## CHAPTER IV

## DATA DESCRIPTION AND ANALYSIS

## A. Data Description

In this chapter, the researcher would like to describe the data that had been collected during the research. The research hold in two cycles and there were four phases, they were planning, acting, observing and reflecting. The researcher collected the data by using the instruments such as worksheet for asses students and the observation table to observe the students' activities in the class. However, before the result of cycle I and cycle II being reported, the researcher would like to presents the result of pre-test.

The pre-test was needed to know the initial condition of students' mastery on simple past tense before the researcher using Numbered Heads Together as a teaching strategy in the class. For the detail description of the result in the pre-cycle, cycle I and cycle II will be explained below.

## B. Data Analysis Per Cycle

## 1. Pre Cycle

This pre cycle was conducted on Sunday, January $18^{\text {th }}$ 2016. There were 16 male students as participant in this pre cycle. The name list of the students as follow:

| No. | Name | Students' Code |
| :---: | :--- | :---: |
| 1. | Heri Hermansyah | $\mathrm{B}-1$ |
| 2. | M. Iqbal Fadlli Ananta | $\mathrm{B}-2$ |
| 3. | Moh. Danur Abidin | $\mathrm{B}-3$ |
| 4. | Muhammad Rifa'i | $\mathrm{B}-4$ |
| 5. | Muhammad Kholilur Rohman | $\mathrm{B}-5$ |
| 6. | Muhammad Maulana Zain | $\mathrm{B}-6$ |
| 7. | Sholahudin Latif | $\mathrm{B}-7$ |
| 8. | Ghozi Tirta Gautama | $\mathrm{B}-8$ |
| 9. | Ahmad Rafli Ramadhan | $\mathrm{B}-9$ |
| 10. | Galih Saifur Rohman | $\mathrm{B}-10$ |
| 11. | Ahmad Sanu | $\mathrm{B}-11$ |
| 12. | Moh. Saiful Umam | $\mathrm{B}-12$ |
| 13. | Muhammad Irham | $\mathrm{B}-13$ |
| 14. | M. Riza Miftahur Rohman | $\mathrm{B}-14$ |
| 15. | M. Bayu Yudhananta | $\mathrm{B}-15$ |
| 16. | Muhammad Ubaidillah H. | $\mathrm{B}-16$ |

Table 4.1

In this pre-cycle the researcher taught students such as usually did by the English teacher, it just explained the material and then gave them questions. It was began by explain to students about the concept of simple past tense. After that, the researcher gave students a test to know the achievement of students on simple past tense before the
researcher using Numbered Heads Together in teaching and learning process. The result of pre test as follow :

| No. | Students' <br> Code | Score | Percentage | Letter <br> Score | Category |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | B - 1 | 60 | 60\% | C | Fair |
| 2. | B - 2 | 50 | 50\% | D | Less |
| 3. | B - 3 | 50 | 50\% | D | Less |
| 4. | B - 4 | 40 | 40\% | E | Poor |
| 5. | B - 5 | 50 | 50\% | D | Less |
| 6. | B-6 | 50 | 50\% | D | Less |
| 7. | B - 7 | 60 | 60\% | C | Fair |
| 8. | B - 8 | 40 | 40\% | E | Poor |
| 9. | B-9 | 50 | 50\% | D | Less |
| 10. | B - 10 | 40 | 40\% | E | Poor |
| 11. | B-11 | 50 | 50\% | D | Less |
| 12. | B-12 | 50 | 50\% | D | Less |
| 13. | B-13 | 60 | 60\% | C | Fair |
| 14. | B - 14 | 70 | 70\% | B | Good |
| 15. | B-15 | 60 | 60\% | C | Fair |
| 16. | B-16 | 40 | 40\% | E | Poor |
| Total of Score |  | 820 |  |  |  |

