## CHAPTER IV

## RESULT OF THE STUDY

This chapter covers data presentation, test of normality and homogeneity independent samples test, result of the data analyses and discussion.

## A. Data Presentation

This section describes the obtained data of the effectiveness of using KWL Strategy in teaching reading invitation.

## 1. The Description Data of Pre-Test Score

The students' pre test scores is distributed in the following table in order to analyze the students' knowledge before conducting the treatment.

Table 4.1 Pre test score of experimental and control group

| Experimental Group |  |  |  |  | Control Group |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Score | Correct | Predicate | Code | Score | Correct | Predicate |  |
|  |  | Answer |  |  |  |  |  |  |
| E-01 | 35 | 7 | FAIL | C-01 | 30 | 6 | FAIL |  |
| E-02 | 55 | 11 | LESS | C-02 | 50 | 10 | LESS |  |
| E-03 | 35 | 7 | FAIL | C-03 | 50 | 10 | LESS |  |
| E-04 | 35 | 7 | FAIL | C-04 | 55 | 11 | LESS |  |
| E-05 | 40 | 8 | FAIL | C-05 | 70 | 14 | GOOD |  |
| E-06 | 60 | 12 | ENOUGH | C-06 | 40 | 8 | FAIL |  |
| E-07 | 30 | 6 | FAIL | C-07 | 15 | 3 | FAIL |  |
| E-08 | 25 | 5 | FAIL | C-08 | 60 | 12 | ENOUGH |  |
| E-09 | 20 | 4 | FAIL | C-09 | 40 | 8 | FAIL |  |
| E-10 | 60 | 12 | ENOUGH | C-10 | 50 | 10 | LESS |  |
| E-11 | 50 | 10 | LESS | C-11 | 15 | 3 | FAIL |  |
| E-12 | 15 | 3 | FAIL | C-12 | 50 | 10 | LESS |  |
| E-13 | 60 | 12 | ENOUGH | C-13 | 65 | 13 | ENOUGH |  |
| E-14 | 35 | 7 | FAIL | C-14 | 25 | 5 | FAIL |  |


| E-15 | 35 | 7 | FAIL | C-15 | 55 | 11 | LESS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E-16 | 40 | 8 | FAIL | C-16 | 45 | 9 | FAIL |
| E-17 | 50 | 10 | LESS | C-17 | 45 | 9 | FAIL |
| E-18 | 40 | 8 | FAIL | C-18 | 35 | 7 | FAIL |
| E-19 | 45 | 9 | FAIL | C19 | 30 | 6 | FAIL |
| E-20 | 30 | 6 | FAIL | C-20 | 25 | 5 | FAIL |
| E-21 | 45 | 9 | FAIL | C-21 | 55 | 11 | LESS |
| E-22 | 65 | 13 | ENOUGH | C-22 | 25 | 5 | FAIL |
| E-23 | 40 | 8 | FAIL | C-23 | 40 | 8 | FAIL |
| E-24 | 35 | 7 | FAIL | C-24 | 25 | 5 | FAIL |
| E-25 | 55 | 11 | FAIL | C-25 | 15 | 3 | FAIL |
| E-26 | 55 | 11 | FAIL | C-26 | 25 | 5 | FAIL |
| E-27 | 50 | 10 | FAIL | C-27 | 50 | 10 | LESS |
| E-28 | 45 | 9 | FAIL | C-28 | 55 | 11 | LESS |
| E-29 | 40 | 8 | FAIL | C-29 | 45 | 9 | FAIL |
| TOTAL |  | 1225 |  | TOTAL |  | 1185 |  |
| AVERAGE |  | 42.24 |  | AVERAGE |  | 40.86 |  |
| Lowest Score |  | 15 |  | Lowest Score |  | 15 |  |
| Highe | core | 65 |  | Highest Score |  | 70 |  |

The table above shows us the comparison of pre-test score achieved by experimental and control group students, both class' achievement are at most the same level. It can be seen that from the students' score. The highest score is 65 and the lowest score is 15 , experimental. The highest score is 70 and the lowest score is 15 control group. It meant that the experimental and control group have most the same level in reading comprehension before getting the treatment.

