## CHAPTER IV

## RESEARCH FINDINGS AND DISCUSSION

This chapter the researcher presents the findings which have been collected during research and discussion about the data of the research.

## A. Research Findings

The aim of the research was to obtain whether there was a significant effect of students' speaking skill taught by using Time Token Arends Technique at the second grade of Junior High School of MTs Assyafi'iyah Gondang Tulungagung. The data of this research were taken from the test.

The data were the students' scores of speaking skill improvement from pre-test to post-test scores of both experimental and control classes. Before giving post-test, the researcher gave pre-test to all of samples in both class. The speaking result was evaluated by concerning five components: pronunciation, grammar, vocabulary, fluency, and comprehension. Each component had its scores. The effectiveness can be seen from the significant different score of students' speaking skill before and after being taught by using Time Token Arends Technique.

To know the students' mastery whether it was good or not, the researcher gave category as follows: (see table 4.1)

Table 4.1 Rating Scale

| No. | Range of Score | Criteria |
| :---: | :---: | :---: |
| 1 | $81-100$ | Excellent |
| 2 | $61-80$ | Good |
| 3 | $41-60$ | Enough/Fair |
| 4 | $0-40$ | Poor |

## 1. The data of experimental class

After conducting pre-test and post-test for experimental class, the researcher obtained the data. The data are as follows:

Table 4.2 Students' speaking skill score before and after being taught using Time Token Arends Technique

| No. | Name | Pre-Test Score | Post-Test Score |
| :---: | :---: | :---: | :---: |
| 1 | A1 | 56 | 64 |
| 2 | A2 | 44 | 60 |
| 3 | A3 | 40 | 52 |
| 4 | A4 | 40 | 56 |
| 5 | A5 | 44 | 64 |
| 6 | A6 | 52 | 80 |
| 7 | A7 | 48 | 68 |
| 8 | A8 | 36 | 52 |
| 9 | A9 | 40 | 60 |
| 10 | A10 | 52 | 80 |
| 11 | A11 | 36 | 52 |
| 12 | A12 | 44 | 60 |
| 13 | A13 | 56 | 64 |
| 14 | A14 | 60 | 76 |
| 15 | A15 | 56 | 80 |
| 16 | A16 | 48 | 60 |
| 17 | A17 | 40 | 60 |
| 18 | A18 | 36 | 52 |
| 19 | A19 | 44 | 60 |
| 20 | A20 | 40 | 60 |
| 21 | A21 | 44 | 64 |
| 22 | A22 | 44 | 64 |
| 23 | A23 | 44 | 72 |


| 24 | A24 | 44 | 56 |
| :---: | :---: | :---: | :---: |
| 25 | A25 | 60 | 84 |
| 26 | A26 | 52 | 80 |

Based on the table 4.2 there were 26 students as samples of the research.
The descriptive statistic of experimental class is as follows:
a. Pre-test of experimental class

The researcher used SPSS 20 version to know he descriptive statistic and the frequency of students' pre-test in experimental class. The frequency divided into four criterions: excellent, good, enough/fair, poor. (See table 4.1). The result of the calculation is as follows:

Table 4.3 Descriptive Statistic of Pre-Test

Descriptive Statistics

|  | N | Minimum | Maximum | Sum | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Pretest <br> Valid N <br> (listwise) | 26 | 36 | 60 | 1200 | 46.15 | 7.265 |

Based on the table above, it showed that minimum score of pretest was 36 , the maximum 60, and the mean was 46.15 .

Table 4.4 Frequency of Students' Speaking Skill before taught by using Time Token Arends Technique

| Pretest |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 36 | 3 | 11.5 | 11.5 | 11.5 |
|  | 40 | 5 | 19.2 | 19.2 | 30.8 |
|  | 44 | 8 | 30.8 | 30.8 | 61.5 |
|  | 48 | 2 | 7.7 | 7.7 | 69.2 |
|  | 52 | 3 | 11.5 | 11.5 | 80.8 |
|  | 56 | 3 | 11.5 | 11.5 | 92.3 |
|  | 60 | 2 | 7.7 | 7.7 | 100.0 |
|  | Total | 26 | 100.0 | 100.0 |  |

From the table 4.4 the frequency of pretest score of experimental class before being distributed there are 8 students getting score between $0-40$, which means that the students' speaking ability was poor. 18 students getting score between $41-60$ which means that on the students' speaking skill is enough/fair.