Table 4.2

From the result of the test above, the researcher classified the students' ability and their percentage using the formula as follow:

$$
\mathrm{P}=\frac{\sum f}{n} \times 100 \%
$$

Note :
P : Percentage
f : Frequency of correct answer
n : Total of the Students
Then the category of students' ability and their percentage can be seen below:

| No. | Interval | Freq | Percentage | Category |
| :---: | :---: | :---: | :---: | :---: |
| 1. | $90 \%-100 \%$ | - | - | Excellent |
| 2. | $70 \%-89 \%$ | 1 | $6,25 \%$ | Good |
| 3. | $60 \%-69 \%$ | 4 | $25 \%$ | Fair |
| 4. | $50 \%-59 \%$ | 7 | $43,75 \%$ | Less |
| 5. | $0 \%-49 \%$ | 4 | $25 \%$ | Poor |
| Total |  |  |  |  |

Table 4.3
The above table showed that there was 1 or $6,25 \%$ of students were in the good category, 4 students or $25 \%$ of students were in the fair category, 7 students or $43,75 \%$ of students were in the less category and the poor category was gotten by 4 students or $25 \%$ in the class. From the description of students' percentage, it can be concluded
that the students' individual ability on simple past tense was less, because the less category of students score and percentage was dominant.

After the researcher got the students' scores and classified it, then the researcher counted the average score of students. It aimed to know the average of students' score in the class. The computation of the average score as follow:

$$
\begin{aligned}
& \bar{x}=\frac{\sum x}{n} \\
& \bar{x}=\frac{820}{16} \\
& \bar{x}=51,25
\end{aligned}
$$

The average score of students is 51,25 . It could be categorized as less, because it was far from the KKM of the school, that is 70 .

Based on the computation of students' average score, students' individual ability and their percentage of the pre test, it can be concluded that students' mastery on simple past tense is less. So that, the researcher continued to the cycle I by using the innovative teaching strategy. It aimed to improve the students' mastery and their achievement on simple past tense.

## 2. Cycle I

The second meeting or cycle I was conducted onJanuary $25^{\text {th }}, 2016$. There were 15 students following the class, because there was 1 student was absent.

In this cycle, the researcher started to use Numbered Heads Together as a teaching strategy. For the detail of activities of four phases can be seen below:

## a. Planning

After conducting the pre test, the researcher knew the students' mastery on simple past tense based on the result of the test. Then, the researcher arranged a plan depend on the result of pre test. In addition, the researcher also arranged the table of observation to observe the students' activities in the class contents some aspects and also prepared the test instrument.

## b. Acting

In this phase, the researcher explained to the students about simple past tense. After that she started to apply Numbered Heads Together. It began by dividing class into 4 groups and each group consisted of 3-4 students. Then the researcher distributed the cards to the groups, then she gave a question sheet for each group to be answered, next students put their heads together to cooperate and share their ideas to find out the answer of the questions. At the end of the
lesson, students and the researcher made a summary about the material. Next she gave students a written test, the test is multiple choice test contents some question related to the material in the meeting. She gave 15 minutes for students to answer it.

After finishing the test, the researcher closed the class and it would be continued in the next week. Furthermore, the researcher made correction for of the student' test, and below the result of their test:

| No. | Students' <br> Code | Score | Percentage | Letter <br> Score | Category |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | B -01 | 60 | $60 \%$ | C | Fair |
| 2. | B -02 | 50 | $50 \%$ | D | Less |
| 3. | B -03 | 60 | $60 \%$ | C | Fair |
| 4. | B -04 | Absent | - | - | - |
| 5. | B -05 | 60 | $60 \%$ | C | Fair |
| 6. | B -06 | 80 | $80 \%$ | B | Good |
| 7. | B -07 | 70 | $70 \%$ | B | Good |
| 8. | B -08 | 50 | $50 \%$ | D | Less |
| 9. | B -09 | 70 | $70 \%$ | B | Good |
| 10. | B -10 | 60 | $60 \%$ | C | Fair |
| 11. | B -11 | 60 | $60 \%$ | C | Fair |
| 12. | B -12 | 70 | $70 \%$ | B | Good |
| 13. | B -13 | 70 | $70 \%$ | B | Good |


| 14. | $\mathrm{~B}-14$ | 90 | $90 \%$ | A | Excellent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15. | $\mathrm{~B}-15$ | 70 | $70 \%$ | B | Good |
| 16. | $\mathrm{~B}-16$ | 50 | $50 \%$ | D | Less |
| Total of Score |  |  |  |  |  |

