**CHAPTER IV
RESEARCH FINDINGS AND DISSCUSION**

This chapter focuses on presenting the basic of the result of the data analysis. Four main topics with be discussed here are teaching learning process, data presentation, data analysis and interpretation.

**A. Teaching and Learning Process**

1. Pre-Test

Before treatment process is done, the researcher observed the condition of the students’ grammar achievement by using pretest. The result of pretest showed that their grammar were so poor. They are difficult and confused to make sentence and answer some question with correct answer.

1. Treatment

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

3. Post-test

After doing treatment, the researcher gave post-test to all students. Post-test is used to know the students grammar achievement after taught by using Snakes and Ladders Game. The researcher wanted to know how far the students understand about grammar that given when treatment process is done. Apparently, the result of the test showed that the students’ grammar mastery improved significantly.

**B. Data Presentation**

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

1. The Students' Achievement before Using Game.

Table 4.1

The Students’ Achievement before Using Snakes and Ladders Game (Pre-test)

|  |  |  |
| --- | --- | --- |
| No | Student | Pre-Test |
| 1 | A | 20 |
| 2 | B | 5 |
| 3 | C | 5 |
| 4 | D | 5 |
| 5 | E | 20 |
| 6 | F | 40 |
| 7 | G | 15 |
| 8 | H | 30 |
| 9 | I | 20 |
| 10 | J | 20 |
| 11 | K | 30 |
| 12 | L | 20 |
| 13 | M | 20 |
| 14 | N | 35 |
| 15 | O | 5 |

Table 4.2

The Students’ Achievement after Using Snakes and Ladders Game (Post-test)

|  |  |  |
| --- | --- | --- |
| No | Student | Post-Test |
| 1 | A | 25 |
| 2 | B | 30 |
| 3 | C | 15 |
| 4 | D | 20 |
| 5 | E | 60 |
| 6 | F | 50 |
| 7 | G | 35 |
| 8 | H | 70 |
| 9 | I | 30 |
| 10 | J | 45 |
| 11 | K | 40 |
| 12 | L | 35 |
| 13 | M | 30 |
| 14 | N | 55 |
| 15 | O | 35 |

Table 4.3

Score of pre-test and post test

|  |  |  |  |
| --- | --- | --- | --- |
| No | Student | Pre-Test | Post-Test |
| 1 | A | 20 | 25 |
| 2 | B | 5 | 30 |
| 3 | C | 5 | 15 |
| 4 | D | 5 | 20 |
| 5 | E | 20 | 60 |
| 6 | F | 40 | 50 |
| 7 | G | 15 | 35 |
| 8 | H | 30 | 70 |
| 9 | I | 20 | 30 |
| 10 | J | 20 | 45 |
| 11 | K | 30 | 40 |
| 12 | L | 20 | 35 |
| 13 | M | 20 | 30 |
| 14 | N | 35 | 55 |
| 15 | O | 5 | 35 |

C. Data Analysis

Data analysis was done to know the different before and after test by researching the gain “d” (score after test – score before test) and then total of the gain score (∑d).

Here also was shown the number of subject (N), the total of pre-test and post-test score, and mean.

Table 4.4

Scores’ of pre-test and post-test to get (d)

|  |  |  |  |
| --- | --- | --- | --- |
| Student | Pre-Test | Post-Test | Gain (d) (Post test – Pre test) |
| A | 20 | 25 |  5 |
| B | 5 | 30 | 25 |
| C | 5 | 15 | 10 |
| D | 5 | 20 | 15 |
| E | 20 | 60 | 40 |
| F | 40 | 50 | 10 |
| G | 15 | 35 | 20 |
| H | 30 | 70 | 40 |
| I | 20 | 30 | 10 |
| J | 20 | 45 | 25 |
| K | 30 | 40 | 10 |
| L | 20 | 35 | 15 |
| M | 20 | 30 | 10 |
| N | 35 | 55 | 20 |
| O | 5 | 35 | 30 |
| N=15 | ∑x=290 | ∑x=575 | ∑d=285 |

After getting ∑d, we can search Md with formulated below:

∑d

N

Md =

285

15

15

 = = 19

Here, also shown the step to get meant of pre-test and post-test as formulated below:

