# CHAPTER IV

# RESEARCH FINDINGS AND DISCUSSION

In this chapter, the researcher presents the research findings and discussion. The research findings include the results of normality and homogeneity testing, hypothesis testing.

## A. Research Findings

In this chapter, the researcher presented the data on students' writing achievement before and after being taught by using bulletin board media in teaching writing. In this presentation, the researcher presented and analyzed the data which had been collected through two kinds of tests, namely pre-test and post-test. They were conducted for thirty five students.

As mentioned before, the researcher used test as the instrument in collecting data. It was given to class VII-D students of MTsN 4 Tulungagung.. There were 35 students as respondent or subject at the research.

The data were collected through administering test. The first test was pre-test, pretest was conducted on 18th April 2018, and it was done before the treatment applied to the students. The purpose was to know the students' achievement in writing descriptive text before being the treatment. After administering pretest, the researcher gave treatment to the students by using bulletin board media. When treatment was finished, the researcher administered posttest; posttest was conducted on 4th May 2018

whose purpose is to know the students' writing achievement after being taught by using bulletin board. Apparently, the result of the post-test showed that the students' writing achievement improved significantly.

In pretest and posttest, they were given different topic. In pretest, the topic was about animal and person. Then, in posttest the topic was about favourite things, animal, and person. The pretest was given before teaching the class by using Bulletin board and posttest was given after using Bulletin board media.

The final result of students' writing after doing all of the steps in process writing in pretest and posttest then were analyzed by using writing scoring rubric. The elements of writing that were rated on the table, such as content, organization, vocabulary, grammar, and mechanics. The students' scores in pre-test and post-test are presented in the following table:

**Table 4.1 : The Result Of Pre-Test And Post-Test Students' Achievement In Writing Descriptive Text Before And After Being Taught By Bulletin Board Media**

| No. | Name | Pre-test Score | Post-test score |
|-----|------|----------------|-----------------|
| 1. | A | 52 | 72 |
| 2. | B | 48 | 68 |
| 3. | C | 52 | 64 |
| 4. | D | 56 | 64 |
| 5. | E | 56 | 68 |
| 6. | F | 52 | 64 |
| 7. | G | 52 | 68 |
| 8. | H | 60 | 72 |
| 9. | I | 56 | 68 |

| 10. | J | 60 | 76 |
|-----|-----|-----|-----|
| 11. | K | 56 | 68 |
| 12. | L | 68 | 76 |
| 13. | M | 68 | 72 |
| 14. | N | 56 | 68 |
| 15. | O | 60 | 76 |
| 16. | P | 60 | 72 |
| 17. | Q | 52 | 68 |
| 18. | R | 68 | 76 |
| 19. | S | 52 | 68 |
| 20. | T | 72 | 80 |
| 21. | U | 76 | 84 |
| 22. | V | 72 | 88 |
| 23. | W | 68 | 76 |
| 24. | X | 72 | 80 |
| 25. | Y | 60 | 72 |
| 26. | Z | 72 | 80 |
| 27. | AA | 60 | 72 |
| 28. | BB | 68 | 76 |
| 29. | CC | 68 | 84 |
| 30. | DD | 68 | 80 |
| 31. | EE | 56 | 72 |
| 32. | FF | 60 | 76 |
| 33. | GG | 72 | 88 |
| 34. | HH | 60 | 76 |
| 35. | II | 68 | 72 |

Sources: Data analyzed SPSS 16, 2018.

Based on the table above , there were 35 students from VII-D as the sample of the research. The test was conducted by the researcer before and after being taught by using bulletin board media. The students' score was diffetent between before and after using bulletin board. The students' score of post-test was better than the students' score of pre-test. It means that the students' writing achievement improved significantly after being taught by using bulletin board.

