## CHAPTER IV

## FINDINGS AND DISCUSSION

## A. Findings

This sub chapter presents the data that have been collected in the research. This research aims to answer the statements of problem. To solve the problems, the researcher used test and observation sheet. She conducted the research on July $13^{\text {th }}-$ September $13^{\text {th }} 2017$ at Class VA and VB of SDN Kebun Raya 1 Kintap in academic year 2017/2018. The total number of both Class VA and VB are 42 students. The following writing is presented to describe and discuss the data.

1. The Pre Test Result about Students' Mastery in Vocabulary of the Fifth Grade at SDN Kebun Raya 1 Kintap in Experiment Class and Control Class

To know the students' mastery in vocabulary before the researcher applied games. The researcher gave written test as pre test for the students in experiment and control class on Thursday, July $20^{\text {th }} 2017$. It was done for 70 minutes to answer 12 similar questions in both classes.

## a) The Pre Test Result in Control Class

Based on the result of pre test in VB as control class, it can be seen in Table 4.1. It showed the students' achievement in answering matching test which consist 12 items of questions.

Table 4.1: The Students' Pre Test Result in Control Class

| No | Students | Matching Test | Score |
| :---: | :---: | :---: | :---: |
| 1. | Adam Prasetya | 33,2 | 33,2 |
| 2. | Akhmad Rifa'i | 16,6 | 16,6 |
| 3. | Arfan Khalif Ahmad | 66,4 | 66,4 |
| 4. | Bagus Danu Ramadhan | 66,4 | 66,4 |
| 5. | Endang Tri Puspitasari | 24,9 | 24,9 |
| 6. | Evi Retno Wulandari | 41,5 | 41,5 |
| 7. | Habibi Bahari | 83 | 83 |
| 8. | Laras Kinanti | 74,7 | 74,7 |
| 9. | Maulana Ramadhani | 24,9 | 24,9 |
| 10. | Muhamad Ahsan | 83 | 83 |
| 11. | Muhammad Sazwan | 74,7 | 74,7 |
| 12. | Muhammad Syamsudin | 58,1 | 58,1 |
| 13. | Nabila Sa'dah | 91,3 | 91,3 |
| 14. | Nadia Novita Wahyuni | 41,5 | 41,5 |
| 15. | Nur Hidayah Sholihah | 74,7 | 74,7 |
| 16. | Rahman | 16,6 | 16,6 |
| 17. | Raihan Rais | 91,3 | 91,3 |
| 18. | Revananda | 41,5 | 41,5 |
| 19. | Ridho Akbar | 66,4 | 66,4 |
| 20. | Said Syahrudin | 41,5 | 41,5 |
| 21. | Samsul | 41,5 | 41,5 |
| 22. | Shofia Fitriana Rahmah | 24,9 | 24,9 |
|  | Total | 1178,6 |  |
|  | Mean Score | 53,57 |  |

The table 4.1 described the results of matching test from 22 students. The highest score is 91,3 and the lowest score is 16,6 . This results showed that the students could answer 11 items
correctly for the highest score and 2 items for the lowest score. The mean score could be seen in the formula below, that is 53,57 .

$$
\begin{gathered}
M=\sum \times \\
n \quad \underline{1178,6}=53,57 \\
n
\end{gathered}
$$

Therefore, it can be concluded that students' mastery in control class of fifth grade at SDN Kebun Raya 1 Kintap is classified in poor category.
b) The Pre Test Result in Experiment Class

Based on the result from pre test of VA as experiment class, students' achievement in answering 12 items of matching question can be seen on table 4.2.

