## CHAPTER IV

## RESEARCH FINDING AND DISCUSSION

This chapter, the researcher presents the description data which includes topics related to research finding that are the description of data, hypothesis testing and discussion.

## A. The Description of Data

The researcher wants to know the effectiveness of using GIST Strategy (Generating Interaction between Schemata and Text) on students' reading comprehension. In this study, the researcher presented the data of students' score in reading comprehension between students who taught by using GIST Strategy and students who taught without any strategy. Here, the researcher wanted to know the effectiveness on GIST Strategy on students' reading comprehension of the seventh graders at MTs Aswaja Tunggangri. The effectiveness can be seen from the significant different score of students reading comprehension before and after being taught by using GIST Strategy. Here, the researcher gave pretest and posttest to the experimental class and control class.

First, the researcher makes the criteria of students' score to describe and easy to categorize the students' scores. This criteria aims to know the students' score of reading comprehension is better or not. The researcher classifies the categories into five variances. The categories will be represented below:

Table 4.1 Scores Criteria

| NO | Interval class | Criteria |
| :---: | :---: | :---: |
| 1. | $90-100$ | Very Good |
| 2. | $70-89$ | Good |
| 3. | $50-69$ | Fair |
| 4. | $30-49$ | Poor |
| 5. | $0-29$ | Very poor |

From the table above, the researcher explains the criteria of students' score in reading comprehension in both experimental and controlled class in order to know the percentages of students' score both pre-test and post-test. The results of the test will be presented below:

1. The Data of Experimental class

The researcher gave pretest and posttest in experimental class. The pretest and posttest score in experimental class can be seen below:

Table 4.2 Pretest and Posttest Score in Experimental Class

| No | Name | Pretest | Posttest | Gain Score |
| :---: | :--- | :---: | :---: | :---: |
| 1 | ASY | 70 | 85 | 15 |
| 2 | AFR | 50 | 60 | 10 |
| 3 | ALA | 75 | 85 | 10 |
| 4 | ATN | 50 | 75 | 25 |
| 5 | BFF | 60 | 70 | 10 |
| 6 | EP | 65 | 80 | 15 |
| 7 | FNA | 80 | 95 | 15 |
| 8 | KWP | 35 | 55 | 20 |
| 9 | MAK | 45 | 70 | 25 |
| 10 | MFS | 55 | 70 | 15 |
| 11 | MMR | 70 | 85 | 15 |
| 12 | MNF | 75 | 90 | 15 |
| 13 | NCP | 65 | 85 | 20 |
| 14 | PHKZ | 60 | 75 | 15 |
| 15 | RAFJ | 45 | 65 | 20 |
| 16 | SNLA | 60 | 65 | 5 |
| 17 | SNIO | 45 | 70 | 25 |
| 18 | UN | 75 | 80 | 5 |


| 19 | VPA | 70 | 85 | 15 |
| :---: | :--- | :---: | :---: | :---: |
| 20 | YSN | 70 | 75 | 5 |
| 21 | MDK | 60 | 75 | 15 |
| 22 | MFN | 80 | 85 | 5 |
| 23 | HNS | 65 | 70 | 5 |
| 24 | NEN | 75 | 85 | 10 |
| 25 | MLRA | 80 | 80 | 0 |
| TOTAL |  | $\mathbf{1 5 8 0}$ | $\mathbf{1 9 1 5}$ | $\mathbf{3 3 5}$ |

The first data that will explain is the data pretest score in experimental class that conducted on $23^{\text {th }}$ March 2019 in VII A class which consist of 25 students. There were 20 items in the form of multiple choice items about descriptive text and the students were given 45 minutes to do the test. After conducting pre-test, the researcher made the descriptive statistic of the data. Descriptive statistics are used to describe the basic futures of data in this study. The researcher used SPSS windows 16.0 version to formulate the descriptive statistics. It means that the researcher measured central tendency of pre-test score. Measures of central tendency are used to know whether the data values cluster around the mean. They are included mean, median, and mode. The table of descriptive statistic will be presented below:

Table 4.3 Descriptive Statistics of Pretest in Experimental Class Statistics
Pretest_exp

| N $\quad$ Valid | 25 |
| :--- | :--- | ---: |
| Missing | 0 |
| Mean | 63.20 |
| Median | 65.00 |
| Mode | $60^{2}$ |
| Minimum | 35 |
| Maximum | 80 |

