**CHAPTER IV**

**REASEARCH FINDINGS AND DISCUSSION**

* 1. **Research Findings**

The researcher took data from the seventh grade students of MTs Hifzhil Qur’an Islamic Center Medan as a research sample. Class VIII- 3 as experimental group and VIII-8 as control group. The class consisted of 30 students / classes. The number of students is complete, and no students were absent when the pre and post examination is held. In this research data were collected used a test that was writing procedure texts in a student worksheet based on his own words. To calculate the results of an English writing test, the score is based on assessment criteria. In this chapter, the researcher wants to show the pre-test and post-test scores conducted by students of MTs Islamic Center Medan.

* + 1. **The Score of Pre-test and Post-test of Experimental Group**

**TABLE 4.1**

**THE SCORE OF PRE-TEST AND POST-TEST OF**

**EXPERIMENTAL GROUP**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Students’ Initial** | **Pre-test** | **Post-test** |
| 1 | RAC | 50 | 95 |
| 2 | RAL | 50 | 80 |
| 3 | RFA | 45 | 70 |
| 4 | RJ | 45 | 55 |
| 5 | RM | 55 | 65 |
| 6 | RAS | 60 | 75 |
| 7 | SFN | 50 | 85 |
| 8 | SRH | 65 | 70 |
| 9 | SAK | 40 | 80 |
| 10 | SFA | 45 | 70 |
| 11 | SSS | 50 | 85 |
| 12 | SAP | 60 | 70 |
| 13 | SFC | 50 | 90 |
| 14 | SNS | 55 | 55 |
| 15 | SFWS | 55 | 65 |
| 16 | SRR | 60 | 75 |
| 17 | SLP | 50 | 85 |
| 18 | SA | 40 | 90 |
| 19 | SR | 65 | 90 |
| 20 | TBS | 65 | 95 |
| 21 | TM | 55 | 70 |
| 22 | UH | 65 | 80 |
| 23 | WMZ | 55 | 75 |
| 24 | YE | 55 | 90 |
| 25 | ZN | 60 | 90 |
| 26 | ZAM | 50 | 70 |
| 27 | ZWDY | 55 | 70 |
| 28 | ZRS | 45 | 85 |
| 29 | ZZZ | 60 | 85 |
| 30 | FSA | 50 | 85 |
| **Total**  | **1605** | **2345** |
| **Mean of Student Scores** | **78,16** |

Based on the result of experimental group above, it can be known that the sum of the students’ score of pre-test is 1185 and post-test is 2345. The mean of experimental group is 78,16*.* Based on the experimental group above, it can be seen that the highest score of the students is 95 and the lowest score is 55. To find out the frequency distribution of the students in score in pre-test and post- test of experimental group computed as below:

R: 95 – 55 = 40

k: = 1 + (3,3) x Log N

i = R

 k

Thus:

 k = 1 + (3,3) x log 30

 = 1 + (3, 3) x 1.47

 = 1 + 4,851

 = 5,851

 = 6

It means that:

i = 

= 6,66

= 7

 Based on the computed above, it can be applied into table frequency distribution as follows:

**TABLE 4.2**

**THE FREQUENCY DISTRIBUTION SCORE**

**OF EXPERIMENTAL GROUP**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Interval**  | **Median** | **Frequency**  | **Percentages**  |
| 1 | 94 – 95  | 94,5 | 2 | 6.67% |
| 2 | 87 – 93  | 87,5 | 5 | 16.67% |
| 3 | 80 – 86  | 80,5 | 9 | 30.00% |
| 4 | 73 – 79  | 73,5 | 3 | 10.00% |
| 5 | 66 – 72  | 66,5 | 7 | 23.32% |
| 6 | 59 – 65  | 59,5 | 2 | 6.67% |
| 7 | 52 – 58  | 52,5 | 2 | 6.67% |
| **Total**  | **30** | **100 %** |