Table 4.2: The Students' Pre Test Result in Experiment Class

| No | Students | Matching Test | Scores |
| :---: | :---: | :---: | :---: |
| 1. | Afita Eliyana | 33,2 | 33,2 |
| 2. | Ahmad Arif Rafiansyah | 49,8 | 49,8 |
| 3. | Ahmad Mufarid | 24,9 | 24,9 |
| 4. | Ahmad Mujahid Subhi | 41,5 | 41,5 |
| 5. | Askira Fira Adam | 33,2 | 33,2 |
| 6. | Atin Yuni Fauziah | 33,2 | 33,2 |
| 7. | Bayu Irawan | 41,5 | 41,5 |
| 8. | Bela Tri Agustina | 83 | 83 |
| 9. | Bima Dwi Subekti | 66,4 | 66,4 |
| 10. | Bunga Meyridha | 49,8 | 49,8 |
| 11. | Claudia Nuria Karim | 24,9 | 24,9 |


| 12. | Danu Wibisono | 41,5 | 41,5 |
| :---: | :---: | :---: | :---: |
| 13. | Dwi Nur Irmayanti | 58,1 | 58,1 |
| 14. | Elita Novi Nurdianti | 33,2 | 33,2 |
| 15. | Emi Madhicatur Rahman | 66,4 | 66,4 |
| 16. | Hasbi Ash Shidiqi | 58,1 | 58,1 |
| 17. | Jesika Amanda | 58,1 | 58,1 |
| 18. | Kelfin Sofatudin | 66,4 | 66,4 |
| 19. | Keren Dwi Martha | 83 | 83 |
| 20. | Kiki Galuh Purnamasari | 66,4 | 66,4 |
| Total |  |  |  |
| Mean Score |  |  | 979,4 |

Table 4.2 described the results of matching test from 20 students. The highest score was 83 and the lowest score was 24,9 . This results showed that the students could answer 10 items correctly for the highest score and 3 items for the lowest score. In addition, based on calculation, the mean score of pre test was 48,97 as seen in following formula.

$$
M=\sum x=\underline{979,4}=48,97
$$

n $\quad 20$
that students' mastery in experiment class of fifth grade at SDN Kebun Raya 1 Kintap is classified in very poor category.
c) Description of the Students' Pre Test in Control Class and Experiment Class of the Fifth Grade at SDN Kebun Raya 1 Kintap

The pre test was conducted on the first meeting of both classes. Out of that, the students who did pre test were found that control class was in poor category and the experiment class was
in very poor category. Then, the description of students' pre test result can be seen on the following table:

Table 4.3: Description of the Students' Pre Test

| No | Category | Control Class | Experiment Class |
| :---: | :---: | :---: | :---: |
| 1. | Highest Score | 91,3 | 83 |
| 2. | Lowest Score | 16,6 | 24,9 |
| 3. | Mean | 53,57 | 48,97 |
| 4. | Standard Deviation | 24,66 | 17,92 |

The table 4.3 showed the results of students' pre test description in control class and experiment class. For the control class, the highest score is 91,3 , the lowest score is 16,6 , mean is 53,57 and standard deviation is 24,66 . The highest score for experiment class is 83 , the lowest score is 24,9 , mean is 48,97 and standard deviation is 17,92 . In addition, based on the highest and lowest scores, mean and standard deviation in control and experiment class were different as well.

## 2. The Post Test Result about the Students' Mastery in Vocabulary of the Fifth Grade at SDN Kebun Raya 1 Kintap in Control Class and Experiment Class

To know the students' mastery in vocabulary by using games, the researcher also used matching test and asked the teacher to used games in teaching and learning process for experiment class and without used games in control class. For this research, the researcher needs 3 weeks to conducted the research, the first meeting on July, $27^{\text {th }}$ 2017, the second meeting on August, $3^{\text {th }} 2017$, and the third meeting on August, $10^{\text {st }} 2017$. To know the rising score and students' mastery in vocabulary teaching after using games and without using games the
researcher gave post test to the students. In other side, to support the data of post test result the researcher also used observation to know actively in teaching and learning English process has been done through observation of teacher's activity and observation of students' activity.

## a) The Post Test Result in Control Class

Based on the post test result in VB as control class, it showed students' achievement in answering matching test, which consist 17 items of questions. It can be presented in the following table.