There were 3 students who got score 36 (11.5\%). 5 students got score 40 (19.2\%). 8 students got score 44 ( $30.8 \%$ ). 2 students got score 48 ( $7.7 \%$ ). 3 students got score 52 (11.5\%). 3 students got score 56 (11.5\%). 2 students got score $60(7.7 \%)$. The highest frequency was in score 44 ( 8 students).
a. Post-test of experimental class

The researcher used SPSS 20 version to know the descriptive statistic and the frequency of students' post-test in experimental class. The frequency divided into four categories excellent, good, enough/fair, poor (see table 4.1). The result of the calculation is as follows:

Table 4.5 Descriptive Statistics of Post-Test
Descriptive Statistics

|  | N | Minimum | Maximum | Sum | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Posttest <br> Valid N <br> (listwise) | 26 | 52 | 84 | 1680 | 64.62 | 9.908 |

Based on the table 4.5 above, it showed that the minimum score of post-test was
52 , the maximum score was 84 , and the mean was 64.62 .
Table 4.6 The Frequency of Students' Speaking Skill after taught by using Time Token Arends Technique

Posttest

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 52 | 4 | 15.4 | 15.4 | 15.4 |
|  | 56 | 2 | 7.7 | 7.7 | 23.1 |
|  | 60 | 7 | 26.9 | 26.9 | 50.0 |
|  | 64 | 5 | 19.2 | 19.2 | 69.2 |
|  | 68 | 1 | 3.8 | 3.8 | 73.1 |
|  | 72 | 1 | 3.8 | 3.8 | 76.9 |
|  | 76 | 1 | 3.8 | 3.8 | 80.8 |
|  | 80 | 4 | 15.4 | 15.4 | 96.2 |
|  | 84 | 1 | 3.8 | 3.8 | 100.0 |
|  | Total | 26 | 100.0 | 100.0 |  |

From the table 4.6 the frequency of post-test score of experimental class after being distributed there are 13 students getting score between $41-60$, which means the students speaking skill was enough/fair. 12 students getting score between $61-80$, which means that on the students speaking skill is good. 1
students getting score between $81-100$, which means that on the students speaking ability is excellent.

There were 4 students got score 52 ( $15.4 \%$ ). 2 students got score 56 (7.7\%). 7 students got score 60 ( $26.9 \%$ ). 5 students got score 64 (19.2\%). 1 students got score $68(3.8 \%) .1$ students got score 72 (3.8\%). 1 students got score 76 (3.8\%). 4 students got score 80 ( $15.4 \%$ ). 1 students got score 84 (3.8\%). The highest frequency was in score 60 ( 7 students).
2. The data of control class

After conducting pre-test and post-test for control class, the researcher obtained the data. The data are as follows:

Table 4.7 Student's speaking ability score before being taught without using Time Token Arends Technique

| No. | Name | Pre-Test Score | Post-Test Score |
| :---: | :---: | :---: | :---: |
| 1 | A1 | 44 | 44 |
| 2 | A2 | 44 | 44 |
| 3 | A3 | 40 | 52 |
| 4 | A4 | 40 | 44 |
| 5 | A5 | 52 | 68 |
| 6 | A6 | 40 | 44 |
| 7 | A7 | 48 | 52 |
| 8 | A8 | 44 | 52 |
| 9 | A9 | 36 | 40 |
| 10 | A10 | 40 | 44 |
| 11 | A11 | 52 | 52 |
| 12 | A12 | 60 | 68 |
| 13 | A13 | 52 | 60 |
| 14 | A14 | 44 | 48 |
| 15 | A15 | 44 | 52 |
| 16 | A16 | 44 | 52 |
| 17 | A17 | 40 | 44 |
| 18 | A18 | 40 | 44 |
| 19 | A19 | 36 | 40 |


| 20 | A20 | 52 | 52 |
| :--- | :--- | :--- | :--- |
| 21 | A21 | 40 | 44 |
| 22 | A22 | 36 | 44 |
| 23 | A23 | 36 | 40 |
| 24 | A24 | 40 | 40 |
| 25 | A25 | 40 | 44 |
| 26 | A26 | 40 | 48 |

Based on the table 4.7 there were 26 students as samples of the research. The descriptive statistic of experimental class is as follows:
a. Pre-test of control class

The researcher used SPSS 20 version to know the descriptive statistic and the frequency of students' pre-test in control class. The frequency divided into four criterions: excellent, good, enough/fair, poor. (See table 4.1). The result of the calculation is as follows:

Table 4.8 Descriptive Statistic of Pre-Test

Descriptive Statistics

|  | N | Minimum | Maximum | Sum | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Pretest <br> Valid N <br> (listwise) | 26 | 36 | 60 | 1124 | 43.23 | 6.095 |

Based on the table 4.8 above, it showed that the minimum score of pre-test was 36 , the maximum score was 60 , and the mean was 43.23 .

Table 4.9 Frequency of Students' Pretest in Control Class

From the table 4.9 the frequency of pre-test score of control class there are 14 students getting score between $0-40$, which means that the students' speaking skill was poor, 12 students getting score between $41-60$, which means that the students' speaking skill is enough/fair.

