**CHAPTER IV**

**RESEARCH FINDING AND DISCUSSION**

This chapter presents the data description, hypothesis testing and discussion.

**A. Data Description**

Having tested students into pre- test and post-test activity, the researcher had gotten score of students speaking ability. To get the result of data, there was two parts mentioned here which are followed below.

1. **Data Presentation**

In this research, the researcher did an experimental research about the effectiveness puppet media to improve speaking ability of the fourth grade students at MI UMMUL AKHYAR in academic 2010/2011. The researcher used three steps; pre-test, treatment using puppet media and post-test. Pre-test and post-test were done to get speaking score of the students.

After doing pre-test and post, the researcher got scores from the students.

**Table 4.1 Scores’ of pre- test**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Student  | Criteria of Analytic Scoring Rubric | Score  |
| Speaking  | Fluency  | Structure  | Vocabulary  | Listening  |
| 1 | A | 2 | 1 | 3 | 2 | 2 | 10 |
| 2 | B | 4 | 3 | 3 | 3 | 5 | 18 |
| 3 | C | 2 | 1 | 3 | 2 | 2 | 10 |
| 4 | D | 2 | 1 | 3 | 2 | 2 | 10 |
| 5 | E | 2 | 1 | 3 | 1 | 2 | 9 |
| 6 | F | 6 | 5 | 5 | 5 | 6 | 27 |
| 7 | G | 2 | 2 | 3 | 2 | 4 | 13 |
| 8 | H | 5 | 5 | 4 | 4 | 5 | 23 |
| 9 | I | 4 | 3 | 3 | 3 | 4 | 17 |
| 10 | J | 2 | 1 | 3 | 2 | 2 | 10 |
| 11 | K | 4 | 4 | 3 | 3 | 5 | 19 |
| 12 | L | 3 | 4 | 3 | 3 | 4 | 17 |
| 13 | M | 6 | 6 | 5 | 5 | 6 | 28 |
| 14 | N | 5 | 4 | 3 | 4 | 6 | 22 |
| 15 | O | 3 | 3 | 3 | 3 | 4 | 16 |
| 16 | P | 4 | 3 | 4 | 5 | 5 | 21 |
| 17 | Q | 4 | 2 | 3 | 2 | 5 | 16 |
| 18 | R | 3 | 2 | 3 | 3 | 3 | 14 |
| 19 | S | 5 | 4 | 4 | 4 | 6 | 23 |
| 20 | T | 6 | 5 | 4 | 5 | 6 | 26 |
| 21 | U | 3 | 2 | 3 | 2 | 4 | 14 |
| 22 | V | 5 | 4 | 4 | 4 | 6 | 23 |
| 23 | W | 4 | 2 | 3 | 2 | 4 | 15 |
| 24 | X | 5 | 3 | 3 | 3 | 6 | 20 |

**Table 4.2 Scores’ of post-test**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Student  | Criteria of Analytic Scoring Rubric | Score  |
| Speaking  | Fluency  | Structure  | Vocabulary  | Listening  |
| 1 | A | 2 | 1 | 3 | 1 | 3 | 10 |
| 2 | B | 4 | 4 | 5 | 4 | 5 | 22 |
| 3 | C | 3 | 2 | 3 | 2 | 3 | 13 |
| 4 | D | 2 | 1 | 3 | 2 | 1 | 9 |
| 5 | E | 2 | 1 | 3 | 2 | 3 | 11 |
| 6 | F | 6 | 6 | 5 | 6 | 6 | 29 |
| 7 | G | 4 | 4 | 3 | 3 | 3 | 17 |
| 8 | H | 6 | 5 | 5 | 6 | 6 | 28 |
| 9 | I | 5 | 4 | 4 | 5 | 5 | 23 |
| 10 | J | 3 | 3 | 3 | 3 | 4 | 16 |