Table. 4.4.The students' post test result in control class

| No | Students | Matching Test | Score |
| :---: | :---: | :---: | :---: |
| 1. | Adam Prasetya | 64,68 | 64,68 |
| 2. | Akhmad Rifa’i | 64,68 | 64,68 |
| 3. | Arfan Khalif Ahmad | 52,92 | 52,92 |
| 4. | Bagus Danu Ramadhan | 82,32 | 82,32 |
| 5. | Endang Tri Puspitasari | 64,68 | 64,68 |
| 6. | Evi Retno Wulandari | 52,92 | 52,92 |
| 7. | Habibi Bahari | 70,56 | 70,56 |
| 8. | Laras Kinanti | 82,32 | 82,32 |
| 9. | Maulana Ramadhani | 70,56 | 70,56 |
| 10. | Muhamad Ahsan | 41,16 | 41,16 |
| 11. | Muhammad Sazwan | 76,44 | 76,44 |
| 12. | Muhammad Syamsudin | 64,68 | 64,68 |
| 13. | Nabila Sa’dah | 64,68 | 64,68 |
| 14. | Nadia Novita Wahyuni | 82,2 | 82,2 |
| 15. | Nur Hidayah Sholihah | 94,8 | 94,8 |
| 16. | Rahman | 88,2 | 88,2 |


| 17. | Raihan Rais | 76,44 | 76,44 |
| :---: | :---: | :---: | :---: |
| 18. | Revananda | 64,68 | 64,68 |
| 19. | Ridho Akbar | 76,44 | 76,44 |
| 20. | Said Syahrudin | 41,16 | 41,16 |
| 21. | Samsul | 82,32 | 82,32 |
| 22. | Shofia Fitriana Rahmah | 94,8 | 94,8 |
| 1553,64 |  |  |  |
|  | Total | 70,62 |  |

The table 4.4 described the result of matching test from 22 students. The highest score is 94,8 and the lowest score is 41,16 . This result showed that the students could answer 16 items correctly for the highest score and 7 items for the lowest score. In addition, based on the calculation, the mean score of post test is 70,62 as seen in following formula.

$$
M=\sum \times=\underline{1553,64}=70,62
$$

n $\quad 22$
It can be concluded that students' mastery in control class of the fifth grade at SDN Kebun Raya 1 Kintap can be classified in good category.

## b) The Post Test Result in Experiment Class

Based on the post test result in VA as experiment class, has been presented in the Table 4.5. It showed students' achievement in answering the matching test, which consist 17 items questions.

Table 4.5. The students' post test result in experiment class

| No | Students | Matching Test | Scores |
| :---: | :---: | :---: | :---: |
| 1. | Afita Eliyana | 94,8 | 94,8 |


| 2. | Ahmad Arif Rafiansyah | 88,32 | 88,32 |
| :---: | :---: | :---: | :---: |
| 3. | Ahmad Mufarid | 94,8 | 94,8 |
| 4. | Ahmad Mujahid Subhi | 70,56 | 70,56 |
| 5. | Askira Fira Adam | 88,2 | 88,2 |
| 6. | Atin Yuni Fauziah | 88,2 | 88,2 |
| 7. | Bayu Irawan | 82,32 | 82,32 |
| 8. | Bela Tri Agustina | 94,8 | 94,8 |
| 9. | Bima Dwi Subekti | 70,56 | 70,56 |
| 10. | Bunga Meyridha | 100 | 100 |
| 11. | Claudia Nuria Karim | 88,2 | 88,2 |
| 12. | Danu Wibisono | 82,32 | 82,32 |
| 13. | Dwi Nur Irmayanti | 88,2 | 88,2 |
| 14. | Elita Novi Nurdianti | 70,56 | 70,56 |
| 15. | Emi Madhicatur Rahman | 94,8 | 94,8 |
| 16. | Hasbi Ash Shidiqi | 88,2 | 88,2 |
| 17. | Jesika Amanda | 82,32 | 82,32 |
| 18. | Kelfin Sofatudin | 100 | 100 |
| 19. | Keren Dwi Martha | 94,8 | 94,8 |
| 20. | Kiki Galuh Purnamasari | 100 | 100 |
| Total |  |  | 1761,96 |
| Mean Score |  |  | 88,098 |

The table 4.5 described the result of matching test from 20 students. The highest score was 100 and the lowest score 70,56 . This result showed that the students could answer 17 items correctly for the highest score and 12 items for the lowest score. In addition, based on the calculation, the mean score of post test was 88,098 as seen in following formula.

$$
M=\sum \times=\underline{1761,96}=88,098
$$

n $\quad 20$

It can be concluded that students' mastery in experiment class of the fifth grade at SDN Kebun Raya 1 Kintap can be classified in very good/excellent category.