## Statistics

Pretest_exp

| $\mathbf{N} \quad$ Valid | 25 |
| :--- | ---: |
| $\quad$ Missing | 0 |
| Mean | 63.20 |
| Median | 65.00 |
| Mode | $60^{a}$ |
| Minimum | 35 |
| Maximum | 80 |

Based on the table above, it shows that the mean score in pretest is 63.20. It means that the average score from all of students is 63.20 . Based on the criteria of the students score, 63.20 is enough score

Table 4.4 Frequency of Pretest Score in Experimental Class

| Pretest_exp |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| Valid | 35 | 1 | 4.0 | 4.0 | 4.0 |
|  | 45 | 3 | 12.0 | 12.0 | 16.0 |
|  | 50 | 2 | 8.0 | 8.0 | 24.0 |
|  | 55 | 1 | 4.0 | 4.0 | 28.0 |
|  | 60 | 4 | 16.0 | 16.0 | 44.0 |
|  | 65 | 3 | 12.0 | 12.0 | 56.0 |
|  | 70 | 4 | 16.0 | 16.0 | 72.0 |
|  | 75 | 4 | 16.0 | 16.0 | 88.0 |
|  | 80 | 3 | 12.0 | 12.0 | 100.0 |
|  | Total | 25 | 100.0 | 100.0 |  |

Based on the table above, the students who got the bad scores are 4 students or ( $16 \%$ ). Then, students who got enough score are 10 students ( $40 \%$ ). Also, students who got good score are 11 students (44\%).

After the researcher calculated the pre-test scores from experimental class, then the researcher calculated the post-test scores one. The test was conducted on $10^{\text {th }}$ April 2019in the same class. The test used for either pretest or posttest were different question, but the indicators tasted was same.This test was conducted after giving the treatment in experimental class. The aim was to know it can be difference between before and after being taught by using GIST Strategy. To know the students'score, the researcher measured central tendency and frequency of the score. The table of descriptive statistic will be presented below:

Table 4.5 Descriptive Statistics of Posttest in Experimental Class
Statistics
Posttest_exp

| N $\quad$ Valid | 25 |
| :--- | ---: |
| $\quad$ Missing | 0 |
| Mean | 76.60 |
| Median | 75.00 |
| Mode | 85 |
| Minimum | 55 |
| Maximum | 95 |

From the table above, the researcher can conclude that the mean of posttest in experimental class is 76.60 . Based on the criteria of students' score, the mean has a good score.

Table 4.6 Frequency of Posttest Score in Experimental Class

$\left.$| Posttest_exp |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | Frequency | Percent | Valid Percent |  | | Cumulative |
| :---: |
| Percent | \right\rvert\, | Valid | 55 |
| :--- | :--- |
|  | 60 |

The table shows that students who got enough are 4 students (16 $\%$ ), while students who got good score are 19 students (76\%). It means that the post test of students in experimental class got higher score than pretest. Most of them got a good score and 2 students (8\%) got very good score based on the criteria students' score above.
2. The Data of Control Class

The researcher also conducted the test in control class. The test was same as the experimental class which the question consist of 20 items in the form of multiple choice items about descriptive text and the students were given 45 minutes to do the test.The pretest and posttest score in control class can be seen below:

Table 4.7 The Pretest and Posttest Score in Contol Class

| No | Name | Pretest | Posttest | Gain Score |
| :---: | :--- | :---: | :---: | :---: |
| 1 | AARH | 60 | 65 | 5 |
| 2 | AB | 70 | 65 | -5 |
| 3 | ARNH | 70 | 75 | 5 |
| 4 | AS | 50 | 55 | 5 |


| 5 | AP | 55 | 65 | 10 |
| :---: | :--- | :---: | :---: | :---: |
| 6 | ASMA | 45 | 55 | 10 |
| 7 | AIP | 55 | 75 | 20 |
| 8 | AAA | 75 | 80 | 5 |
| 9 | BA | 40 | 50 | 10 |
| 10 | DAW | 65 | 70 | 5 |
| 11 | DAK | 70 | 75 | 5 |
| 12 | DF | 55 | 45 | -10 |
| 13 | DR | 50 | 55 | 5 |
| 14 | DEN | 55 | 65 | 10 |
| 15 | EP | 75 | 80 | 5 |
| 16 | FBS | 60 | 75 | 15 |
| 17 | FBM | 45 | 55 | 10 |
| 18 | GL | 40 | 80 | 0 |
| 19 | JS | 65 | 70 | 15 |
| 20 | MHB | 30 | 45 | 5 |
| 21 | AS | 70 | 60 | 15 |
| 22 | ANZ | $\mathbf{1 2 8 0}$ | $\mathbf{1 4 1 5}$ | -10 |
|  | TOTAL | $\mathbf{1 3 5}$ |  |  |