There were 4 students got score 36 (15.4\%). 10 students got score 40 (38.5\%). 6 students got score 44 (23.1\%). 1 students got score 48 (3.8\%). 4 students got score 52 ( $15.4 \%$ ). 1 student got score 60 (3.8\%). The highest frequency was in score 40 (10 students).
b. Post-test of control class

The researcher used SPSS 20 version to know the descriptive statistic and the frequency of students' post-test in control class. The frequency divided into four criterions: excellent, good, enough/fair, poor. (See table 4.1). The result of the calculation is as follows:

Table 4.10 Descriptive Statistic of Post-Test

Descriptive Statistics

|  | N | Minimum | Maximum | Sum | Mean | Std. <br> Deviation |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Posttest <br> Valid N <br> (listwise) | 26 | 40 | 68 | 1256 | 48.31 | 7.667 |

Based on the table above it showed that the minimum post-test score in control class was 40 the maximum score was 68 and the mean was 48.31 .

Table 4.11 The Frequency of Students' Post-Test in Control Class

Posttest

|  | Frequency | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :---: | ---: | ---: | ---: | ---: |
| 40 | 4 | 15.4 | 15.4 | 15.4 |
| 44 | 10 | 38.5 | 38.5 | 53.8 |
| 48 | 2 | 7.7 | 7.7 | 61.5 |
| Valid | 7 | 26.9 | 26.9 | 88.5 |
| 62 | 1 | 3.8 | 3.8 | 92.3 |
| 68 | 2 | 7.7 | 7.7 | 100.0 |
| Total | 26 | 100.0 | 100.0 |  |

From the table above the frequency of post-test score of control class there are 4 students getting score between $0-40$ which means that the students' speaking skill was poor. 20 students getting score between $41-60$ which means that the students' speaking skill is enough/fair. 2 students getting score between $61-80$ which means that the students' speaking skill is good.

There were 4 students got score 40 ( $15.4 \%$ ). 10 students got score 44 (38.5\%). 2 students got score 48 ( $7.7 \%$ ). 7 students got score 52 ( $26.9 \%$ ). 1
student got score 60 (3.8\%). 2 students got score 68 ( $7.7 \%$ ). The highest frequency in post-test control is 44 ( 10 students).

## B. Normality and Homogeneity Testing

## 1. Normality Testing

Normality testing is important in this research or needed to find out whether the data is in normal distribution or not. To know the normality the researcher used One-Sample Kolmogorov-Smirnov test in SPSS 20 with significance value $(\alpha)=0,05$.

### 1.1 Normality Testing of Experimental Class

Table 4.12 The Result of Normality Testing Experimental Class

One-Sample Kolmogorov-Smirnov Test

|  | Pretest | Posttest |
| :---: | :---: | :---: |
| N | 26 | 26 |
| Normal Parameters a,b Mean | 46.15 | 64.62 |
| Normal Parameters Std. Deviation | 7.265 | 9.908 |
| Most Extreme Absolute | . 232 | . 217 |
| Most Extreme Positive | . 232 | . 217 |
| Differences Negative | -. 105 | -. 132 |
| Kolmogorov-Smirnov Z | 1.183 | 1.107 |
| Asymp. Sig. (2-tailed) | . 122 | . 172 |

a. Test distribution is Normal.
b. Calculated from data.

Based on the table above is known that the significant values of experimental class for pre-test and post-test are 0.122 and 0.172 . The significance values of both pre-test and post-test are bigger than 0.050. It means that the data of experimental class has normal distribution.

### 1.2 Normality Testing of Control Class

Table 4.13 The Result of Normality Testing Control Class

One-Sample Kolmogorov-Smirnov Test

|  |  | Pretest | Posttest |
| :--- | :--- | ---: | ---: |
| N |  | 26 | 26 |
| Normal | Mean | 43.23 | 48.31 |
| Parameters ${ }^{\text {a,b }}$ | Std. Deviation | 6.095 | 7.667 |
| Most Extreme | Absolute | .240 | .251 |
| Differences | Positive | Negative | .240 |
| Kolmogorov-Smirnov Z | -.144 | .251 |  |
| Asymp. Sig. (2-tailed) | 1.226 | 1.289 |  |

a. Test distribution is Normal.
b. Calculated from data.

Based on the table above is known that the significant values of control class for pre-test and post-test are 0.099 and 0.075 . The significance values of both pre-test and post-test are bigger than 0.050 . It means that the data of control class has normal distribution.

## 2. Homogeneity Testing

Homogeneity testing is intended to show that two or more groups of the data samples having the same variance. To know the homogeneity the researcher used Test of Homogeneity of Variance in SPSS 20 with significance value $(\alpha)=$ 0,05.

