**CHAPTER IV**

**RESEARCH FINDING AND DISCUSSION**

This chapter focuses on presenting as the basic of the result of the data analysis. Four main topics will be discussed here are the description of the object, data presentation, data analysis and hypothesis.

1. **Short Description of Research Object**
2. Profile of Qurrota A’yun Islamic Elementary School

SDI Qurrota A’yun has been existing since 2001 until now. It has passed very significant in development and progress. It is because of the seriousness of the committee, teachers and the parents of the students. The seriousness of those components is encouraged by the great willingness to reach the goals of school, they are:

1. To create the good Muslim generation with Islamic attitude from the bottom of heart.

2. To create the intellect Muslim generations those are responsive about the Qur’an, Sunah and sciences.

3. To help the government to continue the national development through the educational field that the output is fit with the goal national education.

1. The Location of SDI Qurrota A’yun Ngunut Tulungagung.

Qurrota A’yun Islamic Elementary School is located on Jl. KH. Wahid Hasyim Lk. 2 Beji Ngunut Tulungagung. It is 1.5 km of the district center and 7 km from the regional autonomy. This location is very strategic and quiet easy to be reached by using urban transportations. This location is not crowded and noisy so that it makes students and teachers feel enjoy and comfortable in doing teaching and learning process.

1. The Short History of SDI Qurrota A’yun Ngunut Tulungagung

Qurrota A’yun Islamic Elementary School was built in 2001. It is a non government school. Drs. Imam Muslimun has the idea to build it. He is not alone. He cooperated with Drs. Suprihadi Saputro, S.Pd. M.Pd as the general director of Teacher Training and Education Development Institute (T2EDI).

The both side made a cooperation to build the school to develop the international system program at Qurrota A’yun Islamic Elementary School to reach the goals;

1. This cooperation is to do the training, guidance and companion to SDI Qurrota A’yun in formulating and developing the strategic plan of international system program development at SDI Qurrota A’yun Ngunut Tulungagung based on the scientific study and government policies.
2. Training, guidance and companion are done by Teacher Training and Education Development Institute (T2EDI).
3. School Curriculum

To reach the goal of teaching and education that are fit with the visions and missions of Qurrota A’yun Islamic Educational Institute, so The Qurrota A’yun Islamic Elementary School uses two curriculums in a time in teaching:

a. National Education Curriculum

b. Institute Extra Curriculum that includes:

- Computer (1 computer for each student)

- Samoa

- Reading Qur’an

- Music art

- Painting art

- Boy scout

- English and Arabic

- Tadabur alam

- Intensive religious lessons

5. Vision

”To be the best”, the explanation of this vision is to create the Qur’ani Muslim generation; good behave human that has Islamic attitude, also be able to reach the high achievement in the academic field so that they become great , professional, active, creative, innovative, critical and dynamic Muslims.

6. Mission

”Islamic study through the education”, it is to create three good formal education levels. They are Play Group, Islamic Kindergarten, Islamic Elementary School and also a non-formal education, TPQ. The expectations of these missions is to reach the generation guidance that has high academic ability and good attitude so that it can develop human’s spirit and function as the crater that always pray and become the leader on the earth.

1. Organization Structure of SDI Qurrota A’yun

To make coordination among the headmaster, staffs and the teachers easily, operational system are written in the organization structure as follow:

**Picture I**

**The Organization Structure Of Qurrota A’yun Islamic Elementary School Ngunut Tulungagung year 2008/2009**

8. The Data of the Staffs

The data of teacher and Head master of SDI Qurrota A’yun Ngunut Tulungagung in 2009/2010 are:

**Table I**

**The Data of the Staffs**

|  |  |  |
| --- | --- | --- |
| No. | Name | Status |
| 1 | Drs. Imam Muslimin | Headmaster |
| 2 | Titik Istiqomah, S.PdII | Teacher of Class 1A |
| 3 | Siti Winartin, S.Pd.I | Teacher of Class 1B |
| 4 | Zulfa | Teacher of Class 2A |
| 5 | Badrul Ainiyah, M.Pd.I | Teacher of Class 2B |
| 6 | M. Fatoni, S.Pd.I | Teacher of Class 3A |
| No. | Name | Status |
| 7 | Rofi'atul Mahmudah, S.Ag | Teacher of Class 3B |
| 8 | Eko Priadi, S.Pd.I | Teacher of Class 4A |
| 9 | Siti Suliyah, M.Pd.I | Teacher of Class 4B |
| 10 | Siti Sunaidah, S.HI | Teacher of Class 5A |
| 11 | Novi Rina Dewi, S.Pd.I | Teacher of Class 5B |
| 12 | Siti Saudah, S.HI | Teacher of Class 6 |
| 13 | Sodikin | Teacher of Sport |
| 14 | Sofiatul Muna, M.Pd.I | Teacher of English |

