**CHAPTER IV**

**RESEARCH FINDING**

This chapter discuss is about some topics related to the data presentation, data analysis and hypothesis testing; and discussion.

1. **Data Presentation**

To obtain the data, the test was given to the experimental class. The purpose of the writer knows the result of The Effectiveness on the Teaching Speaking Skill by Using Inquiry method to The Second Grade Students at MTs Sunan Ampel Ringinrejo Academic Year 2011/ 2012”

The writer involves a class that consists of 38 students. So the writer uses a small sample which connects each other (T-Test for one sample, that are value between pre-test and post-test. The result of test of class is described in the table.

**Table 4.1 Students Score Before Taught By Using Inquiry Method**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NO | STUDENTS | SPEAKING COMPONENTS | | | | |
| Acc | Gram | Voc | Flu | Comp |
| 1 | A | 2 | 3 | 3 | 2 | 2 |
| 2 | B | 2 | 2 | 2 | 1 | 2 |
| 3 | C | 3 | 2 | 3 | 2 | 1 |
| 4 | D | 3 | 2 | 3 | 2 | 2 |
| 5 | E | 3 | 2 | 2 | 2 | 3 |
| 6 | F | 2 | 3 | 2 | 3 | 2 |
| 7 | G | 1 | 2 | 2 | 2 | 1 |
| 8 | H | 2 | 2 | 3 | 2 | 2 |
| 9 | I | 2 | 3 | 3 | 2 | 1 |
| 10 | J | 2 | 3 | 2 | 3 | 2 |
| 11 | K | 2 | 2 | 3 | 3 | 2 |
| 12 | L | 3 | 3 | 3 | 2 | 2 |
| 13 | M | 4 | 2 | 4 | 3 | 2 |
| 14 | N | 3 | 4 | 3 | 2 | 2 |
| 15 | O | 2 | 2 | 3 | 2 | 2 |
| 16 | P | 2 | 3 | 2 | 2 | 2 |
| 17 | Q | 3 | 2 | 3 | 2 | 2 |
| 18 | R | 2 | 3 | 3 | 2 | 3 |
| 19 | S | 3 | 4 | 3 | 2 | 3 |
| 20 | T | 2 | 4 | 4 | 3 | 2 |
| 21 | U | 4 | 3 | 3 | 2 | 3 |
| 22 | V | 3 | 2 | 3 | 3 | 3 |
| 23 | W | 2 | 3 | 2 | 3 | 2 |
| 24 | X | 3 | 3 | 3 | 2 | 3 |
| 25 | Y | 4 | 3 | 2 | 2 | 2 |
| 26 | Z | 2 | 3 | 3 | 3 | 4 |
| 27 | AA | 3 | 3 | 3 | 4 | 4 |
| 28 | AB | 4 | 3 | 3 | 2 | 3 |
| 29 | AC | 2 | 2 | 3 | 3 | 3 |
| 30 | AD | 3 | 3 | 3 | 3 | 2 |
| 31 | AE | 3 | 2 | 3 | 3 | 3 |
| 32 | AF | 4 | 3 | 3 | 2 | 2 |
| 33 | AG | 2 | 3 | 3 | 3 | 2 |
| 34 | AH | 3 | 3 | 3 | 2 | 2 |
| 35 | AI | 1 | 2 | 2 | 3 | 2 |
| 36 | AJ | 3 | 2 | 2 | 2 | 2 |
| 37 | AK | 2 | 3 | 3 | 3 | 2 |
| 38 | AL |  |  |  |  |  |

Acc : Accent

Gram : Grammar

Voc : Vocabulary

Flu : Fluency

Comp : Comprehension

Based on the data in table 4.1 above, the weighting score of the students’ level are:

