## CHAPTER IV

## DATA ANALYSIS AND RESEARCH FINDINGS

### 4.1. Data Analysis

The data of this study includes preliminary data and the results of the post test. The writer also analyzed the quantitative data were taken from pre-test and post-test.

### 4.1.1. Description of Data

The population of this research was the students of MA LAB UINSU Medan. The experimental group was X-1 consisted of 30 students and the control group was X-2 consisted of 30 students. After conducted the research, the writer got the data from the students' scores in pre-test and post-test from both experimental and control group. The test used is a story composing test randomly along with an essay consisting of 5 questions. Each group was given a pre-test and post-test. The students at experimental group were taught by using random text strategy while the students at control group were taught by using discussion method.
4.1.2 The Data Students' Reading Comprehension Taught by Using Discussion Method

Table 4.1

| No | Name | PreTest | PostTest |
| :---: | :---: | :---: | :---: |
| 1. | RN | 20 | 30 |
| 2. | CAZ | 25 | 30 |
| 3. | NP | 25 | 35 |
| 4. | DSD | 25 | 35 |
| 5. | MK | 25 | 35 |
| 6. | DR | 30 | 40 |
| 7. | PAA | 30 | 40 |
| 8. | MSA | 30 | 40 |



Based on table 4.1 the average score students in the pre-test of the control class was 36. In the pre-test, all students in the control class had not scored up to 80 . For the post-test, the average students score was 45,33 . In the same way, all students have not scored up to 80 (Minimum Completeness Criteria).

### 4.1.3 The Data Students' Reading Comprehension Taught by Using Random

 Text StrategyTable 4.2

| No | Name | PreTest | PostTest |
| :---: | :---: | :---: | :---: |
| 1. | RIA | 60 | 75 |
| 2. | NM | 60 | 75 |
| 3. | WLA | 60 | 75 |
| 4. | MZ | 65 | 80 |
| 5. | AI | - 65 | 80 |
| 6. | IM | 65 | 80 |
| 7. | MH | 65 | 80 |
| 8. | HM | 70 | 80 |
| 9. | IS | 70 | 80 |
| 10. | TZS | 70 | 80 |
| 11. | DS | 70 | 80 |
| 12. | ADP | 70 | 80 |
| 13. | FAL | 75 | 85 |
| 14. | ATA | 75 | 85 |
| 15. | ES | 75 | 85 |
| 16. | EA | 75 | 85 |
| 17. | $\mathrm{ME}$ | $\mathrm{SLA}^{75}$ |  |
| 18. | MAA | - 75 | 90 |
| 19. | U⿴囗 HA | - 80 | 90 |
| 20. | NRN | 80 | 90 |
| 21. | SB | 80 | 90 |
| 22. | RHL | 80 | 90 |
| 23. | AT | 80 | 90 |
| 24. | FM | 80 | 90 |
| 25. | MTR | 80 | 90 |


| 26. | ML | 80 | 90 |
| :---: | :---: | :---: | :---: |
| 27. | AZK | 80 | 90 |
| 28. | GT | 85 | 95 |
| 29. | AH | 85 | 95 |
| 30. | EL | 85 | 95 |
|  | Total | $\mathbf{2 . 2 1 5}$ | $\mathbf{2 . 0 2 0}$ |
|  | Mean | $\mathbf{7 3 , 8 3}$ | $\mathbf{8 5 , 3 3}$ |

Based on table 4.2, the average score of students in the experimental class pre-test was 73,83 . In the pre-test, 18 students had not scored 80 and 12 other students achieve 80 . For the post-test the average students score was 85,33 . In the post-test, 3 students had not scored 80 , while 27 other students had scored 80 (Minimum Completeness Criteria).

### 4.2 Research Instrument Test

### 4.2.1 Normality Test Resuts

The pretest and posttest data normality test results for the experimental and control classes were calculated using the SPSS version 25 application (attachment) as follows.

Table 4.3 Normality Test Result

|  | Kolmogorov-Smirnov A Shapiro-Wilk |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| PreTest Kontrol | . 177 | 30 | . 017 | . 932 | 30 | . 055 |
| PostTest Kontrol | . 182 | 30 | . 012 | . 941 | 30 | . 098 |
| PreTest Eksperimen | . 167 | 30 | . 033 | . 953 | 30 | . 204 |
| PostTest Eksperimen | . 201 | 30 | . 033 | . 898 | 30 | . 247 |

From the results of the normality test above, it appears that the results obtained from the pretest and posttest activities are normally distributed. This can be seen from the significant value $>a(0,05)$, namely the pretest value of the control class $=0,055>0,05$, the posttest value of the control class $=0,098>0,05$, the pretest value of the experimental class $=0,204>0,005$, experiment $0,247>0,05$, so it can be concluded that the normality test on the posttest value of each experimental class and normality distributed controls.

### 4.2.2 Homogeneity Test Results

From the posttest results data between students in the experimental class and the control class can be seen in the following table :

Table 4.4 Homogeneity Test Results
Test of Homogeneity of Variance

| Lavene Statistic | df1 | df2 | Sig. |
| :--- | :--- | :--- | :--- |
| 1.372 | 1 | 58 | 0.246 |

The data from the control post test and experimental post test above can be tested for homogeneity. After testing homogeneity, it can be seen in the test of homogeneity of varians table that the probability value (significance) is 0.246 greather than 0.05 , so it is homogeneous.