## B. Data Analysis

### 1. The Description of Students' Writing Descriptive Text before being Taught by Using Bulletin Board Media

The pretest was intended to know the students' writing achievement before students got treatment. After got the students' score in pretest then the researcher would like to show the result of descriptive statistic of pretest and frequency of pretest. The descriptive statistic of pretest and frequency of pretest presented in table 4.2 and 4.3 below:

### 4.2 The Descriptive Statistic of Scores in Pretest

**Statistics**

Pretest

| N | Valid | 35 |
|---|---|---|
| | Missing | 0 |
| Mean | | 61.60 |
| Median | | 60.00 |
| Mode | | 60 |
| Std. Deviation | | 7.464 |
| Variance | | 55.718 |
| Range | | 28 |
| Minimum | | 48 |
| Maximum | | 76 |
| Sum | | 2156 |

Based on table 4.2 above, there are 35 students as the subject in the pretest. This table shown that mean score is 61.60, the median score is 60.00, the mode score 60. Then the standard deviation is 7.464, the

variance is 55.718, the range is 28, the minimum is 48, the maximum is 76 and the sum is 2156.

From the table above, we can see that the mode and the median shown that the students' score in pretest includes in average category and it needs the treatment.

**Table 4.3 frequency of Scores in Pretest**

**Pretest**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 48 | 1 | 2.9 | 2.9 | 2.9 |
| | 52 | 5 | 14.3 | 14.3 | 17.1 |
| | 56 | 6 | 17.1 | 17.1 | 34.3 |
| | 60 | 10 | 28.6 | 28.6 | 62.9 |
| | 68 | 7 | 20.0 | 20.0 | 82.9 |
| | 72 | 5 | 14.3 | 14.3 | 97.1 |
| | 76 | 1 | 2.9 | 2.9 | 100.0 |
| | Total | 35 | 100.0 | 100.0 | |

Table 4.3 above that 1 student (2.9%) got 48, 5 student (17.1%) got 52, 6 students (34.3%) got 56, 10 students (62.9%) got 60, 7 students (82.9%) got 68, 5 students (97.1%) got 72, and 1 students (100.0%) got 76. From the frequency above the researcher conclude that score 60 is the most frequency or mode and it is includes in the average category.

2. **The Description of Students' Ability in Writing Descriptive Text After Being Taught by Using Bulletin Board Media**

In this section, the researcher presented the students' writing descriptive text after being taught by using bulletin board media. The researcher gives the posttest for the students after being given a treatment using video. This test was intended to know the students' writing achievement after students got treatment. After got the students' score in posttest then here the researcher would like to show the result of descriptive statistic of posttest and frequency of posttest. The descriptive statistic of posttest and frequency of posttest presented in table 4.4 and 4.5 below:

**Table 4.4 the Descriptive Statistic of Post-test**

**Statistics**

Posttest

| N | Valid | 35 |
|---|---|---|
| | Missing | 0 |
| Mean | | 73.83 |
| Median | | 72.00 |
| Mode | | 72 |
| Std. Deviation | | 6.313 |
| Variance | | 39.852 |
| Range | | 24 |
| Minimum | | 64 |
| Maximum | | 88 |
| Sum | | 2584 |

Based on table 4.4 above, there are 35 students as the subject in the pretest. This table shown that mean score is 73.83, the median score is 72.00, the mode score 72. Then the standard deviation is 6.313, the variance is 39.852, the range is 24, the minimum 64, the maximum 88 and the sum 2584.

From the table above, we can see that the mode and the median shown that the students' score in posttest includes in good category after got the treatment.