Table 4.4

From the result of the test above, the researcher classified thestudents' ability and their percentage. The result ofthe scoring percentage as follow:

| No. | Interval | Freq | Percentage | Category |
| :---: | :---: | :---: | :---: | :---: |
| 1. | $90 \%-100 \%$ | 1 | $6,7 \%$ | Excellent |
| 2. | $70 \%-89 \%$ | 6 | $40 \%$ | Good |
| 3. | $60 \%-69 \%$ | 5 | $33,3 \%$ | Fair |
| 4. | $50 \%-59 \%$ | 3 | $20 \%$ | Less |
| 5. | $0 \%-49 \%$ | - | - | Poor |
| Total |  |  |  |  |

Table 4.5
The above table showed that there was 1 or $6,7 \%$ of students got the Excellent category, 6 students or $40 \%$ of students got the good category, 5 students or $33,3 \%$ of students got the fair category and the less category was gotten by 3 students or $25 \%$ of students in the class. From the description of students' percentage can be concluded that there were improvement of students' individual ability on simple past tense. It because of there was no
student got the poor category and the good category is dominant.

Next, the researcher calculated the average score of students using the formula such as in the pre cycle.

$$
\begin{aligned}
& \bar{x}=\frac{\sum x}{n} \\
& \bar{x}=\frac{970}{15} \\
& \bar{x}=64,67
\end{aligned}
$$

The average score of students is 64,67 . It categorized unsuccessful, because it was not achieve the KKM of the school yet.

## c. Observing

The observing phase ran gather to the acting phase. To observe the students',the researcher helped by the collaborator using the table of observation. The result of observation as follow:

| No | Criteria |  | Score |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| • |  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Score |
| 1. | Students pay <br> attention to the <br> reseracher's <br> explanation <br> during the |  |  |  | V |  | 4 |



Table 4.6

## Note:

$$
\begin{array}{lc}
=\text { Majority of students }(>70 \%) & 11-16 \text { students } \\
=\text { Many students }(50 \%-69 \%) & 8-10 \text { students } \\
=\text { Half of students }(20 \%-49 \%) & 3-7 \text { students } \\
=\text { A few students }(<20 \%) & 1-2 \text { students } \\
=\text { None }(0 \%) & 0
\end{array}
$$

Then the score analyzed to know the percentage of observation aspects using the formula as below:

P $=\frac{n}{N} \times 100 \%$

$$
\begin{aligned}
& =\frac{18}{25} \times 100 \% \\
& =72 \%
\end{aligned}
$$

The above percentage describe that there were $72 \%$ of the students achieve the aspects of observation which has been settled.

## d. Reflecting

After the researcher conducted the research and got the result of students' test and observation, then the researcher made reflection. The reflection was based on the result of the test and observation. The researcher reflected some matters, such as below:

1) Some students less attention to the researcher's explanation
2) Students were still confused to differentiate beteween be used in the simple past tense and simple present tense
3) Students were still confused to differentiate between nominal and verbal sentence
4) The researcher should be able to attract the students' attention

## 3. Cycle II

The third meeting or cycle II was conducted on February $1^{\text {st }}$, 2016. There were 16 students joined the class. The teaching and learning process was represented in many phases.

## a. Planning

In this phase, the researcher arranged some phases based on the result of reflecting phase in the previous cycle. Those were choosing the learning material, arranging lesson plan, arranging the table of observation and test instrument.

## b. Acting

The researcher began the class by greeting students, after that the researcher review the material in the previous meeting, then she explained about simple past tense and irregular verb. Next the researcher started to apply Numbered Heads Together. It began by dividing class into 4 groups and
each group consists of 3-4 students, and ended by students and the researcher made a summary about the material. Next the researcher gave students a written test, the test was multiple choice test contents some question related to the material in the meeting. The researcher gave 15 minutes for students to answer it.

