 | 50 | 25 | 625 |
| 25 | S25 | 40 | 65 | 25 | 625 |
| 26 | S26 | 35 | 70 | 35 | 1225 |
| 27 | S27 | 30 | 60 | 30 | 900 |
| 28 | S28 | 25 | 60 | 35 | 1225 |
| 29 | S29 | 25 | 65 | 40 | 1600 |
| 30 | S30 | 25 | 60 | 35 | 1225 |
| 31 | S31 | 25 | 50 | 25 | 625 |
| 32 | S32 | 40 | 65 | 25 | 625 |
| 33 | S33 | 30 | 60 | 30 | 900 |
| 34 | S34 | 35 | 70 | 35 | 1225 |
|  | $\sum$ | $\mathbf{1 0 1 5}$ | $\mathbf{1 9 3 0}$ | $\mathbf{9 2 0}$ | $\mathbf{3 1 2 0 0}$ |

The difference score was the result from post-test score substract pre-test score. There was significant difference score between pre-test and post-test at the control class, the biggest difference score was 45 and the lowest difference was 10 . All of students increased in their scores.

## Graphic 4.7

The difference score between pre-test and post-test of speaking test at the control class


Graphic 4.2 above showed that the result of the student pretest and post-test score on criteria speaking at the control class. that the data showed pre-test score, the maximum score was 40 and the minimum score was 25 . Five students who got the maximum score and 17 students who got minimum score, and post-test score, the maximum score was 70 and the minimum score was 35 . Five students who got the maximum score and two students who got the minimum score.

Table 2
The Result of Experimental Class (X1) and Control Class (Y2)

| Experimental <br> Class <br> ( $\mathrm{X}_{1}$ ) |  |  | Control Class$\left(Y_{2}\right)$ |  |  | $\mathrm{X}_{1}{ }^{2}$ | $Y_{2}^{2}$ | $X_{1} \bullet Y_{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No | Code <br> Number | $\mathrm{X}_{2}$ | No | Code <br> Number | $\mathrm{Y}_{2}$ |  |  |  |
| 1 | S1 | 60 | 1 | S1 | 50 | 3600 | 2500 | 3000 |
| 2 | S2 | 65 | 2 | S2 | 50 | 4225 | 2500 | 3250 |
| 3 | S3 | 70 | 3 | S3 | 40 | 4900 | 1600 | 2800 |
| 4 | S4 | 75 | 4 | S4 | 35 | 5625 | 1225 | 2625 |
| 5 | S5 | 80 | 5 | S5 | 35 | 6400 | 1225 | 2800 |
| 6 | S6 | 70 | 6 | S6 | 40 | 4900 | 1600 | 2800 |
| 7 | S7 | 75 | 7 | S7 | 40 | 5625 | 1600 | 3000 |
| 8 | S8 | 60 | 8 | S8 | 60 | 3600 | 3600 | 3600 |
| 9 | S9 | 50 | 9 | S9 | 60 | 2500 | 3600 | 3360 |
| 10 | S10 | 60 | 10 | S10 | 65 | 3600 | 4225 | 3900 |
| 11 | S11 | 70 | 11 | S11 | 70 | 4900 | 4900 | 4900 |
| 12 | S12 | 65 | 12 | S12 | 70 | 4225 | 4900 | 4550 |
| 13 | S13 | 60 | 13 | S13 | 60 | 3600 | 3600 | 3600 |
| 14 | S14 | 65 | 14 | S14 | 65 | 4225 | 4225 | 4225 |
| 15 | S15 | 70 | 15 | S15 | 70 | 4900 | 4900 | 4900 |
| 16 | S16 | 60 | 16 | S16 | 60 | 3600 | 3600 | 3600 |
| 17 | S17 | 70 | 17 | S17 | 50 | 4900 | 2500 | 3500 |
| 18 | S18 | 75 | 18 | S18 | 65 | 5625 | 4225 | 4875 |
| 19 | S19 | 65 | 19 | S19 | 50 | 4225 | 2500 | 3250 |