**Table 4.2 Weighting Table of Students’ Ability in Speaking Test before Using Inquiry Method**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NO. | STUDENTS | DESCRIPTION OF PROFICIENCY | | | | | |
| Acc | Gram | Voc | Flu | Comp | Total Score |
| 1 | A | 1 | 12 | 8 | 8 | 8 | 37 |
| 2 | B | 2 | 12 | 12 | 6 | 8 | 40 |
| 3 | C | 1 | 12 | 8 | 6 | 12 | 39 |
| 4 | D | 2 | 8 | 4 | 6 | 8 | 28 |
| 5 | E | 0 | 12 | 8 | 6 | 12 | 38 |
| 6 | F | 2 | 12 | 12 | 6 | 12 | 44 |
| 7 | G | 1 | 12 | 8 | 8 | 12 | 41 |
| 8 | H | 0 | 6 | 8 | 6 | 8 | 28 |
| 9 | I | 2 | 12 | 8 | 8 | 8 | 38 |
| 10 | J | 1 | 12 | 12 | 12 | 15 | 52 |
| 11 | K | 0 | 12 | 12 | 8 | 8 | 40 |
| 12 | L | 1 | 6 | 8 | 6 | 8 | 29 |
| 13 | M | 1 | 12 | 8 | 8 | 12 | 41 |
| 14 | N | 2 | 12 | 8 | 8 | 8 | 38 |
| 15 | O | 0 | 6 | 8 | 6 | 8 | 28 |
| 16 | P | 1 | 6 | 8 | 6 | 8 | 29 |
| 17 | Q | 1 | 12 | 12 | 8 | 8 | 41 |
| 18 | R | 2 | 12 | 12 | 10 | 8 | 44 |
| 19 | S | 2 | 18 | 20 | 12 | 19 | 71 |
| 20 | T | 0 | 12 | 12 | 10 | 8 | 42 |
| 21 | U | 1 | 12 | 8 | 10 | 8 | 39 |
| 22 | V | 0 | 12 | 8 | 12 | 15 | 47 |
| 23 | W | 1 | 12 | 8 | 10 | 12 | 43 |
| 24 | X | 2 | 12 | 12 | 10 | 15 | 51 |
| 25 | Y | 2 | 12 | 12 | 6 | 8 | 40 |
| 26 | Z | 1 | 12 | 8 | 12 | 8 | 41 |
| 27 | AA | 4 | 12 | 12 | 10 | 15 | 53 |
| 28 | AB | 2 | 18 | 16 | 12 | 15 | 63 |
| 29 | AC | 1 | 12 | 12 | 6 | 12 | 43 |
| 30 | AD | 1 | 18 | 8 | 8 | 12 | 47 |
| 31 | AE | 0 | 12 | 12 | 8 | 8 | 40 |
| 32 | AF | 1 | 12 | 12 | 6 | 12 | 43 |
| 33 | AG | 2 | 6 | 8 | 8 | 8 | 32 |
| 34 | AH | 2 | 12 | 8 | 6 | 12 | 40 |
| 35 | AI | 1 | 18 | 12 | 12 | 12 | 55 |
| 36 | AJ | 1 | 12 | 8 | 8 | 12 | 41 |
| 37 | AK | 2 | 12 | 12 | 8 | 12 | 46 |
| 38 | AL | 1 | 6 | 8 | 6 | 8 | 29 |

The pre-test was done before treatment process (teaching speaking by using the inquiry method). This test is given to know the basic competence for all students and to know their earlier knowledge before they get treatment.

**Graphic 4.1**

**HISTOGRAM OF THE RESULT IN PRE TEST**

**Table 5.1 the frequency Distribution of the Students’ Speaking in Pre Test**

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | Interval | Frequency | Percent (%) |
| 1. | 21-30 | 4 | 13.158 |
| 2. | 31-40 | 13 | 34.210 |
| 3. | 41-50 | 15 | 36.842 |
| 4. | 51-60 | 4 | 10.526 |
| 5. | 61-70 | 1 | 2.632 |
| 6. | 71-80 | 1 | 2.632 |
| 7. | 81-90 | 0 | - |
| Total | |  | 999.997 |