After finishing the test, the researcher closed the class and the research still continued in the next week. Furthermore, she made correction for of the student' test, and below the result of their test:

| No. | Students' <br> Code | Score | Percentage | Letter <br> Score | Category |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | $\mathrm{~B}-01$ | 70 | $70 \%$ | B | Good |
| 2. | $\mathrm{~B}-02$ | 70 | $70 \%$ | B | Good |
| 3. | $\mathrm{~B}-03$ | 100 | $100 \%$ | A | Excellent |
| 4. | $\mathrm{~B}-04$ | 60 | $60 \%$ | C | Fair |
| 5. | $\mathrm{~B}-05$ | 60 | $60 \%$ | C | Fair |
| 6. | $\mathrm{~B}-06$ | 70 | $70 \%$ | B | Good |
| 7. | $\mathrm{~B}-07$ | 100 | $100 \%$ | A | Excellent |
| 8. | $\mathrm{~B}-08$ | 60 | $60 \%$ | C | Fair |
| 9. | $\mathrm{~B}-09$ | 90 | $90 \%$ | A | Excellent |
| 10. | $\mathrm{~B}-10$ | 70 | $70 \%$ | B | Good |
| 11. | $\mathrm{~B}-11$ | 80 | $80 \%$ | B | Good |
| 12. | $\mathrm{~B}-12$ | 70 | $70 \%$ | B | Good |
| 13. | $\mathrm{~B}-13$ | 70 | $70 \%$ | B | Good |


| 14. | $\mathrm{~B}-14$ | 100 | $100 \%$ | A | Excellent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15. | $\mathrm{~B}-15$ | 70 | $70 \%$ | B | Good |
| 16. | $\mathrm{~B}-16$ | 60 | $60 \%$ | C | Fair |
| Total of Score |  |  |  |  |  |

Table 4.7
After knowing the students' score, then it classified as follow:

| No. | Interval | Freq | Percentage | Category |
| :---: | :---: | :---: | :---: | :---: |
| 1. | $90 \%-100 \%$ | 4 | $25 \%$ | Excellent |
| 2. | $70 \%-89 \%$ | 8 | $50 \%$ | Good |
| 3. | $60 \%-69 \%$ | 4 | $25 \%$ | Fair |
| 4. | $50 \%-59 \%$ | - | - | Less |
| 5. | $0 \%-49 \%$ | - | - | Poor |
| Total |  |  |  |  |

Table 4.8
The classification of students' score showed that there were no students got the less and poor category. The highest frequency of students was in the good category. There were 8 students or $50 \%$ of students in the class. While excellent category, there were 4 students or $25 \%$ of students in the class. The last was fair category. In the fair category, there were 4 students or $25 \%$ of students in the class.

After classifying students' score to the fair, good and excellent category, then the researcher
calculated the students' average score. It calculated by using the formula such as below:

$$
\begin{array}{ll}
\bar{x} & =\frac{\sum x}{n} \\
\bar{x} & =\frac{1200}{16} \\
\bar{x} & =75
\end{array}
$$

## c. Observing

In this cycle, the majority of students were be active to respond the researcher' questions and instructions, and also asking questions related to the material. In addition, they showed their enthusiasm to doing Numbered Heads Together and completed the test.

The students' scores on rating scale of observation table as follow:

| No | Criteria |  | Score |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| • |  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | Score |
| 1. | Students pay <br> attention to the <br> reseracher's <br> explanation <br> during the <br> lesson |  |  |  |  | V | 5 |


| 2. | Students or <br> respond <br> answer to <br> theresearcher's <br> questions |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| 3. | Students ask <br> question to the <br> researcher <br> during the <br> lessson |  |  |  | V |  |
| 4. | Students show <br> their enthusiasm <br> in the Numbered <br> Heads Together <br> activity |  |  |  |  | V |
| 5. | Students show <br> their enthusiasm <br> when doing the <br> test. |  |  |  |  |  |

Table 4.9

The indicator for each score was same as the observation table of cycle I. The maximal score was 5 and the minimum score was 1 .

The table above shows that the total score was 23. Then, the score calculated the percentage using formula such as below:

$$
\begin{aligned}
\mathrm{P} & =\frac{n}{N} \times 100 \% \\
& =\frac{23}{25} \times 100 \% \\
& =88 \%
\end{aligned}
$$

The percentage of students' observation score was $92 \%$. It categorized as excellent and it was improved $20 \%$ than the percentage of cycle I.