**Table 4.5 frequency of Post-test**

**Post-test**

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 64 | 3 | 8.6 | 8.6 | 8.6 |
|  | 68 | 7 | 20.0 | 20.0 | 28.6 |
|  | 72 | 10 | 28.6 | 28.6 | 57.1 |
|  | 76 | 7 | 20.0 | 20.0 | 77.1 |
|  | 80 | 4 | 11.4 | 11.4 | 88.6 |
|  | 84 | 2 | 5.7 | 5.7 | 94.3 |
|  | 88 | 2 | 5.7 | 5.7 | 100.0 |
|  | Total | 35 | 100.0 | 100.0 |  |

Table 4.5 above that 3 students (8.6%) got 64, 7 students (28.6%) got 68, 10 students (57.1%) got 72, 7 students (77.1%) got 76, 4 students (88.6%) got 80, 2 students (94.3%) got 84, and 2 students (100.0%) got 88.

From the frequency above the researcher conclude that score 88 is the high frequency and it is includes in the excellent category.

3. **The Description of Students' Ability in Writing Descriptive Text Before and After Being Taught by Using Bulletin Board Media**

In this section the researcher presented the result of pretest and posttest that had been done before and after the treatment. Then, the result of pretest and posttest were analyzed by using paired sample T Test with SPSS Windows 16.00. Referring the data of students' writing score in the table 4.6 above, the researcher analyzed the data by using paired sample T test with SPSS 16.0 program to know whether there is any significant difference of students' writing descriptive text before and after being taught using bulletin board media. The result as follow:

**Table 4.6 Paired Sample Statistics**

**Paired Samples Statistics**

|  |  | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | Pretest | 61.60 | 35 | 7.464 | 1.262 |
|  | Post-test | 73.83 | 35 | 6.313 | 1.067 |

The data presented above is the performance scores of the one group of students taken as the sample, before and after using bulletin board media as the treatment.

The mean score of pre-test is 61.60 while the mean score of post-test is 73.83. The number of students (N) both in pre-test and post-test is 35. The standard deviation of pre-test is 7.464 and the error mean is 1.262. On the posttest, the standard deviation is 6.313 and the error mean is 1.067.

Based on the result of mean, it can be concluded that the mean score of pre-test is different from the mean score of post-test. Thus it can be concluded that there is increase since the mean score of post-test is higher than pre-test.

**Table 4.7 Paired Sample Correlations**

**Paired Samples Correlations**

|  | | N | Correlation | Sig. |
|---|---|---|---|---|
| Pair 1 | Pretest & Post-test | 35 | .785 | .000 |

Based on the table 4.7 above, shows the correlations between two scores of pre-test and post-test where it seen that the correlation scores of pre-test and post-test= 0.785 and sig= 0.000. For interpretation of decision based on the result of probability achievement, that is:

a) If the sig >0.05, means Ho is accepted

b) If the sig <0.05, means Ho is rejected

It shows that sig= 0.000 is lower than 0.05 means that H0 is rejected and Ha is accepted. So, it can be concludes that there is significant correlation between pre – test and post – test score

**Table 4.8 Paired Sample Test**

**Paired Samples Test**

| | Paired Differences | | | | | | | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | | | | 95% Confidence Interval of the Difference | | | | |
| | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | t | df | |
| Pair 1 Pretest – Post-test | -12.229 | 4.647 | .785 | -13.825 | -10.632 | -15.569 | 34 | .000 |

Based on the table 4.8, the output Paired Sample T Test shows the result of T test analysis. The result show that the mean score of pre-test and post-test were (-12.229), standard deviation was (4.647), standard error mean was (0.785), the lower difference was (-13.825) and the upper difference was (-10.632), and the significance was (0.000).

The score of sig. is 0.000, it means that the level of significance was less than 0.05 (0.000 < 0.05). Thus, it can be concluded that the null hypothesis was rejected means there was significant difference in the writing scores of the students before they are taught by using bulletin board media and after they are taught by using bulletin board media.

Based on the table 4.8, the sig. (2-tailed) is 0.000. When Sig. (2-tailed) > 0.05, Null Hypothesis (Ho) is accepted. Then, Sig. (2-tailed) < 0.05, Alternative hypothesis (Ha) is accepted. Based on the result of paired sample test, we can see that Sig. (2-tailed) is 0.000. It means the significant level is less than 0.05 (0.000 < 0.05). Therefore, alternative hypothesis (Ha) that states there is significant difference in writing achievement between the students before are taught by bulletin board media and after are taught by bulletin board media is accepted. While, null hypothesis that states there is no significant difference in writing achievement between the students before are taught by bulletin board media and after taught by bulletin board media is rejected.