## c) Description of Students' Post Test and Rising Score in Control Class and Experiment

## Class

The description of students' post test result in control and experiment class can be seen from the post test score which has given in the end of the teaching and learning process. It found that control class was in good category and experiment class can be classified in very good category. The description of students' post test in control class and experiment class can be seen in the following table:

Table 4.6.Description of the Students’ Post Test

| No. | Category | Control class | Experiment class |
| :---: | :---: | :---: | :---: |
| 1. | Highest score | 94,8 | 100 |
| 2. | Lowest score | 41,16 | 70,56 |
| 3. | Mean | 70,62 | 88,098 |
| 4. | Standard Deviation | 14,67 | 9,38 |

The table 4.6 described that the highest score in control class was 94,8 , the lowest score was, 41,16 , the mean score was 70,62 and the standard deviation was 14,67 and the highest score in experiment class was 100 , the lowest score was 70,56 , the mean score was 88,098 and the standard deviation was 9,38 . In other side, Base on the highest score, the lowest score, mean and
standard deviation in both control class and experiment class was different and this data can be clarified by the rising score result from pre test and post test in the both classes (control class and experiment class) that could be seen in the following table.

Table 4.7.Description of the students' rising score

| No. | Class | Pre Test | Post Test | Rising Score Result |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Control Class | 53,57 | 70,62 | 17,05 Point |
| 2 | Experiment Class | 48,97 | 88,098 | 39,13 Point |

The table 4.7 showed that the mean score of pre test in control class is 53,57 , the mean score of post test in control class is 70,62 and the rising score between pre test and post test in control class is $53,57>70,62=17,05$ point. The mean score of pre test in experiment class is 48,97, the mean score of post test in experiment class is 88,098 and the rising score between pre test and post test in experiment class is $48,97>88,098=39,13$ point. Based on the pre test and post test in control class and experiment class, can be seen that there is a significant rising score and it means using games in teaching vocabulary is effective. In other side, to know the different of frequency distribution of the students post test in both control class and experiment class could be seen in following table.
a) Frequency distribution of the students' post test result in control class

Table 4.8. Frequency Distribution of Students Post Test in Control Class

| No. | Score | Frequency | Percentage | Category |
| :---: | :---: | :---: | :---: | :---: |
| 1. | $80-100$ | 7 | $31,8 \%$ | Very Good |
| 2. | $70-<80$ | 5 | $22,7 \%$ | Good |


| 3. | $60-<70$ | 6 | $27,3 \%$ | Fair |
| :---: | :---: | :---: | :---: | :---: |
| 4. | $50-<60$ | 2 | $9,1 \%$ | Poor |
| 5. | $0-<50$ | 2 | $9,1 \%$ | Very poor |

From the table 4.8 above, it can be seen that there were 2 students $(9,1 \%)$ whose scores were around $0-<50$ that classified in very poor category. There were 2 students $(9,1 \%)$ whose scores were around $50-<60$ that classified in poor category. There were 6 students $(27,3 \%)$ whose scores were around $60-<70$ that classified in fair category. There were 5 students from 22 students $(22,7 \%)$ whose scores were around $70-<80$ that classified in good category. And there were 7 students from 22 students (31,8\%) whose scores were around $80-100$ that classified in very good category.
b) Frequency distribution of the students' post test result in experiment class

Table 4.9. Frequency Distribution of Students Post Test in Experiment Class

| No. | Score | Frequency | Percentage | Category |
| :---: | :---: | :---: | :---: | :---: |
| 1. | $80-100$ | 17 | $85 \%$ | Very Good |
| 2. | $70-<80$ | 3 | $15 \%$ | Good |
| 3. | $60-<70$ | 0 | $0 \%$ | Fair |
| 4. | $50-<60$ | 0 | $0 \%$ | Poor |
| 5. | $0-<50$ | 0 | $0 \%$ | Very poor |

From the table 4.9 above, it can be seen that there were no students $(0 \%)$ whose scores were around $0-<50$ that classified in very poor category. There were no students ( $0 \%$ ) whose scores were around $50-<60$ that classified in poor category. There were no students ( $0 \%$ ) whose scores were around $60-<70$ that classified in fair category. There were 3 students from 20 students (6,7\%) whose scores were around $70-<80$ that classified in good category. And there
were 17 students from 20 students $(93,3 \%)$ whose scores were around $80-100$ that classified in very good category.