Score A = 2 students Percentage = $\frac{2}{30}$X 100% = 6.67%

Score B = 5 students Percentage = $\frac{5}{30}$X 100% = 16.67%

Score C = 9 students Percentage = $\frac{9}{30}$X 100% = 30.00%

Score D = 3 students Percentage = $\frac{3}{30}$X 100% = 10.00%

Score E = 7 students Percentage = $\frac{7}{30}$X 100% = 23.32%

Score F = 2 students Percentage = $\frac{2}{30}$X 100% = 6.67%

Score G = 2 students Percentage = $\frac{2}{30}$X 100% = 6.67%

Based on the table above, the students score of experimental group can be drawn at histogram as below

* 1. **Figure 1: Histogram of Experimental Group**

Based on the histogram above, it can be seen that there were 9 students or 30.00% who have the highest scores at interval scores 80-86, and then at interval scores 66-72 there were 7 students or 23,32%, then at interval scores 87-93 there were 5 students or 16,67%, then at interval scores 73-79 there were 3 students or 10.00%, and the last at interval scores 94-95, 59-65, 52-58 there were 2 students or 6.67%.

* + 1. **The Score of Pre-test and Post-test of Control Group**

The result of pre-test and post-test acquired by students of control group are as follow:

**TABLE 4.3**

**THE SCORE OF PRE-TEST AND POST-TEST OF CONTROL GROUP**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Students’ Initial** | **Pre-test** | **Post-test** |
| 1 | MAS | 55 | 80 |
| 2 | MAF | 50 | 65 |
| 3 | MAL | 40 | 70 |
| 4 | MADS | 50 | 75 |
| 5 | MAR | 50 | 65 |
| 6 | MF | 55 | 75 |
| 7 | MFAB | 50 | 60 |
| 8 | MFA | 50 | 65 |
| 9 | MFT | 70 | 70 |
| 10 | MFZ | 45 | 60 |
| 11 | MGHA | 50 | 80 |
| 12 | MHAH | 55 | 85 |
| 13 | MIAV | 40 | 45 |
| 14 | MJP | 50 | 90 |
| 15 | MMHH | 45 | 70 |
| 16 | MHP | 45 | 55 |
| 17 | MRS | 80 | 85 |
| 18 | MRHL | 65 | 70 |
| 19 | MRHH | 55 | 75 |
| 20 | MSKS | 55 | 75 |
| 21 | MTSS | 50 | 80 |
| 22 | MTR | 55 | 70 |
| 23 | MWAR | 50 | 65 |
| 24 | MAA | 60 | 70 |
| 25 | MZS | 65 | 60 |
| 26 | MH | 60 | 50 |
| 27 | MFR | 65 | 85 |
| 28 | MAEP | 70 | 80 |
| 29 | RPS | 45 | 55 |
| 30 | RTH | 50 | 55 |
| **Total**  | **1625** | **2085** |
| **Mean** | **69,5** |

Based on the result of control group above, it can be known that the sum of the students’ score of pre-test is 1625 and post-test is 2085. Based on the control group above, it can be seen that the highest score of the students is 90 and the lowest score is 45. The mean of post test of control group is 69,5. To find out the frequency distribution of the students in score in pre-test and post- test of control group computed as below:

R: 90 – 45 = 50

k: = 1 + (3,3) x Log N

i = R

 k

Thus:

 k = 1 + (3,3) x log 30

 = 1 + (3, 3) x 1.47

 = 1 + 4,851

 = 5,851

 = 6

It means that:

i = 

= 8,33

= 8

 Based on the computed above, it can be applied into table frequency distribution as follows:

**TABLE 4.4**

 **THE FREQUENCY DISTRIBUTION SCORE OF CONTROL GROUP**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Interval**  | **Median** | **Frequency**  | **Percentages**  |
| 1 | 83 – 90 | 89,5 | 4 | 13.33% |
| 2 | 75 – 82 | 81,5 | 8 | 26.67% |
| 3 | 67 – 74 | 73,5 | 6 | 20.00% |
| 4 | 59 – 66 | 65,5 | 7 | 23.33% |
| 5 | 51 – 58 | 57,5 | 3 | 10.00% |
| 6 | 43 – 50 | 49,5 | 2 | 6.67% |
| **Total**  | **30** | **100 %** |