**B. Teaching and Learning Process**

1. Pre- Treatment

Before treatment process is done, the researcher observed the condition of the students’ vocabulary mastery by using pretest. The result of pretest showed that most of them are still confused about the meaning of the vocabularies.

1. Treatment

After getting the result of pretest, the researcher gave treatment to all students. The treatment was teaching vocabulary by using monopoly game. It is a media to help the students improve their vocabulary mastery. The cards are written in English. Apparently, the students were enthusiastic to play the game. When teaching and learning process by using monopoly game is done, the students were very happy and got new spirit to learn English. Although the media were simple and cheap, the students were enjoy and interested.

 The steps in giving treatment to the students are:

* + - 1. Pre-section

In this section, the researcher gave explanation to the students about the game and its rules. The students were easily understood about the explanation because the game is quiet familiar to them. The researcher only needed 15 minutes to explain it. Then, the researcher divided them into three groups and each group consists of 6-7 students. One group has one game board for playing.

* + - 1. Main section

In the main section, the students played the game themselves. Here, the researcher controlled and give guidance to them. If there were students who did not understand about the meaning, they might ask to the researcher. Then, the researcher wrote the word down on the white board and returned to ask his/her friends about the word. If there is no students know about the meaning the researcher told it and wrote it down on the white board and so did for the next. This section spent about 90 minutes.

1. Post-section

After the game ended, the students were asked by the researcher to watch the white board that had been written with many vocabularies that they had been asked during playing the game. The researcher asked the students to pronounce the words together by repeating after the researcher.

1. Post Treatment

After doing treatment, the researcher gave posttest to all students. Posttest is used to know the students vocabulary mastery after taught by using monopoly game. The researcher wanted to know how far the students understand and remember about the words that given when treatment process is done. Apparently, the result of the test showed that the students’ vocabulary mastery improved significantly.

**Table II**

**Names of Fifth Graders of SDI Qurrota A’yun Ngunut Tulungagung**

|  |  |
| --- | --- |
| No. | Name |
| 1 | Agil Wahyu Diana |
| 2 | Alya Novia C.H. |
| 3 | Anandya Wahyu Indah A. |
| 4 | Ayu Nasyiatul Azhara |
| 5 | Cahyaningrum Argyanti W. |
| 6 | Febrina Widya Anggraini |
| 7 | Fiqri Rachmawati Kusuma |
| 8 | Fitri Wahyu Nandha Wati |
| 9 | Pretty Liliana |
| 10 | Putri Dewi Maisaroh |
| 11 | Rahma Nurfarida I.H. |
| 12 | Rifatul Azizah |
| 13 | Rizka Aulia Zulfa Ulinnuha |
| 14 | Sari Aila R. |
| 15 | Sheilla Ilmi Qori'ah |
| 16 | Sri Indra Tirta Ningrum |
| 17 | Zahra Danie Anindita |

**C. Data Presentation**

As mentioned previously, the researcher wants to know whether there is different result between the students before and after taught by using monopoly game. The result of test will be presented as follows:

1. The Students’ Achievement before Using Monopoly Game (pretest)

**Table III**

**The Students’ Achievement before**

**Using Monopoly Game**

|  |  |
| --- | --- |
| Test Items | Students |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 8 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 9 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 17 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 20 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| Test Items | Students |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 21 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 23 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 24 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Score | 68 | 68 | 76 | 60 | 80 | 72 | 76 | 80 | 52 | 80 | 92 | 64 | 76 | 68 | 76 | 64 | 68 |

The numbers of the test given were 25 questions for 17 students. The pretest was done before treatment process (teaching vocabulary by using monopoly game). This test is given to know the basic competence for all students and to know their earlier knowledge before they get treatment.