The pretest was conducted at on $21^{\text {st }}$ March 2019 in VII B class. Then, the researcher calculated the score to know the descriptive statistics, it can be seen below:

Table 4.8 Descriptive Statistics of Pretest in Control Class

## Statistics

## Pretest control

| $\mathbf{N} \quad$ Valid | 22 |
| :--- | ---: |
| Missing | 3 |
| Mean | 58.18 |
| Median | 57.50 |
| Mode | $55^{2}$ |
| Minimum | 30 |
| Maximum | 80 |

Based on the table above, it shows that the mean score in pretest is 58.18. Based on the criteria of the students score, 58.18 is enough score.

Table 4.9 Frequency of Pretest Score in Control Class

| Pretest control |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 30 | 1 | 4.0 | 4.5 | 4.5 |
|  | 40 | 2 | 8.0 | 9.1 | 13.6 |
|  | 45 | 2 | 8.0 | 9.1 | 22.7 |
|  | 50 | 2 | 8.0 | 9.1 | 31.8 |
|  | 55 | 4 | 16.0 | 18.2 | 50.0 |
|  | 60 | 2 | 8.0 | 9.1 | 59.1 |
|  | 65 | 2 | 8.0 | 9.1 | 68.2 |
|  | 70 | 4 | 16.0 | 18.2 | 86.4 |
|  | 75 | 2 | 8.0 | 9.1 | 95.5 |
|  | 80 | 1 | 4.0 | 4.5 | 100.0 |
| Total |  | 25 | 100.0 | 100.0 |  |

Based on the table above, there are some students who got bad score in this test. It means that they failed in this test because they got bad score. There are 5 students ( $22,7 \%$ ). But some students got enough score in this test. There are 10 students (45,5\%). Finally, most students got good score in this test, there are 7 students ( $31,8 \%$ ).

Then, the researcher calculated the post test scores from control class. The test was conducted on $09^{\text {th }}$ April 2019 in the same class. The test was same with experiment class. The test used for either pretest or posttest were different question, but the indicators tasted was same.

Table 4.10 Descriptive Statistics of Posttest Score in Control Class Statistics
Posttest control

| N $\quad$ Valid | 22 |
| :--- | ---: |
| $\quad$ Missing | 3 |
| Mean | 64.32 |
| Median | 65.00 |
| Mode | 55 |
| Minimum | 45 |
| Maximum | 80 |

Based on the table above, it shows that the mean score in posttest is 64.32 which is enough score.

Table 4.11 Frequency of Posttest Score in Control Class
Posttest control

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 45 | 2 | 8.0 | 9.1 | 9.1 |
|  | 50 | 1 | 4.0 | 4.5 | 13.6 |
|  | 55 | 5 | 20.0 | 22.7 | 36.4 |
|  | 60 | 1 | 4.0 | 4.5 | 40.9 |
|  | 65 | 4 | 16.0 | 18.2 | 59.1 |
|  | 70 | 2 | 8.0 | 9.1 | 68.2 |
|  | 75 | 4 | 16.0 | 18.2 | 86.4 |
|  | 80 | 3 | 12.0 | 13.6 | 100.0 |
| Total |  | 100.0 | 100.0 |  |  |

Based on the table above, the students who got the bad score are 2 students ( $9,1 \%$ ) but there is a student got very good score. Then, students who got enough score are 11 students ( $49,9 \%$ ). Also, students who got good score are 9 students ( $40,9 \%$ ).

## B. Hypothesis Testing

In this research, hypothesis testing is used to answer research problem. It is aimed to prove whether there is significant different score between the students who were taught and without taught by using GIST Strategy.The researcher used SPSS 16.0 to measured and saw the statistical test in independent sample t-test, because the samples are different class. Before compute the t -test, the researcher did the gained score analysis to know the homogeneity testing using F test (Levene's Test), to know whether to use Equal Variance Assumed (If the variance is the same) or use Equal Variance Not Assumed (If the variance is different). The hypotheses in F test can be seen bellow:

1. Ho: both variance are the same (experimental and control class).
2. Ha: both variance are different (experimental and control class).