Score A = 4 students Percentage= $\frac{4}{30}$X 100% = 13.33%

Score B = 8 students Percentage = $\frac{8}{30}$X 100% = 26.67%

Score C = 6 students Percentage = $\frac{6}{30}$X 100% = 20.00%

Score D = 7 students Percentage = $\frac{7}{30}$X 100% = 23.33%

Score E = 3 students Percentage = $\frac{3}{30}$X 100% = 10.00%

Score F = 2 students Percentage = $\frac{2}{30}$X 100% = 6.67%

Based on the table above, the students score of control group can be drawn at histogram as below

**4.2 Figure 2: Histogram of Control Group**

Based on the histogram above, it can be seen that there were 8 students or 26,67% who have the highest scores at interval scores 75-82, and then at interval scores 59-66 there were 7 students or 23,33%, then at interval scores 67-74 there were 6 students or 20.00%, then at interval scores 83-90 there were 4 students or 13.33%, then at interval scores 51-58 there were 3 students or 10.00%, and the last at interval scores 45-50 there were 2 students or 6.67%.

* + 1. **Data Analysis**

After got the data and the result of test, then the data was analyzed by applying test to prove hypothesis by calculating data as table below:

**TABLE 4.5**

**THE DIFFERENCE SCORE OF PRE-TEST AND POST-TEST OF EXPERIMENTAL GROUP**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Students’ Initial** | **Pre-test T1** | **Post-test T2** | **X=T2-T1** |
| 1 | RAC | 50 | 95 | 45 |
| 2 | RAL | 50 | 80 | 30 |
| 3 | RFA | 45 | 70 | 25 |
| 4 | RJ | 45 | 55 | 10 |
| 5 | RM | 55 | 65 | 10 |
| 6 | RAS | 60 | 75 | 15 |
| 7 | SFN | 50 | 85 | 35 |
| 8 | SRH | 65 | 70 | 5 |
| 9 | SAK | 40 | 80 | 40 |
| 10 | SFA | 45 | 70 | 25 |
| 11 | SSS | 50 | 85 | 35 |
| 12 | SAP | 60 | 70 | 10 |
| 13 | SFC | 50 | 90 | 40 |
| 14 | SNS | 55 | 55 | 0 |
| 15 | SFWS | 55 | 65 | 10 |
| 16 | SRR | 60 | 75 | 15 |
| 17 | SLP | 50 | 85 | 35 |
| 18 | SA | 40 | 90 | 50 |
| 19 | SR | 65 | 90 | 25 |
| 20 | TBS | 65 | 95 | 30 |
| 21 | TM | 55 | 70 | 15 |
| 22 | UH | 65 | 80 | 15 |
| 23 | WMZ | 55 | 75 | 20 |
| 24 | YE | 55 | 90 | 35 |
| 25 | ZN | 60 | 90 | 30 |
| 26 | ZAM | 50 | 70 | 20 |
| 27 | ZWDY | 55 | 70 | 15 |
| 28 | ZRS | 45 | 85 | 40 |
| 29 | ZZZ | 60 | 85 | 25 |
| 30 | FSA | 50 | 85 | 35 |
| **Total**  | **740** |

Based on the table above, it can be counted that total score of Y = T2-T1  is 740, in order to find out the mean of experimental group the score is calculated as below:

Mx or M1 = 

 = 

 = 24,66

 Then, the table below had shown the difference score of pre-test and post-test of Control Group.