As Table 4.8 showed, that the mean score before and after being taught by using bulletin board media is different. There is improvement of mean score. It can be seen variable 1 (pretest) the mean score 61.60. It means that most of students got enough score. Thus, variable 2 (posttest) show that the mean score is 73.83.It means that most of them got good score. The p-value was less than 0.05 (0.000 < 0.05). Thus, there was enough evidence indicating that the null hypothesis could be rejected, and it could be concluded that using Bulletin board media was effective on the students' achievement in writing descriptive text.

## C. The Result of Normality and Homogeneity Testing

In this part the researcher discusses about the result of normality and homogeneity testing.

## 1. The Result of Normality Testing

Normality testing is conducted to determine whether the gotten data is normal distribution or not. The researcher used SPSS.16. *One- Sample Kolmogorov-Smirnove test* by the value of significance ($\alpha$) = 0.050. The result can be seen below.

**Table 4.9 : Normality Testing**

**One-Sample Kolmogorov-Smirnov Test**

|  |  | Pretest | Posttest |
|---|---|---|---|
| N |  | 35 | 35 |
| Normal Parameters[a] | Mean | 61.60 | 73.83 |
|  | Std. Deviation | 7.464 | 6.313 |
| Most Extreme Differences | Absolute | .213 | .185 |
|  | Positive | .213 | .185 |
|  | Negative | -.176 | -.100 |
| Kolmogorov-Smirnov Z |  | 1.263 | 1.097 |
| Asymp. Sig. (2-tailed) |  | .082 | .180 |
| a. Test distribution is Normal. |  |  |  |
|  |  |  |  |

Based on the table above was knowed that the significance value from pre-test is 1.263 and from the post test is 1.097. Both value from pre-test and post-test are higher than 0.05. The sig/p value on pre-test is 1.263 and it is higher than 0.05 (1.263 > 0.05) means that the data is in normal distribution. Then, for post-test score the value of sig/p is 1.097 and that is higher than 0.05 (1.097 > 0.05) means that the data is in normal distribution.

The hypothesis for testing normality are:

a. H0 : Data is in normal distribution

b. H1: Data is not in normal distribution.

So, it can be interpreted that both of data (pre-test and post-test score) are in normal distribution.  After ensuring whether the data has been normal, the next step that has to be done by researcher is calculating the homogeneity of the data.

## 2. The Result of Homogeneity Testing

The researcher calculates homogeneity after ensuring whether the data has been normal distribution. Homogeneity testing is intended to make sure that the collected manipulation data in analysis is truly taken from population which is too different each other. The aim of calculating homogeneity is to see whether the data includes to homogenous or heterogeneous data. The researcher used *Test of Homogeneity of Variances* with SPSS.16 by the value of significance ($\alpha$) = 0.050 to calculate the homogeneity of the data. The researcher used the formula of Levene Statistic. The result is presented in the table below:

**Table 4.10 : Homogeneity Testing**

**Test of Homogeneity of Variances**

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| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 2.901 | 1 | 68 | .093 |

Based on the table above is known that the sig/p value is 0.93 higher than 0.05 means H0 is rejected and Ha is accepted. So, it can be interpreted that the data is homogeny.

## D. Hypothesis Testing

The hypothesis testing of this research is as follow: As mentioned in chapter 1 the research hypotheses in this research are:

1. **Alternative Hypothesis** : there is significance difference between the students who are taught by using bulletin board media and whom are not taught by using bulletin board media.