Here, the results of independent sample test can be seen bellow:

Table 4.12 Group of Statistics from Gained Score
Group Statistics

| Class | N | Mean | Std. Deviation | Std. Error <br> Mean |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| The Result of | Experiment | 25 | 13,4 | 9.760 | 1.952 |
| Reading | Control | 22 | 6,14 | 11.265 | 2.402 |

Table 4.13 Independent Sample Test from Gained Score
Independent Samples Test

|  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | Sig. | T | df | Sig. (2tailed) | Mean <br> Difference | Std. Error Difference | $95 \%$ <br> Confidence Interval of the Difference |  |
|  |  |  |  |  |  |  |  | Lower | Upper |
| Gained_Score Equal variances assumed | 733 | . 396 | 4.006 | 45 | . 000 | 12.282 | 3.066 | 6.106 | 18.457 |
| Equal variances not assumed |  |  | $3.969$ | $41.907$ | $.000$ | $12.282$ | 3.095 | 6.036 | 18.528 |

## C. Discussion

Ho is accepted if $\mathrm{F}>0.05$. Then, Ho is rejected if $\mathrm{F}<0.05$. According to the table 4.13 above, it shows that F is 0,733 . It means the $\mathrm{F}(0,733)$ is bigger than 0.05 and Ho is accepted. It can be concluded that both variance (experimental and control class) are the same. The result is the researcher used Equal Variance Assumed in making decision of T-test.

First, see the hypothesis testing of this study before explains the table above, the hypothesis testing of this study is mentioned as follows:

1. If the significant level is bigger than significant value, the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is
accepted. It means that there is different score between experiment class and control class. And the different is significant.
2. If the significant level is lower than significant value, the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected. It means that there is not any different score between experiment class and control class. And the different is not significant. According to statement above, the basic statement in t-test is Ho is accepted if P value > 0.05 and Ho is rejected if P value < 0.05 . Here, from the table 4.13 above, the score of P value (Sig. (2-tailed)) is 0.000 and the significant level is 0.05 . It can be concluded that significant value ( 0.000 ) is smaller than the significant level (0.05). In other words, Ho is rejected and Ha is accepted. It means that there is different score in the students' reading comprehension between experimental group and control group.

According to the table 4.12 (Group Statistics) above, it shows that there is different in mean of gained score in both experimental class and controlled class, also the mean of gained score in experimental class is bigger than the mean of control class. The mean of gained score in experimental group is 13.4 and 6.14 is the mean of gained score in controlled group. Then, the mean of experimental class after taught by using GIST Strategyis 76.60 and the mean of control class after taught without using GIST Strategy (using conventional learning method) is 64.32.The mean difference is 12.282 and the interval of the differences ranged from 6.106 to 18.457 . Finally, taught by using GIST Strategy in the students'
reading comprehension is effective for the seventh grader of MTs Aswaja Tunggangri.

From the result of the research finding above, it shows that there is any significant different score between teaching reading comprehension by using GIST Strategy and without using GIST Strategy. The researcher knew after calculated pretest and posttest score from both experimental class and contol class. The mean of the students who were taught by using GIST Strategy (experimental class) are 63.20 in pre-test and 76.60 in post-test. The mean of the students who were not taught by using GIST Strategy (control class) are 58.18 in pre-test and 64.32 in post-test, and the result of the mean difference is 12.282 .

Based on the research conducted at MTs Aswaja Tunggangri, it can be inferenced that teaching students by using GIST Strategy is better than students who are not. It means that GIST Strategy is effective to use in teaching reading comprehension. According Frey, Fisher and Hernandez (2003) GIST summaries require students to pare down information into a thirty word summary. The process help students better comprehend content material. And Richardson, Morgan and Fleener (2009) say GIST is a great tool for scaffolding the difficult skill of summarizing. From those expert statements, it means that this strategy is helpful when the students read a text, they can identify the main idea. When they have some difficult to summarizing text it can be helpful for them. So, it can be used to improve the students understanding and memory of what they have read.