**TABLE 4.6**

**THE DIFFERENCE SCORE OF PRE-TEST AND POST-TEST**

**OF THE CONTROL GROUP**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Students’ Name** | **Pre-test T1** | **Post-test T2** | **Y = T2-T1** |
| 1 | MAS | 55 | 80 | 25 |
| 2 | MAF | 50 | 65 | 15 |
| 3 | MAL | 40 | 70 | 30 |
| 4 | MADS | 50 | 75 | 25 |
| 5 | MAR | 50 | 65 | 15 |
| 6 | MF | 55 | 75 | 20 |
| 7 | MFAB | 50 | 60 | 10 |
| 8 | MFA | 50 | 65 | 15 |
| 9 | MFT | 70 | 70 | 0 |
| 10 | MFZ | 45 | 60 | 15 |
| 11 | MGHA | 50 | 80 | 30 |
| 12 | MHAH | 55 | 85 | 30 |
| 13 | MIAV | 40 | 45 | 5 |
| 14 | MJP | 50 | 90 | 40 |
| 15 | MMHH | 45 | 70 | 25 |
| 16 | MHP | 45 | 55 | 10 |
| 17 | MRS | 80 | 85 | 5 |
| 18 | MRHL | 65 | 70 | 5 |
| 19 | MRHH | 55 | 75 | 20 |
| 20 | MSKS | 55 | 75 | 20 |
| 21 | MTSS | 50 | 80 | 30 |
| 22 | MTR | 55 | 70 | 15 |
| 23 | MWAR | 50 | 65 | 15 |
| 24 | MAA | 60 | 70 | 10 |
| 25 | MZS | 65 | 60 | -5 |
| 26 | MH | 60 | 50 | -10 |
| 27 | MFR | 65 | 85 | 20 |
| 28 | MAEP | 70 | 80 | 10 |
| 29 | RPS | 45 | 55 | 10 |
| 30 | RTH | 50 | 55 | 5 |
| **Total**  | **460** |

Based on the table above, it can be counted that total score of X = T2-T1 is 460, in order to find out the mean of control group the score is calculated as below:

My or M2 = 

 = 

 = 15,33

The next step is to calculate the data above, the writer applied the statistic t –test as table below:

**TABLE 4.7**

**THE CALCULATION TO FIND THE “t”**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **X** | **Y** | **X = (X-MX)** | **Y = (Y-My)** | **X2** | **Y2** |
| 1 | 45 | 25 | 20.34 | 9.67 | 413.72 | 93.51 |
| 2 | 30 | 15 | 5.34 | 15 | 900.00 | 225.00 |
| 3 | 25 | 30 | 0.34 | 30 | 625.00 | 900.00 |
| 4 | 10 | 25 | -14.66 | 25 | 100.00 | 625.00 |
| 5 | 10 | 15 | -14.66 | 15 | 100.00 | 225.00 |
| 6 | 15 | 20 | -9.66 | 20 | 225.00 | 400.00 |
| 7 | 35 | 10 | 10.34 | 10 | 1225.00 | 100.00 |
| 8 | 5 | 15 | -19.66 | 15 | 25.00 | 225.00 |
| 9 | 40 | 0 | 15.34 | 0 | 1600.00 | 0.00 |
| 10 | 25 | 15 | 0.34 | 15 | 625.00 | 225.00 |
| 11 | 35 | 30 | 10.34 | 30 | 1225.00 | 900.00 |
| 12 | 10 | 30 | -14.66 | 30 | 100.00 | 900.00 |
| 13 | 40 | 5 | 15.34 | 5 | 1600.00 | 25.00 |
| 14 | 0 | 40 | -24.66 | 40 | 0.00 | 1600.00 |
| 15 | 10 | 25 | -14.66 | 25 | 100.00 | 625.00 |
| 16 | 15 | 10 | -9.66 | 10 | 225.00 | 100.00 |
| 17 | 35 | 5 | 10.34 | 5 | 1225.00 | 25.00 |
| 18 | 50 | 5 | 25.34 | 5 | 2500.00 | 25.00 |
| 19 | 25 | 20 | 0.34 | 20 | 625.00 | 400.00 |
| 20 | 30 | 20 | 5.34 | 20 | 900.00 | 400.00 |
| 21 | 15 | 30 | -9.66 | 30 | 225.00 | 900.00 |
| 22 | 15 | 15 | -9.66 | 15 | 225.00 | 225.00 |
| 23 | 20 | 15 | -4.66 | 15 | 400.00 | 225.00 |
| 24 | 35 | 10 | 10.34 | 10 | 1225.00 | 100.00 |
| 25 | 30 | -5 | 5.34 | -5 | 900.00 | 25.00 |
| 26 | 20 | -10 | -4.66 | -10 | 400.00 | 100.00 |
| 27 | 15 | 20 | -9.66 | 20 | 225.00 | 400.00 |
| 28 | 40 | 10 | 15.34 | 10 | 1600.00 | 100.00 |
| 29 | 25 | 10 | 0.34 | 10 | 625.00 | 100.00 |
| 30 | 35 | 5 | 10.34 | 5 | 1225.00 | 25.00 |
| **Total**  | **21388.72** | **10218.51** |