   When the significant value < significant level, the alternative (Ha) is accepted and the null hypothesis (Ho) is rejected. It means that there was any significant difference between students' writing descriptive text score before and after they were taught by using bulletin board media in seventh grade of MTsN 4 Tulungagung.

2. **Null hypotheses:** there is no significance difference between the students who are taught by using bulletin board media and whom are not taught by using bulletin board media.

When the significant value > Significant level, the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected. It means that there was no significant difference between students' writing descriptive text score before and after they were taught by using bulletin board media.

Based on the statistical analysis by using paired sample t-test on SPSS 16.00, the output of statistical computation showed that the score of significant level (0.05) and the score of significant value is (0.000) it can be clearly concluded that the null hypothesis (Ho) was rejected and the alternative hypothesis (Ha) was accepted. It means that there was significant difference in the writing score of the students on VII-D by using bulletin board media. Bulletin Board media was effective and suggested to be used to teach writing descriptive text on VII-D MTsN 4 Tulungagung.

Based on the table 4.8 The p-value was less than 0.05 (0.000 < 0.05). Thus, there was enough evidence indicating that the null hypothesis could be rejected. In conclusion there is significance difference score using Bulletin board media on the students' achievement in writing descriptive text.

## E. Discussion

From data analysis, the objective of this study is to know the effectiveness of teaching english by using bulletin board media towards

the students ability in writing descriptive text of the first grade students at MTsN 4 Tulungagung in academic year 2017/2018.

Based on the result of data analysis, using Bulletin Board media can improves their achievement in writing descriptive text. This media can improve their writing components such as content, organization, vocabulary, grammar, and mechanics.

The first previous study from Anindhita (2014) which used bulletin board media, the students can decrease their writing problems in four aspects of writing that include content, language use, vocabulary and organization. It can be seen ftom the $T_{count}$ (5.35)> T $_{table}$ (2.350). as comparison with the study shows that The p-value was less than 0.05 (0.000 < 0.05). it means that  there is significance difference between pre-test and post-test score. In conclusion the previous study had the same result using bulletin board media.

The second previous study from Sofia Winda (2014). The use of picture series and school bulletin board based activities are effectively proven to facilitate the students to improve their writing practice. It can be seen ftom the $T_{count}$ (5.25)> T $_{table}$ (2.150). as comparison with the study shows that The p-value was less than 0.05 (0.000 < 0.05). it means that there is significance difference between pre-test and post-test score. In conclusion the previous study had the same result using bulletin board media.

The objectives of this research is to know the effect of teaching English by using bulletin board media towards students' writing of VII D at MTsN 4 Tulungagung in the academic year of 2017/2018. In order to achieve the objectives of the research with one-group pre-test post-test design. The research procedures was done during the teaching and learning process. In this study, it was indicated that the result of post-test was better than the pre-test. It means that the score of post-test were significantly better than the score pre-test at the end of the study.

From the research finding in chapter IV, the output data of *Paired Samples Statistics* shows the the mean of pre-test and post-test was increased from 61.60 to be 73.83. The standard deviation is to measure how much the variance of the sample. The standard deviation of pre-test is 7.464 < 61.60 and post-test is 6.313 < 73.83 where if the standard deviation is getting higher than the mean it means that the mean is not homogeny and if the standard deviation is getting smaller than the mean it means that the mean is homogeny. So, it can be concluded that standard deviation of pre-test and post-test was homogeny means that the sample of this research almost has the same mean.

The result of the study is line (Robert and Michael, 2002) state that bulletin board can play the important role in the life of the classroom and it can increase the students achievement, reinforcing students' efforts to do a good job.

The statement above is obvious that bulletin board media is beneficial to the students ability in writing descriptive text and it help the teacher to

make easy in teaching learning by using bulletin board media. So, the students can improve their writing ability in writing descriptive text.

In conclusion, based on the discussion above the students' post-tesrt score have better than pre-test. Therefore, it can be conclude that bulletin board media is effective in teaching writing descriptive text.