**Table 4.1 Students Score After Taught By Using Inquiry Method**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NO. | STUDENTS | SPEAKING COMPONENTS | | | | |
| Acc | Gram | Voc | Flu | Comp |
| 1 | A | 1 | 2 | 1 | 1 | 2 |
| 2 | B | 2 | 1 | 1 | 1 | 2 |
| 3 | C | 1 | 2 | 2 | 2 | 2 |
| 4 | D | 1 | 1 | 2 | 2 | 2 |
| 5 | E | 2 | 1 | 2 | 2 | 3 |
| 6 | F | 2 | 1 | 2 | 2 | 2 |
| 7 | G | 2 | 2 | 3 | 3 | 3 |
| 8 | H | 2 | 2 | 3 | 2 | 2 |
| 9 | I | 2 | 3 | 3 | 3 | 3 |
| 10 | J | 2 | 2 | 3 | 2 | 2 |
| 11 | K | 2 | 1 | 2 | 1 | 2 |
| 12 | L | 2 | 2 | 3 | 2 | 2 |
| 13 | M | 2 | 3 | 3 | 2 | 3 |
| 14 | N | 2 | 2 | 3 | 2 | 3 |
| 15 | O | 2 | 2 | 2 | 2 | 3 |
| 16 | P | 2 | 2 | 2 | 2 | 2 |
| 17 | Q | 3 | 2 | 3 | 3 | 3 |
| 18 | R | 2 | 2 | 3 | 3 | 4 |
| 19 | S | 2 | 3 | 3 | 2 | 2 |
| 20 | T | 2 | 3 | 3 | 2 | 2 |
| 21 | U | 3 | 3 | 3 | 4 | 3 |
| 22 | V | 3 | 4 | 4 | 3 | 4 |
| 23 | W | 2 | 3 | 3 | 3 | 3 |
| 24 | X | 3 | 3 | 3 | 3 | 4 |
| 25 | Y | 2 | 2 | 3 | 4 | 3 |
| 26 | Z | 3 | 4 | 4 | 3 | 3 |
| 27 | AA | 2 | 2 | 3 | 2 | 2 |
| 28 | AB | 2 | 2 | 3 | 3 | 2 |
| 29 | AC | 2 | 2 | 3 | 3 | 3 |
| 30 | AD | 3 | 3 | 4 | 3 | 4 |
| 31 | AE | 1 | 2 | 2 | 1 | 2 |
| 32 | AF | 5 | 5 | 5 | 5 | 5 |
| 33 | AG | 3 | 2 | 3 | 3 | 3 |
| 34 | AH | 2 | 2 | 3 | 2 | 2 |
| 35 | AI | 2 | 2 | 2 | 2 | 2 |
| 36 | AJ | 3 | 3 | 4 | 2 | 3 |
| 37 | AK | 4 | 3 | 4 | 2 | 3 |
| 38 | AL | 3 | 3 | 4 | 3 | 3 |

Acc : Accent

Gram : Grammar

Voc : Vocabulary

Flu : Fluency

Comp : Comprehension

Based on the data in table 4.1 above, the weighting score of the students’ level are:

**Table 4.2 Weighting Table of Students’ Ability in Speaking Test after Using Inquiry Method**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NO. | STUDENTS | DESCRIPTION OF PROFICIENCY | | | | | |
| Acc | Gram | Voc | Flu | Comp | Total Score |
| 1 | A | 0 | 12 | 4 | 8 | 8 | 33 |
| 2 | B | 1 | 6 | 8 | 8 | 12 | 41 |
| 3 | C | 0 | 12 | 8 | 4 | 8 | 32 |
| 4 | D | 0 | 6 | 8 | 4 | 8 | 26 |
| 5 | E | 1 | 6 | 8 | 4 | 12 | 31 |
| 6 | F | 1 | 12 | 8 | 10 | 8 | 39 |
| 7 | G | 1 | 12 | 12 | 6 | 12 | 43 |
| 8 | H | 1 | 12 | 12 | 4 | 8 | 37 |
| 9 | I | 2 | 12 | 8 | 10 | 8 | 40 |
| 10 | J | 1 | 12 | 8 | 4 | 8 | 45 |
| 11 | K | 1 | 6 | 8 | 8 | 8 | 39 |
| 12 | L | 1 | 12 | 12 | 4 | 8 | 37 |
| 13 | M | 1 | 18 | 12 | 4 | 12 | 47 |
| 14 | N | 1 | 12 | 12 | 4 | 12 | 41 |
| 15 | O | 1 | 12 | 8 | 4 | 12 | 37 |
| 16 | P | 1 | 12 | 8 | 4 | 8 | 33 |
| 17 | Q | 2 | 12 | 12 | 6 | 12 | 44 |
| 18 | R | 2 | 18 | 12 | 6 | 15 | 46 |
| 19 | S | 1 | 12 | 12 | 10 | 15 | 57 |
| 20 | T | 1 | 18 | 12 | 4 | 8 | 43 |
| 21 | U | 3 | 12 | 12 | 10 | 8 | 45 |
| 22 | V | 2 | 18 | 12 | 6 | 15 | 55 |
| 23 | W | 1 | 18 | 12 | 6 | 12 | 49 |
| 24 | X | 2 | 18 | 12 | 6 | 5 | 53 |
| 25 | Y | 1 | 12 | 12 | 8 | 12 | 45 |
| 26 | Z | 2 | 18 | 16 | 4 | 12 | 50 |
| 27 | AA | 2 | 12 | 12 | 6 | 15 | 47 |
| 28 | AB | 4 | 12 | 20 | 12 | 12 | 56 |
| 29 | AC | 1 | 12 | 12 | 6 | 12 | 43 |
| 30 | AD | 3 | 12 | 12 | 12 | 18 | 55 |
| 31 | AE | 1 | 12 | 8 | 8 | 8 | 37 |
| 32 | AF | 3 | 18 | 16 | 4 | 15 | 56 |
| 33 | AG | 2 | 12 | 12 | 4 | 12 | 42 |
| 34 | AH | 1 | 12 | 12 | 4 | 8 | 37 |
| 35 | AI | 1 | 12 | 20 | 12 | 15 | 60 |
| 36 | AJ | 2 | 12 | 16 | 4 | 12 | 46 |
| 37 | AK | 2 | 18 | 16 | 4 | 12 | 52 |
| 38 | AL | 1 | 8 | 8 | 6 | 8 | 33 |