Related to the data on the above table in order to know the standard deviation, standard error of experimental and control group, the writer calculated by the formula as below:

*SDX* *or SD1* = 

 = 

 = 

 = 11.08

*SDy* *or SD2* = 

 = 

 = 

 = 11.10

*SEMX* *or SEM1* = 

 = 

 = 

 = 

 = 2.05

*SEMY* *or SEM2* = 

 = 

 = 

 = 

 = 2.06

*SE M1 - M2* = 

 = 

 = 

 = 

 = 2.89

 *to* = 

 = 

 = 

 = 3.11

Based on the calculation of the scores in tables above, the following formula of t-test was implemented to find out the critical value of both samples in groups as the main basic implementation to the hypothesis of this research.

t = 

Its means that:

 X : 24.33 X : 15.33

 ΣX : **3686.667**  ΣX : **3696.667**

 n : 30 n : 30

After knowing the value as stated above, thus, the each value calculated as follows:

*to* = 

t = 

t = 

t = 

t = 

*SDX* *or SD1* = 

 = 

 = 

 = 26,70112

*SDy* *or SD2* = 

 = 

 = 

 = 18.45581

*SEMX* *or SEM1* = 

 = 

 = 

 = 

 = 4,958273

*SEMY* *or SEM2* = 

 = 

 = 

 = 

 = 3,427158

*SE M1 - M2* = 

 = 

 = 

 = 

 = 6.02744

*to* = 

 = 

 = 

 = 1.54

 Based on the calculation of the scores in tables above, the following formula of t-test was implemented to find out the critical value of both samples in groups as the main basic implementation to the hypothesis of this research.

t = 

Its means that:

 X : 24.66 X : 15.33

 ΣX : 21388.72 ΣX : 10218.51

 n : 30 n : 30

 After knowing the value as stated above, thus, the each value calculated as follows:

t = 

t = 

t = 

t = 

t = 

t = 5.99

* + 1. **Testing the Hypothesis**

Testing the Hypothesis should be done in order to know whether the hypothesis is accepted or rejected. Based on t-table with df 60 (n + n – 2 = 30 + 30 – 2 = 58) at t-critical 0.05 it’s obtained 1.666. If compared the value of to and tt, so it shown that the value of t-observed is bigger than the value of t-table or 5.99 > 1.666. It means that the hypothesis alternative was accepted and hypothesis null was rejected.

Based on the calculation and explanation above, it is concluded that there is a significant effect of Contextual Teaching Learning (CTL) on the students’ achievement in writing skills and the hypothesis is accepted, on the other word, the student achievement taught by using CTL in teching writing skills is higher than those without CTL.

* 1. **Discussions**

Researcher observed about the studying of students in class VIII at MTs Hifzhil Qur’an Islamic Center Medan especially in teaching learning English. Researcher found some problems faced by the students in learning process one of them was writing English. Researcher observed why the students find it difficult to learn to write because most students could not express their idea and it was difficult to remember what they want to say in English. Furthermore, researcher improve the students‟ procedure text writing ability through contextual teaching and learning. The researcher used this technique to help the students with their writing ability and made them more active and creative in learning process.

Based on the result of the research the mean of experimental group was 24,66 and 26.70 standard deviation and the mean of control group is 15,33 and 18.45 standard deviation. Then the result of t-test was 5.99

The researcher presents the previous study dealing with the topic. The fisrt title is “*The Influence of Contextual Teaching and Learning Approach on Students’ Writing Descriptive Text ( A Quasi-experimental Study at the Seventh Grade Students of SMP Fatahillah Ciledug, Tangerang )”* written by Anisa Nurul Hidayah. This research used experimental research design. The result of this research implied that Contextual Teaching and Learning approach is effective on the students’ achievement of writing skills.

The second title is *the effectiveness of contextual teaching and learning in improving students reading skills in procedural Text (A Quasi-experimental Study of second grade students at one vocational school in Bandung)* written by Khaefiatunnisa. This research used experimental design. The result of this research implied that Contextual Teaching and Learning approach is effective on the students’ achievement of reading skills.