| 20 | S20 | 70 | 20 | S20 | 50 | 4900 | 2500 | 3500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | S21 | 75 | 21 | S21 | 50 | 5625 | 2500 | 3750 |
| 22 | S22 | 60 | 22 | S22 | 60 | 3600 | 3600 | 3600 |
| 23 | S23 | 60 | 23 | S23 | 60 | 3600 | 3600 | 3600 |
| 24 | S24 | 65 | 24 | S24 | 50 | 4225 | 2500 | 3250 |
| 25 | S25 | 70 | 25 | S25 | 65 | 4900 | 4225 | 4550 |
| 26 | S26 | 70 | 26 | S26 | 70 | 4900 | 4900 | 4900 |
| 27 | S27 | 60 | 27 | S27 | 60 | 3600 | 3600 | 3600 |
| 28 | S28 | 75 | 28 | S28 | 60 | 5625 | 3600 | 4500 |
| 29 | S29 | 60 | 29 | S29 | 65 | 3600 | 4225 | 3900 |
| 30 | S30 | 60 | 30 | S30 | 60 | 3600 | 3600 | 3600 |
| 31 | S31 | 65 | 31 | S31 | 50 | 4225 | 2500 | 3250 |
| 32 | S32 | 70 | 32 | S32 | 65 | 4900 | 4225 | 4875 |
| 33 | S33 | 65 | 33 | S33 | 60 | 4225 | 3600 | 3900 |
| 34 | S34 | 70 | 34 | S34 | 70 | 4900 | 4900 | 4900 |
| $\Sigma=2260$ |  |  | $\sum=1925$ |  |  | $\sum=143100$ | $\begin{gathered} \sum=1131 \\ 00 \end{gathered}$ | $\begin{gathered} \sum=128 \\ 210 \end{gathered}$ |

## C. Analyzing of the Data Research

## 1. The Mean of Control Class

To find the mean of control class, the writer used the following formula: $\quad M y=\frac{\sum y}{N y}$

My : Mean of Control Class
$\Sigma y \quad:$ The Sum of Control Class

$$
\begin{aligned}
& \text { Ny } \quad \begin{array}{l}
\text { : The Number of Sample at Control Class } \\
M y= \\
\\
\\
34 \\
= \\
\mathbf{9 2 0}
\end{array}
\end{aligned}
$$

To find the mean of experimental class, the writer used the following formula:

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

Mx : Mean of experimental class
$\sum x$ : The Sum of experimental class
$N x \quad$ : The Number of Sample at experimental class
Mx : $\frac{1175}{34}$
$=34,55$

## 2. The Standard Deviation

To calculate the standard Deviation of Control Class, the writer used the formula as follow:

$$
M y=\sum y^{2}-\left(\frac{\sum y}{N y}\right)^{2}
$$

| $\Sigma y^{2}$ | $:$ The Standard Deviation of Control Class |
| :--- | :--- |
| $y$ | $:$ Gain result of Control Class |
| $N y$ | $:$ The Number of the Sample at Experimental |

$$
\begin{aligned}
& =31200-\frac{(920)^{2}}{34} \\
& =31200-\frac{(846400)}{34} \\
& =31200-24894 \\
& =6306
\end{aligned}
$$

- The Standard Deviation Experimental Class

$$
M x=\sum x^{2}-\left(\frac{\sum x}{N x}\right)^{2}
$$

| $\sum x$ | $:$ The Standard Deviation of Experimental Class |
| :--- | :--- |
| $x$ | $:$ Gain Result of Experimental Class |
| $\sum x^{2}$ | $: 43725-(\underline{1175})^{2}$ | 34

$$
: 43725-\underline{1380625}
$$

$$
34
$$

$$
: 43725-40606
$$

$$
\text { : } 3119
$$

## 3. Significant test ( t-test)

$$
t=\frac{M x-M y}{\sqrt{\left(\frac{\sum x^{2}+\sum y^{2}}{N x^{2}+N-2}\right)\left(\frac{1}{N x}+\frac{1}{N y}\right)}}
$$