The distribution of students' pretest score of experiment group can also be seen in the following figure 4.1.


Figure 4.1. The students' predicate in pretest score of experiment group
From the figure above it shows that there are twenty five of students who got score $10-55$, they got Fail predicate. There were four students who got score $60-65$, they got Enough predicate. Base on the distribution above, can be seen that there are students of experiment group who got Fail predicate before given treatment.

Then, the distribution of students' pretest score of control group can also be seen in the following figure 4.2.

## Histogram



Figure 4.2. The students' predicate in pretest score of control group
From the figure above shows that there are twenty seventh of students who got score $10-55$, they got Fail predicate. There are two students who got score 60-65, they got Enough predicate. There is one student who got score 70 she/he got good predicate. Base on the distribution above, it can be seen that there are students of control group who got Fail predicate before given treatment.

## 2. The Description Data of Post-Test Score

The students' scores are distributed in the following table in order to analyze the students' knowledge after conducting the treatment.

Table 4.2 Post-Test score of experimental and control group

| Experimental Group |  |  |  | Control Group |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Score | Correct | Predicate | Code | Score | Correct | Predicate |
|  |  | Answer |  |  | Answer |  |  |
| E-01 | 75 | 15 | GOOD | C-01 | 50 | 10 | LESS |
| E-02 | 65 | 13 | ENOUGH | C-02 | 65 | 13 | ENOUGH |
| E-03 | 65 | 13 | ENOUGH | C-03 | 60 | 12 | ENOUGH |
| E-04 | 85 | 17 | GOOD | C-04 | 50 | 10 | LESS |
| E-05 | 70 | 14 | GOOD | C-05 | 40 | 8 | FAIL |
| E-06 | 65 | 13 | ENOUGH | C-06 | 60 | 12 | ENOUGH |
| E-07 | 75 | 15 | GOOD | C-07 | 50 | 10 | LESS |
| E-08 | 60 | 12 | ENOUGH | C-08 | 35 | 7 | FAIL |
| E-09 | 75 | 15 | GOOD | C-09 | 55 | 11 | ENOUGH |
| E-10 | 70 | 14 | GOOD | C-10 | 75 | 15 | GOOD |
| E-11 | 70 | 14 | GOOD | C-11 | 50 | 10 | LESS |
| E-12 | 70 | 14 | GOOD | C-12 | 40 | 8 | FAIL |
| E-13 | 75 | 15 | ENOUGH | C-13 | 50 | 10 | LESS |
| E-14 | 80 | 16 | GOOD | C-14 | 50 | 10 | LESS |
| E-15 | 60 | 12 | ENOUGH | C-15 | 55 | 11 | LESS |
| E-16 | 80 | 16 | GOOD | C-16 | 45 | 9 | FAIL |
| E-17 | 90 | 18 | Excellent | C-17 | 60 | 12 | ENOUGH |
| E-18 | 75 | 15 | GOOD | C-18 | 40 | 8 | FAIL |
| E-19 | 70 | 14 | GOOD | C19 | 65 | 13 | ENOUGH |
| E-20 | 75 | 15 | GOOD | C-20 | 55 | 11 | LESS |
| E-21 | 75 | 15 | GOOD | C-21 | 50 | 10 | LESS |
| E-22 | 80 | 16 | GOOD | C-22 | 40 | 8 | FAIL |
| E-23 | 85 | 17 | Excellent | C-23 | 35 | 7 | FAIL |
| E-24 | 70 | 14 | GOOD | C-24 | 50 | 10 | LESS |
| E-25 | 75 | 15 | GOOD | C-25 | 45 | 9 | FAIL |
| E-26 | 70 | 14 | GOOD | C-26 | 60 | 12 | ENOUGH |


| E-27 | 85 | 17 | Excellent | C-27 | 50 | 10 | LESS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E-28 | 75 | 15 | GOOD | C-28 | 45 | 9 | LESS |
| TOTAL | $\mathbf{2 0 6 5}$ |  | TOTAL |  | $\mathbf{1 4 2 5}$ |  |  |
| AVERAGE | $\mathbf{7 3 . 7 5}$ | AVERAGE | $\mathbf{5 0 . 8 9}$ |  |  |  |  |
| Lowest Score | $\mathbf{6 0}$ | Lowest Score | $\mathbf{3 5}$ |  |  |  |  |
| Highest Score | $\mathbf{9 0}$ | Highest Score | $\mathbf{7 5}$ |  |  |  |  |