∑x

N

 X =

* The computation of the mean score of pre - test

290

15

X = = =

19,33

The mean score of pre test was 19,3

The computation of the mean score of post – test

575

15

X = = =

38,3

The mean score of post test was 38,3

 After different score of pre-test and post test known, the researcher search “Xd” the deviation of subject (d-Md). Md is mean from the difference between before treatment and after treatment. Here also searching the ∑x2d (total of quadrate deviation)

Table 4.5 the pre-test and the post-test scores analyzed to Xd and X2d

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Student | Pre-Test | Post-Test | D | Xd (d-Md) | X2d |
| A | 20 | 25 |  5 | -14 | 196 |
| B | 5 | 30 | 25 | 6 | 36 |
| C | 5 | 15 | 10 | -9 | 81 |
| D | 5 | 20 | 15 | -4 | 16 |
| E | 20 | 60 | 40 | 21 | 441 |
| F | 40 | 50 | 10 | -9 | 81 |
| G | 15 | 35 | 20 | 1 | 1 |
| H | 30 | 70 | 40 | 21  | 441 |
| I | 20 | 30 | 10 | -9 | 81 |
| J | 20 | 45 | 25 | 6 | 36 |
| K | 30 | 40 | 10 | -9 | 81 |
| L | 20 | 35 | 15 | -4 | 16 |
| M | 20 | 30 | 10 | -9 | 81 |
| N | 35 | 55 | 20 | 1  | 1 |
| O | 5 | 35 | 30 | 11 | 121 |
| N=15 | ∑x=290 | ∑x=575 | ∑d=285 | 0  | ∑X2d=1710 |

To know the degree of freedom (df) or (db), we can find the result from the formula bellow:

Df/db = N - 1

 = 15 - 1

 = 14

After finishing those steps, insert t - test formula

Md

t =

$$\sqrt{\begin{array}{c}∑X2d\\N(N-1)\end{array}}$$

$$\sqrt{\begin{array}{c}1710\\15(15-1)\end{array}}$$

19

t =

t =

19

$$\sqrt{\begin{array}{c}1710\\210\end{array}}$$

19

$$\sqrt{8,14}$$

t =

$$\frac{19}{2,85}$$

t =

 6,66

t =

The score of grammar before taught by using snakes and ladder game is bad because the mean of the total score of 15 students was only (19,66). After got treatment the mean score of grammar was (38,3). It was improved, with the t-test analysis that used by researcher, the result of t count was (6,66).

Then, the researcher gave interpretation to t0 First, he considered the db = N - 1 with the db is (14). He consulted to the score table “t”, at the significance level of 0,05. In fact, with the db is (14), he can get the critic value or table at 0,05 significance ttable is (2.145)

By comparing the “t” that she has got in calculation tcount is (6,66) and the value of “t” on the t score table t0,05 is (2.145). It is known that t0 is bigger than t1 = 2,145 < 6,66

Because the t count was bigger than t table the alternative hypothesis (Ha) is accepted and the null hypothesis is rejected, it means that there is different grammar score of the second grade students at MTs AL Huda Bandung between before using snakes and ladders game and after taught by using snakes and ladders game. The different is significant.

1. **Discussion**

Based on the research method in chapter III in this research, teaching and
learning process was divided into three steps. First step is preliminary' study where the researcher conducted a preliminary study to know the students' grammar achievement by using administering pre-test by teaching without using snakes and ladders

The second step was given treatment to the students. The treatment here was teaching grammar by using snakes and ladders game as media. The students were given material about passive voice. At the first treatment, the researcher told about passive voice. The researcher decide student into four groups. Each group there was four students. Then the researcher asked the students to make some sentence about passive voice by using Snakes and Ladders game. After got treatment, the students more active, effective and enthusiasm to study grammar because they enjoyed in teaching learning grammar.

Based on the research finding, snakes and ladders game was the real effectiveness to improve grammar achievement. It was because snakes and ladders game can encourage the young learners to study grammar more active, effective and enthusiastically.

Snakes and ladders game also gave fun activities in study grammar. The young learner can study grammar easily and relax without hard feeling. The situation that conducive and comfort for their sense, it will make them enjoy to learn and getting good result. It can be done because by fun learning, information can be understood and maintained in memory well.

A ccording to Sanchez (2007:50) “A game is considered a valuable technique, which includes three principal elements: competition, rule(s), and enjoyment, which should be well established by a teaching-learning objective. Any teacher would be able to use games in order to increase the student's motivation towards the English language, at the same time that students can better develop or improve his/her own abilities of learning. Such is the purpose that the use of dynamic games has in class”.