From the homogeneity data above, the results are homogeneous so that there is no difference between the two and the existing data can be said to be normal and have the same variance.There is no class has similirities between students who excel and also have students who are less or slow in learning.

### 4.2.3 Results of Hypothesis Testing/Results of Data Analysis

Testing hypothesis aim for give answer which put forward by researchers whether the hypothesis can be accepted or rejected. The hypothesis to be tested is
a. H1 : There is an effect of using Random Text Strategy on reading comprehension learning outcomes at MA LAB UINSU
b. Ho : There is no effect of using Random Text Strategy on reading comprehension learning outcomes at MA LAB UINSU

Hypotesis testing was carried out to test the hypothesis using the average difference test mean the independent Sample T-Test while to use level significant that is, if it is significant $>0.05$ then Ho is rejected, and Ha is accepted if it is significant accepted $<0.05$, after testing the average difference with Independent Sample T-Test, the results are as follows :

Table 4.5 Average Value :

| Class | N | Mean | Std. <br> Deviation | Std. <br> Error Mean |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Helajar | PreTest | 30 | 73.83 | 6.149 | 1.123 |
|  |  |  |  |  |  |
| PostTest |  |  |  |  |  |
|  | 30 | 85.33 | 7.621 | 1.391 |  |

Independent Samples Test

|  |  | Levene's <br> Test for Equality of Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | T | df | Sig. <br> (2- <br> taile <br> d) | Mean Differ ence | Std. <br> Error <br> Diffe <br> rence | $95 \%$ <br> Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| $\begin{array}{\|l} \hline \text { hasil } \\ \text { belaj } \\ \text { ar } \\ \hline \end{array}$ | Equal variances assumed |  | 1.372 | . 246 | $\begin{array}{r} 6.43 \\ 2 \end{array}$ | 58 | . 000 | 11.500 | 1.788 | 15.079 | 7.921 |


|  | Equal <br> variances <br> not <br> assumed |  |  |  | 6.43 | 55 |  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Based on the table above, regarding the output of the calculation of the average difference test of the experimental group's learning outcomes using the Random Text Strategy and the control group using conventional learning, it can be seen in the table that the mean or average of the experimental group's learning outcomes can be seen in the group statistics table that the mean or average of the experimental group's learning outcomes is 85.33 while the control group is 73.83 . So the average of the experimental group is higher than the average of the control group. Then it can also be seen from the Independent Sample Test table that the sig value in the Levene's Test For Equality Of Variance column obtained a value of 0.246. If the hypothesis is formulated, namely Ho: sig < 0.05 , meaning that the samples do not have the same variance, then the output results conclude that Ha is accepted because sig $>0.05$, namely $0.246>0.05$, meaning that both samples have the same variance.

In the T-Test For Equality Of Means column, a value of 0.00 is obtained, if the hypothesis formulation is Ho : $\mathrm{sig}>0.05$, it means that there is no difference in the learning outcomes of the experimental group and the control group (no effect of using the Random Text Strategy) and Ha: sig $<0.05$ means that there is a difference in the learning outcomes of the experimental group and the control group (there is an effect of using the Random Text Strategy), so from the output it is concluded that Ha is accepted because sig <0.05, namely $0.00<0.05$ means that the learning outcomes of students in the experimental group using the Random Text Strategy can affect the learning outcomes of students' reading comprehension at MA LAB UINSU.

### 4.3 Discussion

There is a significant difference in students' reading comprehension by applying the random text strategy. Students taught using the random text strategy had higher scores than students taught using the discussion method. It was explained that this strategy can help students to activate their prior knowledge by arousing their curiosity about the understanding given by the teacher. The random text strategy has the potential to stimulate knowledge about reading, not only because it can lead to comprehension, but also because it helps students to master the meaning of what they have read before and accommodate new information that may conflict with their previous thinking.

From these results, the authors found that there was a significant effect that students who were taught with the random text strategy were better at understanding the text than students who were taught with the discussion method. Several previous authors have used random text strategies to teach reading comprehension. Anggun (2018) The authors of the article "The Effect of Question-Answering Relationship Strategy on First Grade High School Students Reading Comprehension" concluded that the experimental group's use of the QAR strategy improved the students' reading comprehension, and statistical analysis showed a significant difference between the performance of the experimental group and the control group in the post-test relative to the pre-test.

Another writers such as Wahyuni (2014) The author of Improving Reading Comprehension Through Question-Answering Instruction of The Eight Grade Students of SMP According to Andika Denpasar's analysis of the research, the average pre-cycle score was 39.02 , the cycle 1 students' mean score was 69.58 , and the final cycle 2 score was 79.03 . This suggests that teaching students to read comprehension through question-answering exercises could benefit students' reading comprehension.

So from some previous related studies, the writer can compare the result of the study. From the previous related studies the result of the $t$-test and mean score
showed that Random Text Strategy had significant result on students" reading comprehension and it is also same with the results of the study that have been conducted by the writer with the same procedures. This also shows that the random text strategy can be applied to test students' ability to understand a text.


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