1. The Students’ Achievement after Using Monopoly Game (Posttest)

**Table IV**

**The Students’ Achievement after Using Monopoly Game**

|  |  |
| --- | --- |
| Test Items | Students |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| 6 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 9 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Test Items | Students |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 14 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 15 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 16 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 18 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 19 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 22 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| Score | 96 | 88 | 96 | 68 | 100 | 96 | 92 | 96 | 52 | 100 | 100 | 76 | 92 | 80 | 84 | 60 | 80 |

The numbers of the test given were 25 questions for 17 students. The post-test was done after treatment process (teaching vocabulary by using monopoly game). It is done to know the final score and to know the students’ difference competence before and after they get treatment.

**D. Data Analysis**

**Table V**

**The Difference between Pretest and Posttest**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Name | Vocabulary Score: | D= | D2= |
| Before Using Monopoly Game (X) | After Using Monopoly Game (Y) | (X-Y) | (X-Y)2 |
| 1 | Agil Wahyu Diana | 68 | 96 | -28 | 784 |
| 2 | Alya Novia C.H. | 68 | 88 | -20 | 400 |
| 3 | Anandya Wahyu Indah A. | 76 | 96 | -20 | 400 |
| 4 | Ayu Nasyiatul Azhara | 60 | 68 | -8 | 64 |
| 5 | Cahyaningrum Argyanti W. | 80 | 100 | -20 | 400 |
| 6 | Febrina Widya Anggraini | 72 | 96 | -24 | 576 |
| 7 | Fiqri Rachmawati Kusuma | 76 | 92 | -16 | 256 |
| 8 | Fitri Wahyu Nandha Wati | 80 | 96 | -16 | 256 |
| 9 | Pretty Liliana | 52 | 52 | 0 | 0 |
| 10 | Putri Dewi Maisaroh | 80 | 100 | -20 | 400 |
| 11 | Rahma Nurfarida I.H. | 92 | 100 | -8 | 64 |
| 12 | Rifatul Azizah | 64 | 76 | -12 | 144 |
| 13 | Rizka Aulia Zulfa Ulinnuha | 76 | 92 | -16 | 256 |
| 14 | Sari Aila R. | 68 | 80 | -12 | 144 |
| 15 | Sheilla Ilmi Qori'ah | 76 | 84 | -8 | 64 |
| 16 | Sri Indra Tirta Ningrum | 64 | 60 | +4 | 16 |
| 17 | Zahra Danie Anindita | 68 | 80 | -12 | 144 |
| 17= N | - | - | -236= ΣD | 4368= ΣD2 |

By getting ΣD and ΣD2, the researcher can find the different standard deviation of score between variable X and Variable Y:

SDD = $\sqrt{\frac{ΣD^{2}}{N}-\frac{(ΣD)^{2}}{(N)}}$ = $\sqrt{\frac{4368}{17}-\frac{(-236)}{(17)}}$

SDD = $\sqrt{256.9-(-13.8)^{2}}$ = $\sqrt{256.9-190.44}$

= $\sqrt{66.46}$ = 8.152

By knowing SDD (8.152), the researcher continued to calculate the Standard Error of the mean difference between the variable X and variable Y.

 $SE\_{M\_{D}}$ = $\frac{SD\_{D}}{\sqrt{N-1}}$ = $\frac{8.152}{\sqrt{17-1}}$ = $\frac{8.152}{\sqrt{16}}$

 = $\frac{8.152}{4}$ = 2.038

The next step is to find out the to by using the formula:

to = $\frac{M\_{D}}{SE\_{M\_{D}}}$

The researcher has found that MD is -13.8 and $SE\_{M\_{D}}$ is 2.038; so:

to = $\frac{-13.8}{2.038}$ = -6.771

Then, the researcher gave interpretation to to. First, he considered the df or db. df or db = N-1 = 17-1 = 16. With the df is 16, he consulted to the Score Table “t”, at the significance level of 5% or even at 1%.

In fact, with the df is 16, he can get the critic value or table at 5% significance ttable is 2.12; and at 1% significance ttable is 2.92.

**E. Hypothesis**

By comparing the “t” that he has got in calculation (to = 6.771) and the value of “t” on the t Score Table (tt.ts.5%= 2.12 and tt.ts.1%= 2.92), it is known that to is bigger than tt:

 2.12<6.771>2.92

Because the to is bigger than tt so the null hypothesis is rejected; it means that there is different vocabulary score to the students of SDI Qurrota A’yun between before using monopoly game and after using monopoly game. The different is significant.

The conclusion is, based on the research, monopoly game is surely shows the real effectiveness.