The Inquiry method, it was done to know the final score and to know the students’ difference competence before and after they get treatment.

**Graphic 2**

**HISTOGRAM OF THE RESULT IN POST TEST**

Table **5.2 The frequency Distribution of students’ speaking in post test**

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | Interval | Frequency | Percent (%) |
| 1. | 21-30 | 1 | 2.632 |
| 2. | 31-40 | 13 | 34.211 |
| 3. | 41-50 | 16 | 42.105 |
| 4. | 51-60 | 8 | 21.053 |
| 5. | 61-70 | - | - |
| 6. | 71-80 | - | - |
| 7. | 81-90 | - | - |
| Total | |  | 99.796 |

1. **Data Analysis**

Data analysis is done to know the different score before test and after test by searched the gain “d” (post-test – pre-test) and the total of gain score (∑d). Here also was sought the number of subject (N). The total of pre-test and post-test score and its mean (X)

**Table 4.5 the Different Score of Pre-test and Post-test**

**(To Gain (D) / Post-Test – Pre-Test)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Pre-test | Post-test | Gain (d) | d2 |
| 1 | 37 | 33 | -4 | 16 |
| 2 | 40 | 41 | 1 | 1 |
| 3 | 39 | 32 | -7 | 49 |
| 4 | 28 | 26 | -2 | 4 |
| 5 | 38 | 31 | -7 | 49 |
| 6 | 44 | 39 | -5 | 25 |
| 7 | 41 | 43 | 2 | 4 |
| 8 | 28 | 37 | 9 | 81 |
| 9 | 38 | 40 | 2 | 4 |
| 10 | 52 | 45 | -7 | 49 |
| 11 | 40 | 39 | -1 | 1 |
| 12 | 29 | 37 | 8 | 64 |
| 13 | 41 | 47 | 0 | 0 |
| 14 | 38 | 41 | 3 | 9 |
| 15 | 28 | 37 | 9 | 81 |
| 16 | 29 | 33 | 4 | 16 |
| 17 | 41 | 44 | 3 | 9 |
| 18 | 44 | 46 | 2 | 4 |
| 19 | 71 | 57 | -14 | 196 |
| 20 | 42 | 43 | 1 | 1 |
| 21 | 39 | 45 | 6 | 36 |
| 22 | 47 | 55 | 8 | 64 |
| 23 | 43 | 49 | 6 | 36 |
| 24 | 51 | 53 | 2 | 4 |
| 25 | 40 | 45 | 5 | 25 |
| 26 | 41 | 50 | 9 | 81 |
| 27 | 53 | 47 | -6 | 36 |
| 28 | 63 | 56 | -7 | 49 |
| 29 | 43 | 43 | 0 | 0 |
| 30 | 47 | 55 | 8 | 64 |
| 31 | 40 | 37 | -3 | 9 |
| 32 | 43 | 56 | 13 | 169 |
| 33 | 32 | 42 | 10 | 100 |
| 34 | 40 | 37 | -3 | 9 |
| 35 | 55 | 60 | 5 | 25 |
| 36 | 41 | 46 | 5 | 25 |
| 37. | 46 | 52 | 6 | 36 |
| 38 | 29 | 33 | 4 | 16 |
| N=38 | 1581  X1=41.605 | 1652  X2=43.474 | ∑d=79 | ∑d2=1830 |

The total of before treatment score is 1581 with X1=41.605. The total of after treatment score is 1652 with X2=43.474. Moreover, the total of gain ∑d= 71.

After the different score before treatment and after treatment known, the researcher searches the “Xd” the deviation of every subject (d – Md). Md is mean from the difference between before treatment and after treatment. Here also searching the ∑ X2d (square of deviation).