## B. Discussion

The purpose of the study was to find out the effectiveness of using games in teaching and learning English of the fifth grade at SDN Kebun Raya 1 Kintap. The researcher used comparative study between experiment class by using games and control class without using games. After all the data have collected and processed, the researcher analyzed and concluded them by using "t-test" formula.

After the researcher calculated the post test data of both experiment class and control class (See appendix VI), it can be concluded that the mean score in experiment class was 88,098 and the control class was 70,62 . Then, the researcher counted the standard deviation. Standard deviation was a measure of the dispersion of a set of data from its mean. For the standard deviation in experiment class was 9,38 and 14,67 for the control class. For the standard error in experiment class was 2,15 and the standard error in control class was 3,17 . From both subject the total standard error were 3,83 . Then, the researcher counted the $t$-test scores, and it was 4,56 . After having the t-test scores, look at the t-table by counting the degree of freedom. The researcher found the df (degree of freedom), which was 40 and then consult with t table.

1. The Effectiveness of Using Games in Teaching and Learning English of the Fifth

## Grade at SDN Kebun Raya 1 Kintap Academic Year 2016/2017

Based on the calculated above, it found the mean score of pre test result was 48,97 and the mean score of post test result was 88,098 therefore, there was a rising score from the pre test to post test. It means, used games in teaching and learning English can be classified in very good category. From the observation of teacher's participation showed percentage score was $87,5 \%$,
the data of the table showed that the teacher was very active in teaching and learning process and it was classified in very good category. In other hand, the percentage score of students' participation observation was $91,67 \%$, it was concluded in very good category and the data of the table showed that the students were very active in teaching and learning process.

After the presented data on the previous sub chapter, it showed the data of post test result, there were no students $(0 \%)$ whose scores were around $0-<50$ that classified in very poor category. No students ( $0 \%$ ) whose scores were around $50-<60$ that classified in poor category. No students $(0 \%)$ whose scores were around $60-<70$ that classified in fair category. There were 3 students from 20 students ( $15 \%$ ) whose scores were around $70-<80$ that classified in good category. Also 17 students from 20 students ( $85 \%$ ) whose scores were around $80-100$ that classified in very good category.

## 2. The Difference in Teaching and Learning English Between Experiment Class which Taught by Using Games and Control Class which Taught Without Using Games

The difference in teaching and learning English between experiment class which taught by using games and control class which taught without using games was significant. From the statistical measurement above showed that Ho (Null Hypothesis) was not accepted or rejected, Ha (Alternative Hypothesis) was accepted, because value of $t_{\text {test }}$ was higher than of $t_{\text {table }}$ (value of critic " t "). T table $(5 \%=2,02)<\mathrm{T}$ test $(4,56)>\mathrm{t}$ table $(1 \%=2,71)$.

According to Martinson and chu (2008, p. 478) said "games are effective tools for learning, because they offer students a hypothetical environment in which they can explore alternative decisions without the risk of failure. Thought and action are combined into purposeful behavior to accomplish a goal. Playing games teaches us how to strategize, to consider
alternatives and to think flexibly". Because in teaching and learning process, the teacher should did test based on vocabulary that they have learned with used games.

Game had some benefit for the students, such as helped students to understand and memorized the vocabulary. It was also helped students to be more joyful, interest, and enthusiastic teaching and learning process. The researcher gave the interpretation that using games could gave an effect in teaching and learning English. Therefore, based on the result of the research in teaching and learning English by using games was better than teaching and learning English without using games. Finally, findings revealed that used games made more effective in teaching and learning English and it could be used to improved students' mastery in vocabulary.