The table above shows us the comparison of post-test score achieved by experimental and control group students. Both class' achievement have different score. It can be seen from the highest score 90 and 75 and the lowest score 60 and 35 . It meant that the experimental and control group have different level in reading comprehension after getting the treatment. The distribution of students' post-test score of experiment group can also be seen in the following figure 4.3.


Figure 4.3. The students' predicate in post-test score of experimental

From the figure above shows that there are five of students who got score 6065 , they got enough predicate. There are sixteen students who got score $70-55$, they got good predicate. There are six of students who got score $80-90$, they got excellent predicate.

The distribution of students' post-test score of control group can also be seen in the following figure 4.4.

## Histogram



Figure 4.4. The students' predicate in post-test score of control group
From the figure above showed that there are twenty one of students who got score 35-55, they got Fail predicate. There are six students who got score $60-65$, they got

Enough predicate. There is one student who got score 80 , she/he got excellent predicate.

## B. Testing of Normality and Homogienity

## 1. Normality Test

The testing of normality test used SPSS 20.0 program. It is divided into two parts, testing of normality of pre-test and post-test both experimental and control group.

Table 4.3 Testing normality of post-test experimental and control group

| Tests of Normality |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Kolmogorov-Smirnov ${ }^{\text {a }}$ |  |  | Shapiro-Wilk |  |  |
|  |  | Statistic | Df | Sig. | Statistic | df | Sig. |
| Scores of students posttest | Control | . 180 | 28 | . 020 | . 954 | 28 | . 249 |
|  | Experiment | . 183 | 28 | . 017 | . 951 | 28 | . 212 |

The table shows the result of test normality calculation using SPSS 20.0 program.
To know the normality of data, the formula can be seen as follows:
If the number of sample. $>50=$ Kolmogorov-Smirnov
If the number of sample. $<50=$ Shapiro-Wilk
Based on the number of data the writer was $28<50$, so to analyzed normality data the writer used Shapiro-Wilk. The next step, the writer analyzed normality of data by using formula as follows:

If Significance $>0.05=$ data is normal distribution
If Significance $<0.05=$ data is not normal distribution

Based on data above, significant data of experiment and control group used Shapiro-Wilk is $0 . .249>0.05$ and $0.212>0.05$. It can be concluded that the data is normal distribution.

## 2. Testing Homogeneity

Testing homogeneity used SPSS 20.0 program. The result of testing homogeneity of post-test of experimental and control group can be seen on the table 4.4.

Table 4.4. Testing Homogeneity and independent samples test of post-test of experimental and control group


The table shows the result of Homogeneity test calculation using SPSS 20.0 program. To know the Homogeneity of data, the formula can be seen as follows:

If Sig. $>0,05=$ Equal variances assumed or Homogeny distribution
If Sig. $<0,05=$ Equal variances not assumed or not Homogeny distribution. Based on data above, significant data is 0.299 . The result is $0.299>0,05$, it mean the t-test calculation used at the equal variances assumed or data is Homogeny distribution.

## C. The Result of Data Analysis

## 1. Descriptive Calculation of data analysis

An analyzes of descriptive calculation of data analysis used SPSS 20.0 program to shows mean, median, standard deviation, ranges and variances it is showed on table 4.7. and 4.8.

Table 4.5. Descriptive Calculation of data analysis of pre-test of control and experiment group.