## d. Reflecting

After all the data was analyzed, then the researcher made a reflection that the students' on simple past tense of this cycle was more significant. The students were able to comprehend the concept of simple past tense well. It could be seen by the improvement of students' average score start from pre cycle until cycle II and their enthusiastic during teaching and learning process.

From the result, the researcher and the English teacher decided to stop the cycle, because the students' achievement on simple past tense using

Numbered Heads Together had a significant score, and there were $75 \%$ of students in the class got the good and excellent score category.

## C. Final Data Analysis

After all the data analyzed, then the researcher arranged the final data analysis.

## 1. The Result of Test

. After all the scores from pre cycle until cycle II was analyzed, next the researcher arranged the final data analysis. It aimed to know the improvement of students' test score from pre-cycle until cycle II. The scores can be seen below:

| No. | Students' Code | Pre-Cycle | Cycle I | Cycle II |
| :---: | :---: | :---: | :---: | :---: |
| 1. | $\mathrm{~B}-1$ | 60 | 60 | 70 |
| 2. | $\mathrm{~B}-2$ | 50 | 50 | 70 |
| 3. | $\mathrm{~B}-3$ | 50 | 60 | 100 |
| 4. | $\mathrm{~B}-4$ | 40 | Absent | 60 |
| 5. | $\mathrm{~B}-5$ | 50 | 60 | 60 |
| 6. | $\mathrm{~B}-6$ | 50 | 80 | 70 |
| 7. | $\mathrm{~B}-7$ | 60 | 70 | 100 |
| 8. | $\mathrm{~B}-8$ | 40 | 50 | 60 |
| 9. | $\mathrm{~B}-9$ | 50 | 70 | 90 |
| 10. | $\mathrm{~B}-10$ | 40 | 60 | 70 |
| 11. | $\mathrm{~B}-11$ | 50 | 60 | 80 |
| 12. | $\mathrm{~B}-12$ | 50 | 70 | 70 |


| 13. | $\mathrm{~B}-13$ | 60 | 70 | 70 |
| :---: | :---: | :---: | :---: | :---: |
| 14. | $\mathrm{~B}-14$ | 70 | 90 | 100 |
| 15. | $\mathrm{~B}-15$ | 60 | 70 | 70 |
| 16. | $\mathrm{~B}-16$ | 40 | 50 | 60 |
|  | Total Score | $\mathbf{8 2 0}$ | $\mathbf{9 7 0}$ | $\mathbf{1 2 0 0}$ |
|  | Mean | $\mathbf{5 1 , 2 5}$ | $\mathbf{6 4 , 6 7}$ | $\mathbf{7 5}$ |

Table 4.10
The table above shows that there was improvement of students' score on simple past tense. The average score of students in pre cycle was 51,25 , while it was 64,67 in cycle I and it was 75 in cycle II. The average scores mean that the students' achievement on simple past tense by using Numbered Heads Together was improved.

## 2. The Result of Observation

The researcher was analyzed not only the test score of cycle I and cycle II, but also the students' observation score. The score of observation from cycle I up to cycle II was improved. It can be seen in the table below:

| No. | Aspect of Observation | Score |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Cycle I |  |  |  |  | Cycle II |
| 1. | Students pay attention to the reseracher's <br> explanation during the lesson | 4 | 5 |  |  |  |
| 2. | Students respond or answer to the <br> researcher's questions | 3 | 4 |  |  |  |


| 3. | Students ask question to the researcher <br> during the lesson | 3 | 4 |
| :--- | :--- | :---: | :---: |
| 4. | Students show their enthusiasm in the <br> Numbered Heads Together activity | 4 | 5 |
| 5. | Students show their enthusiasm when <br> doing the test | 4 | 5 |
| Total Score | 18 | 23 |  |
| Percentage | $72 \%$ | $92 \%$ |  |

Table 4.11
The table above showed that, the total score of students' observation in the cycle I was 18 or $72 \%$, while in the cycle II it was 23 or $92 \%$. It can be concluded that the enthusiasm of students in learning simple past tense by using Numbered Heads Together was improved 20\%.