**Graphic 3**

**HISTOGRAM OF THE RESULT OF THE STUDENTS’ SPEAKING**

**IN PRE TEST AND POST TEST**

**Table 5.3 the frequency Distribution of students’ speaking in Pre test and Post test.**

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | Interval | Pre Test | Post Test |
| 1. | 21-30 | 4 | 1 |
| 2. | 31-40 | 13 | 13 |
| 3. | 41-50 | 15 | 16 |
| 4. | 51-60 | 4 | 8 |
| 5. | 61-70 | 1 | - |
| 6. | 71-80 | 1 | - |
| 7. | 81-90 | 0 | - |
| Total | | 38 | 38 |

**Table 4.6 Find the Xd and X2d**

|  |  |  |  |
| --- | --- | --- | --- |
| Subject | D | Xd (d – Md) | X2d |
| 1 | -4 | -6.079 | 36.954241 |
| 2 | 1 | -1.079 | 1.164241 |
| 3 | -7 | -9.079 | 82.428241 |
| 4 | -2 | -4.079 | 16.638241 |
| 5 | -7 | -9.079 | 82.428241 |
| 6 | -5 | -7.079 | 50.112241 |
| 7 | 2 | -0.079 | 0.006241 |
| 8 | 9 | 6.921 | 47.900241 |
| 9 | 2 | -0.079 | 0.006241 |
| 10 | -7 | -9.079 | 82.428241 |
| 11 | -1 | -3.079 | 9.480241 |
| 12 | 8 | 5.921 | 35.058241 |
| 13 | 0 | 0 | 0 |
| 14 | 3 | -0.921 | 0.848241 |
| 15 | 9 | 6.921 | 47.900241 |
| 16 | 4 | 1.921 | 3.690241 |
| 17 | 3 | 0.921 | 3.690241 |
| 18 | 2 | -0.079 | 0.006241 |
| 19 | -14 | -16.079 | 258.534241 |
| 20 | 1 | -1.079 | 1.164241 |
| 21 | 6 | 3.921 | 15.374241 |
| 22 | 8 | 5.921 | 35.058241 |
| 23 | 6 | 3.921 | 15.374241 |
| 24 | 2 | -0.079 | 0.006241 |
| 25 | 5 | 2.921 | 8.532241 |
| 26 | 9 | 6.921 | 47.900241 |
| 27 | -6 | -8.079 | 65.270241 |
| 28 | -7 | -9.079 | 82.428241 |
| 29 | 0 | 0 | 0 |
| 30 | 8 | 5.921 | 35.058241 |
| 31 | -3 | -5.079 | 25.796241 |
| 32 | 13 | 10.921 | 119.268241 |
| 33 | 10 | 7.921 | 62.742241 |
| 34 | -3 | -5.079 | 25.796241 |
| 35 | 5 | 2.921 | 8.532241 |
| 36 | 5 | 2.921 | 8.532241 |
| 37 | 6 | 3.921 | 15.374241 |
| 38 | 4 | 1.921 | 3.690241 |
| N=38 |  |  | ∑ X2d=1335.172676 |





To know the degree of freedom, we can find the result from the formula below:



1. **Discussion**

Based on 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 speaking without using inquiry method.

The second were given treatment to the students. The treatment here is teaching speaking by using inquiry method. The materiel is opinion. After got treatment, the students more lazy or not enthusiasm to speak because they can speak more about the opinion.

The score of speaking before taught by using inquiry method is bad because the mean of the total score of 38 students is only (41.605). After got treatment, the mean score of speaking is (43.474). It was improved, with the t-test analysis that use by researcher, the result of t count is (2.112).

Then, the researcher gave interpretation to t0. First, she considered the. = N – 1 with the  is (37). She consulted to the score table “t”, at the significance level of 0.05. In fact, with the  is (37), she can get the critic value or table at 0.05 significance t count is (2.02)

By comparing the “t” that she has got in calculation t count = (2.112) and the value of “t” on the t score table t0.05 = (2.02). It is known that t0 is smaller than tt= 2.112>2.02

Because the t count is large that t table the alternative hypothesis , the alternative hypothesis (Ha) is accepted it means that there is different speaking score to the second year student of MTs Sunan Ampel Ringinrejo Kediri between before using the inquiry method and after using inquiry method. The different is significant.

Based on the research finding, inquiry method as teaching method is surely shows the real effectiveness, because this method is comfortable to students at class VIII in MTs Sunan Ampel Ringinrejo Kediri. They are easy to interaction, conversation, active in speaking. They seed is confidence. So, their oral language is better.