The table shows first, the descriptive calculation of data analysis of pre-test control group. the result of mean calculation is 40.86 , the result of median calculation is 45.00 , and the result of ranges calculation was 55 . The result of standard deviation was 15.357 . The result of standard error of mean calculation is 2.852 . Second, the
descriptive result of data analysis of pre-test of experiment group. The result of mean calculation is 42.24 , the result of median calculation is 40,00 and the result of ranges calculation is 50 . The result of standard deviation is 12.435 The result of standard error of mean calculation is 2.309 .

Table 4.6. Descriptive Calculation of data analysis of post-test of control and experiment group.


The table shows first, the descriptive calculation of data analysis of post-test of control group. the result of mean calculation is 50.89 , the result of median calculation is 50.00 , and the result of ranges calculation is 40 . The result of standard deviation is 9.531. The result of standard error of mean calculation is 1.801 . Second,
the descriptive result of data analysis of pre-test of experiment group. The result of mean calculation is 73.75 , the result of median calculation is 75.00 and the result of ranges calculation is 30 . The result of standard deviation is 7.407 . The result of standard error of mean calculation is 1.400.

## 2. Testing Hypothesis Using Calculation of T-Test Used SPSS 20.0 Program.

The last step on data analysis was testing hypothesis using calculation of T- test used SPSS 20.0 program.

Table 4.7. Testing Hypothesis Using Calculation of T-Test Used SPSS 20.0 Program.

| Independent Samples Test |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Levene's Test for <br> Equality of <br> Variances |  | t-test for Equality of Means |  |  |  |  |  |  |
|  |  | F | Sig. | T | Df | Sig. (2-tailed) | Mean <br> Differenc <br> e | Std. Error <br> Difference | 99\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| scores of | Equal <br> variances <br> assumed |  | 1.098 | . 299 | 10.020 | 54 | . 000 | 22.857 | 2.281 | 27.431 | 18.284 |
| posttest | Equal <br> variances not assumed |  |  | 10.020 | 50.896 | . 000 | 22.857 | 2.281 | 27.437 | 18.277 |

The table above shows score on "T" on equal variances assumed is 10.020 with sig. (.000) two tailed. To know the testing hypothesis of data used SPSS 20.0 program, the formula can be seen as follows:
$\mathrm{H}_{0} \quad:$ If score sig. (2-tailed) $>0.05$ it means $\mathrm{H}_{0}$ was accepted and $\mathrm{H}_{1}$ was rejected.
$\mathrm{H}_{\mathrm{a}} \quad:$ If score sig. (2-tailed) $<0.05$ it means $\mathrm{H}_{1}$ was accepted and $\mathrm{H}_{0}$ was rejected.

Based on data above, significant probability (sig.2-tailed) is 0.000 . The result is $0.000<0,05$, it mean $\mathrm{H}_{1}$ was accepted and $\mathrm{H}_{0}$ is rejected. From the result of testing hypothesis using calculation of t-test, it is shows that KWL strategy is effective towards reading comprehensions scores of Eighth Grade Students of SMP N-2 Danau sembuluh.

## D. Discussion

The result of analysis shows that there is significant effect of KWL strategy Toward Reading Comprehension for the Eight grade students at SMP N-2 Danau Sembuluh. The students who were taught by using KWL strategy reached higher score than those who were taught without using KWL strategy.

Then, after the data was calculated by using SPSS 20.00 Program, It was found the significant probability (sig.2-tailed) was 0.000 . The result was 0.000 < 0,05 , it means that $H_{a}$ is accepted and $H_{0}$ is rejected. From the result of testing hypothesis using calculation of t -test showed that KWL strategy is effective towards reading comprehensions scores of Eighth Grade Students of SMP N-2 Danau sembuluh.

This finding indicated that the alternative hypothesis (Ha) stating that KWL strategy was effective Toward Reading Comprehension scores of Eight grade
students of SMPN-2 Danau Sembuluh was accepted. On the contrary, the Null hypothesis (Ho) stating that KWL strategy was not effective Toward Reading Comprehension scores of Eight grade students of SMPN-2 Danau Sembuluh was rejected.