Where:
t : The result of the two means
$M x \quad$ : The average of score experiment group
My : The average of score control group
$\mathrm{N} \quad$ : The number of the subject
$x \quad$ : Deviation of each score $x$ and $y$
$y \quad$ : Deviation of score $y$ and $y$
$\sum \mathrm{x}^{2} \quad$ : Some of square deviation of control class
$\sum y^{2} \quad:$ Some of squared deviation of control class
Nx : Subject of experiment class
Ny : Subject of control class
$\mathrm{t}=\frac{34,55-27,05}{\sqrt{\left(\frac{6306+3119}{34+34-2}\right)\left(\frac{1}{34}+\frac{1}{34}\right)}}$
$=\frac{7,5}{\sqrt{71(0,058)}}$
$=\frac{7,5}{\sqrt{4,1748}}$
$=\frac{7,5}{2,0292}$
$=3,69$

## 4. T-Table

After the writer found the t -count ha calculated $d b$ ( Drajat Bebas ) or $d f$ ( Degree of Freedom ), which is formulated as follow:
$d f \quad:(\mathrm{Nx}+\mathrm{Ny}-2)$
$d f \quad:$ Degree of Freedom
$N x \quad$ : Number of the students in the Control Class
Ny : Number of the students in Experimental Class
$d f \quad:(34+34-2)=\mathbf{6 6}$

The result above showed about the score of sample both experimental and control class. the writer used 68 students as sample for research. 34 students from VIII D as experimental class and 34 students from VIII B as control class.

Comparing " t " has been tested in calculating ( $\mathrm{t}_{\mathrm{o}}=3,69$ ), and $\mathrm{DF}=66$, there is no DF for 66 , the writer used the closer "DF" from 60. So DF $=66$ which has been tasted on $t$-table $\left(t_{t}\right.$ $5 \%=2,00$ and $\left.t_{t} 1 \%=2,65\right)$ it can be knowen that $t_{o}>t_{t} 5 \%$ and $t_{o}>t_{t} 1 \%$, it means $2,00<2,65$.

## D. Interpretation of Data

The data showed that the mean of pre-test score obtained by students of VIII D as experimental class was 31,02 and pre-test scores obtained by students of VIII B as control class was 29,85 . The highest in the two classes that was class VIII D as experimental class got 45 and VIII B as control class got 40. The lowest score of pre-test in booth classes was 20 for experimental class and 25 for control class.

The data showed that the mean of post-test score obtained by students of VIII D as experimental class was 66,47 while VIII B as control class 56,76 . The highest score post-test of VIII D as experimental class got 80 and VIII B as control class got 70. The lowest score post-test as experimental class 60 and control class 50.

By $\mathrm{DF}=68$ and analyzed by using t -test, the writer tasted there was and effect in using short story through audio material because
t -count was higher that t -table in significant $5 \%$ was 2,00 and significant level $1 \%$ was 2,65 .

From the interpretation above t-count> t-table there was significant effect using short story through audio material to increas speaking skill.

Testing hypothesis was to know the significant of both variables, and tested as follow:S

$$
\begin{aligned}
& \mathrm{Ha}=\mathrm{t}_{\mathrm{o}}>\mathrm{t}_{\mathrm{t}} \\
& \mathrm{Ho}=\mathrm{t}_{\mathrm{o}}<\mathrm{t}_{\mathrm{t}}
\end{aligned}
$$

Notes:
Ha= Alternative Hypothesis
$\mathrm{Ho}=$ Null Hypothesis
$t_{0}=$ The value of $t$-observation
$t_{t}=$ The value of $t$-table

To prove the data hypothesis, the data obtained from an experimental class and control class are calculated by usimg t-test formula with assumption as follows:
if $t_{0}>t_{t}$ : the alternative hypothesis is accepted it means there was significant effect by using short story in teaching speaking skill at VIII D as experimental class and VIII B as control class.
from the result calculation above, the value of $t_{0}=3,69$ the degree of freedom $(\mathrm{df})=68$. The writer use degree of significant $5 \%=2,00$ and $1 \%=2,65$. It means that Ha (Alternative Hypothesis) of the research is accepted and Ho (Null Hypothesis)is rejected.

After getting the data, the writer compared it $t_{t}$ both degree of significant $5 \%$ and $1 \% \quad t_{0}>2,00<3,69>2,65$. It means (Alternative Hypothesis) of the research is accepteed. The result on research about increasing speaking skill using short story through audio material has positive effect and accepted in teaching speaking skill.