*Was continued………………….*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | K | 5 | 4 | 3 | 5 | 5 | 22 |
| 12 | L | 3 | 4 | 3 | 4 | 5 | 19 |
| 13 | M | 6 | 6 | 5 | 6 | 6 | 29 |
| 14 | N | 5 | 6 | 5 | 6 | 6 | 28 |
| 15 | O | 3 | 4 | 4 | 4 | 4 | 19 |
| 16 | P | 5 | 4 | 5  | 5 | 6 | 25 |
| 17 | Q | 5 | 4 | 4 | 5 | 5 | 23 |
| 18 | R | 4 | 3 | 4 | 5 | 4 | 20 |
| 19 | S | 6 | 6 | 5 | 6 | 6 | 29 |
| 20 | T | 6 | 6 | 5 | 6 | 6 | 29 |
| 21 | U | 4 | 4 | 3 | 4 | 4 | 19 |
| 22 | V | 6 | 6 | 5 | 6 | 6 | 29 |
| 23 | W | 4 | 4 | 4 | 4 | 5 | 21 |
| 24 | X | 6 | 5 | 5 | 5 | 6 | 27 |

**Table 4.3 Score of Pre-test and Post-test**

|  |  |  |
| --- | --- | --- |
| Student  | Pre- Test | Post- Test |
| A | 10 | 10 |
| B | 18 | 22 |
| C | 10 | 10 |
| D | 10 | 9 |
| E | 9 | 11 |
| F | 27 | 29 |
| G | 13 | 17 |
| H | 23 | 28 |
| I | 17 | 23 |
| J | 10 | 16 |
| K | 19 | 22 |
| L | 17 | 19 |
| M | 28 | 29 |
| N | 22 | 28 |
| O | 16 | 19 |
| P | 21 | 25 |
| Q | 16 | 23 |
| R | 14 | 20 |
| S | 23 | 29 |
| T | 26 | 29 |
| U | 14 | 19 |
| V | 23 | 29 |
| W | 15 | 21 |
| X | 20 | 27 |
| N= 24 |  |  |

1. **Data Analysis**

Data analysis was done to know the different score before test and after test by searching the gain “d” (score after test – score before test) and the total of the gain score (∑d).

Here also was shown the number of subject (N), the total of pre-test and post-test scores, and its mean.

**Table 4.4 Scores’ of pre- test and post test to get (d)**

|  |  |  |  |
| --- | --- | --- | --- |
| Student | Pre- Test | Post- Test | Gain (d). Post-test; Pre- test |
| A | 10 | 10 | 0 |
| B | 18 | 22 | +4 |
| C | 10 | 10 | 0 |
| D | 10 | 9 | -1 |
| E | 9 | 11 | +2 |
| F | 27 | 29 | +2 |
| G | 13 | 17 | +4 |
| H | 23 | 28 | +5 |
| I | 17 | 23 | +6 |
| J | 10 | 16 | +6 |
| K | 19 | 22 | +3 |
| L | 17 | 19 | +2 |
| M | 28 | 29 | +1 |
| N | 22 | 28 | +6 |
| O | 16 | 19 | +3 |
| P | 21 | 25 | +4 |
| Q | 16 | 23 | +7 |
| R | 14 | 20 | +6 |
| S | 23 | 29 | +6 |
| T | 26 | 29 | +3 |
| U | 14 | 19 | +5 |
| V | 23 | 29 | +6 |
| W | 15 | 21 | +6 |
| X | 20 | 27 | +7 |
| N= 24 | 421 | 517 | ∑d = 96 |

After getting ∑d, we can search Md with formulated below:

Md : $\frac{∑d}{N}$

 : $\frac{96}{24}$

 : 4

 Here, also shown the step to get means of pre-test and post-test as formulated below:

To gain mean of pre-test = 421:24

 = 17.542

To gain mean of post-test = 517:24

 = 21.542

The number of the test were 10 question for each students. The total score of before treatment (pre-test) is 421 and its mean was 17.542. The total score of after treatment (post-test) is 517 its mean 21.542.

After different score of pre-test and post-test known, the researcher search “Xd” = the deviation of subject (d-Md). Md is mean from the difference between before treatment and after treatment. Here also searching the ∑x2d (total of quadrate deviation).