After the students have been taught by using KWL Strategy, the reading scores were higher than before implementing KWL Strategy as a learning strategy. It can be seen in the comparison of pre test and post test score of experimental group and control group (p. 43). This finding indicated that KWL strategy was effective and supports the previous research done by Iva Emaliana and Rini Mariana also stated teaching reading by using KWL strategy was effective.

There were some reasons why using KWL Strategy gave very significant effect for the students' reading comprehension scores of Eight grade students of SMPN-2 Danau Sembuluh. First, KWL Strategy was effective in terms of improving the students' English reading score. It can be seen from the improvement of the students' scores average in the post-test. From the mean score of control and experiment were 73.75 and 50.89. (See p. 48).

It is suitable with the result of pre-test and post test for Experiment and control Group. (See p. 43 and 48). In the pre-test of experiment group there were nineteen of students who got fail predicate. They were E-01, E-03, E-04, E-05, E-07, E-08, E-09, E-13, E-14, E-15, E-16, E-18, E-19, E-20, E-21, E-28, and E-29. There were six of students who got less predicate. They were E-02, E-11, E-17, E-25, E-26 and E-27. There were four of students that who enough predicate. They are E-06, E-

10, E-13 and E-22. Then, in the pre-test score of control group there were seventeen of students who got fail predicate. They were C-01, C-06, C-07, C-09, C-11, C-16, C17, C-18, C-19, C-20, C-22, C-23, C-24, C-25, C-26 and C-29. There were eight of students who got less predicate. There were C-02, C-03, C-04, C-10, C-12, C-15 C21, C-27 and C-29. There were Two of students that got enough predicate. They were C-08, C-and C-19. There was one of students who got good predicate. it was C-05.

Based on the result of post-test for experimental and control group, (See p. 48). In the experimental group, there was no student that got in fail predicate. There were six of students who got enough predicate. They were E-02, E-03, E-06, E-13, and E-15. There were twenty of students who got good predicate. They were E-01, E04, E-05, E-07, E-09, E-10, E-11, E-12, E-14, E-16, E-18, E-19, E-20, E-21, E-22, E24, E-256 and E-28. There three of students who got excellent predicate, there were E-17, E-23 and E-27. In the control group, there were eight of student who got in fail predicate. There were C-05, C-08, C-12, C-16, C-18, C-22, C-23, and C-25 . There were twelve of students who got less predicate. They were C-01, C-04, C- $07, \mathrm{C}-11$, C-13, C-14, C-15, C-20, C-21, C-24, C-27 and C-28. There were seventh of students who got enough predicate. They were C-02, C-03, C-06, C-07, C-09, C-17, C-19, Cand C-20. There was one of students that got good predicate. It was C-10.

The next reason was KWL strategy can motivate students in teaching learning process. It was suitable with the students response when learning process was going, they enthusiasm to wrote in coloum ( K ) for what they Know about the topic with their background knowledge. It was necessary to keep responses inside the topic. It
indicated that using KWL strategy was effective in enhance reading motivation and encouragement. It supports with Ferdinand Nicholas Boonde states that KWL strategy can motivate the students to take a part in the teaching learning process and Filling the columns is effective to help the students understand the reading text.

The last reason was KWL strategy made the students can answer both literal and inferential reading comprehension types. It indicated the test was suitable for junior high school students. It supports with Ebrahami in Youniss maintains that KWL is developed to encourage purposeful reading activity by activating and organizing students' prior knowledge. Furthermore, the students also think more active to developed their knowledge by making question what they want to know about the topic. Then it was also support with Anderson \& Pearson in Youniss, that KWL encourages EFL students to think more actively about what they are reading and, therefore, improve their comprehension abilities in general and perhaps learn more about what they are reading, KWL also helps teachers to activate a learner's prior knowledge concerning a topic.

Those are the result of pre-test compared with post-test for experimental group and control group of students of SMPN-2 Danau Sembuluh. Based on the theories and the writer's result, KWL Strategy gave significance effect for the students' reading comprehension scores of Eight grade of students of SMPN-2 Danau Sembuluh.