Table 4.14 The Result of Homogeneity of Variances

## Test of Homogeneity of Variances

Score Posttest

| Levene Statistic | df1 | df2 | Sig. |
| ---: | ---: | ---: | ---: |
| 1.908 |  | 1 |  |

Based on the table above is known that the significance value of pot-test is 0.173 . As on the basic decision making in homogeneity testing, if the significance value is bigger than 0.050 then the data distribution is homogeneous. It can be concluded that significance value that is 0.173 is bigger than 0.050 and the data distribution is homogeneous.

## C. Data Analysis

In this research the researcher use Quantitative data analysis by using statistical computation because the data in the form of numeric data. In this research to collecting the data by comparing the first data (pre-test) and the second data (post-test) to see or to know the significant different by given treatment.

In this study, the researcher used T-Test through SPSS 20 version to analyze the data. If the result is lower than at the level of significance that is 0,05 the null hypothesis (Ho) can't be rejected indicating that Time Token Arends technique is not effective in teaching learning speaking' skill. While, if it is bigger than at the level of significance 0,05 , the null hypothesis (Ho) can be rejected and alternative hypothesis (Ha) is accepted indicating that Time Token Arends technique is effective in teaching learning speaking' skill.

## D. Hypothesis Testing

Stating the null and alternative hypotheses

1. Null Hypothesis (H0) : There is no significant difference between the students' speaking scores before and after being taught by using Time Token Arends Technique.
2. Alternative Hypothesis (Ha) : There is any significant difference between the students' speaking score before and after being taught by using Time Token Arends Technique.

To know whether any significant difference between students' speaking skill who were taught and who were not taught by using Time Token Arends Technique, the researcher computed Independent Sample Test by using SPSS 20 Version. The output are as follows:

Table 4.15 Group Statistics

|  | group | N | Mean | Std. <br> Deviation | Std. Error <br> Mean |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Students' <br> score | treatment | 26 | 64.62 | 9.908 | 1.943 |

Table 4.16 The Output of Independent Sample Test

|  |  | Levene's Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | Df | Sig. (2taile d) | Mean Differe nce | Std. <br> Error <br> Diffe <br> rence | $95 \%$ <br> Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| students' | Equal variances assumed |  | 1.908 | . 173 | 6.637 | 50 | . 000 | 16.308 | 2.457 | 11.373 | 21.243 |
| score | Equal variances not assumed |  |  | 6.637 | 47.038 | . 000 | 16.308 | 2.457 | 11.365 | 21.250 |

Table 4.16 The Output of Independent Sample Test

Based on the table above, the significant value of this research is 0.000 and the standard significant is 0.050 . It means the significant value is smaller than significant level $(0.000<0.050)$. When the significant value is smaller than significant level, it can be concluded that the null hypothesis (Ho) was rejected and alternative hypothesis ( Ha ) was accepted. It means that there is any significant difference on the students' score in speaking skill between those who were taught by using Time Token Arends Technique and those who were not.

## E. Discussion

From the result of the research finding above, it shows that there is significance on students' score in speaking skill between the students who were taught by using Time Token Arends with the students who were not taught by using Time Token Arends Technique. The mean of the students who were taught
by using Time Token Arends (experimental class) are 46.15 in pre-test and 64.62 in post-test. The mean of the students who were not taught by using Time Token Arends (control class) 43.23 in pre-test and 48.31 in post-test and the result of the mean difference is 13.08571 . It was found that the students speaking skill taught by using Time Token Arends had better than the students' speaking skill without taught using Time Token Arends Technique.

Based on the research conducted at MTs Assyafi'iyah Gondang Tulungagung it can be inferenced that teaching students by using Time Token Arends Technique is better than students who are not. It means that Time Token Arends Technique is effective to use in teaching speaking skill as stated by Arends (1998) Time Token Arends is technique is to train develop the students speaking skill not domination or silent when they discussion with their friends in the class.

Based on the result of post-test that showed higher scores than pre-test score. It is indicated that the students were increased in their speaking skill after being taught Time Token Arends Technique. The result of this study in the class showed that the technique can make the students motivated when they speak. In this case, the researcher as English teacher explaining the role of Time Token Arends Technique and ask students to apply this technique in teaching and learning speaking.

This is line with the finding by Parlian (2016) stated that Time Token Arends Technique gave great contribution for students in improving their speaking skill. Based on this research after taught by using Time Token Arends
they could share their opinion, share their experience with their group and they were more active, productive in teaching and learning process in the class. Time Token Arends Technique was effective to improve students speaking skill. In this study Time Token Arends in teaching and learning process give a positive effect on student's achievement.

Based on the result of this study above indicates that Time Token Arends technique treatment increase students speaking skill. Besides, the researcher gave treatment to the students, it means the treatment become one of factors increasing the student's speaking skill. By giving treatment the students understood well the material. The students of second grade Junior High School of MTs Assyafi'iyah Gondang Tulungagung have a good response while applying Time Token Arends Technique and the students more enthusiastic in learning speaking skill.