**Table 4.4 the pre- test and post- test scores’ analyzed to get Xd and X2d**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Student | Pre-test | Post-test | D | Xd (d- Md) | X2d |
| A | 10 | 10 | 0 | -4 | 16 |
| B | 18 | 22 | +4 | 0 | 0 |
| C | 10 | 13 | +3 | -1 | 1 |
| D | 10 | 9 | -1 | -5 | 25 |
| E | 9 | 11 | +2 | -2 | 4 |
| F | 27 | 29 | +2 | -2 | 4 |
| G | 13 | 17 | +4 | 0 | 0 |
| H | 23 | 28 | +5 | 1 | 1 |
| I | 17 | 23 | +6 | 2 | 4 |
| J | 10 | 16 | +6 | 2 | 4 |
| K | 19 | 22 | +3 | -1 | 1 |
| L | 17 | 19 | +2 | -2 | 4 |
| M | 28 | 29 | +1 | -3 | 9 |
| N | 22 | 28 | +6 | 2 | 4 |
| O | 16 | 19 | +3 | -1 | 1 |
| P | 21 | 25 | +4 | 0 | 0 |
| Q | 16 | 23 | +7 | 3 | 9 |
| R | 14 | 20 | +6 | 2 | 4 |
| S | 23 | 29 | +6 | 2 | 4 |
| T | 26 | 29 | +3 | -1 | 1 |
| U | 14 | 19 | +5 | 1 | 1 |
| V | 23 | 29 | +6 | 2 | 4 |
| W | 15 | 21 | +6 | 2 | 4 |
| X | 20 | 27 | +7 | 3 | 9 |
| N= 24 |  |  | ∑d = 96 | 0 | ∑x2d= 114 |

To know the degree of freedom (df) or (db), we can find the result from the formula below:

Df/db : N-1

 : 24-1

 : 23

After finishing those steps, insert t-test formula:

t : $\frac{Md}{\sqrt{\frac{∑x^{2}d}{N(N-1)}}}$

t : $\frac{4}{\sqrt{\frac{114}{24(24-1)}}}$

t : $\frac{4}{\sqrt{\frac{114}{24×23}}}$

t : $\frac{4}{\sqrt{\frac{114}{552}}}$

t : $\frac{4}{\sqrt{0,206}}$

t : $\frac{4}{0,454}$

t : 8,811

After counting by using t-test is gotten t-count: 8,811

1. **Hypothesis Testing**

The researcher analyzed the collected data by quantitative data analyzed through t-test statistical analysis. After analyzing was done, there are there were 2 possibilities, Ho is rejected and Ha is accepted or Ho is accepted and Ha is rejected.

The used puppet as a media to improve speaking ability will be significant if t-count > t-table and in contrast, if t-count < t-table its means that there is no significant of sing puppet as a media to improve speaking ability of fourth grade students at MI UMMUL AKHYAR in academic year 2010/2011.

1. **Discussion**

Based on the research method in chapter III in this research, teaching and learning process was divided into three steps. First step is preliminary study where the researcher conducted a preliminary study to know the students’ speaking ability by using administering pre-test by teaching without using puppet.

The second step was given treatment to the students. The treatment here was teaching speaking by using puppet media. The students were given material about calendar. At the first treatment, the researcher told about calendar (name of days, months and ordinal number) using puppet. Then, the researcher asked the students to hold conversation about calendar with their partners using puppet media. The students also talked (made conversation) with the researcher using puppet media. After got treatment, the students more active and enthusiasm to speak because they enjoyed in speaking.

The score of speaking before taught by using puppet media is bad because the mean of the total score of 24 students was only (17,542). After got treatment, the mean score of speaking was (21,542). It was improved, with the t-test analysis that used by researcher, the result of t count  was (8,811).

Then, the researcher gave interpretation to t0. First, she considered the. = N – 1 with the  is (23). She consulted to the score table “t”, at the significance level of 0, 05. In fact, with the  is (23), she can get the critic value or table at 0, 05 significance t count  is (2, 07)

By comparing the “t” that she has got in calculation t count = (8,811) and the value of “t” on the t score table t0, 05 = (2, 07). It is known that t0 is bigger than tt  = 2,07<8,811

Because the t count was bigger than t table the alternative hypothesis (Ha) is accepted and the null hypothesis is rejected, it means that there is different speaking score of the fourth grade studenst at MI UMMUL AKHYAR between before taught using puppet media and after taught by using puppet media. The different is significant.

Based on the research finding, puppet media was the real effectiveness to improve speaking ability. It was because puppet media can encourage the young learners to speak more actively and enthusiastically.

Puppet media also gave them fun activities in speaking and stimulated to speak. The young learners can speak easily and relax in English without hard feeling. The situation that conducive and comfort for their sense, it will make them enjoy to learn and getting good result. It can be done because by fun learning, information can be understood and maintained in memory well.