CHAPTER IV

DATA ANALYSIS AND DISCUSSION

In this chapter, the writer would like to presents the result of Classroom Action Research conducted in the eighth grade students of SMPK Sta. Familia in the school year 2018/2019. This chapter describes the activities developed a study on the effectiveness of using mind mapping technique to improve students in writing procedure text. The findings of the research are described and discussed in data analysis and discussion.

4.1 Data Analysis

In this part, the writer provides analysis result of qualitative data and quantitative data. The first the writer would like to explain some elements that include in qualitative data and the second the writer would like to explain about quantitative data.

4.1.1 Qualitative Data

In this part, the writer would explain about the aspects or some elements that include in qualitative data. There are three aspects in qualitative data, those are pre-test, cycle one and cycle two. In cycle one and cycle two, they consist of planning, action, observation and reflecting.

4.1.1.1 Cycle 1 (25th October 2018)

a. Planing

The first part was planning. In this part the writer made a planning for the action based on the problem faced by students toward writing skill. In this case, the writer prepared lesson plan, teaching material. The writer also prepared pre test post test 1 for students to know the effectiveness of using mind mapping in teaching and learning process.

b. Action

The second part is action. The action of cycle 1 was done on October 25th 2018. The writer implemented the teaching and learning process based on the lesson plan

- Pre teaching activities

The class started by greeting the students, he then introduced himself to the students, checked the students' attendance list, in fact in this class there were 26 students. But just 22 students who were present, because, when the researcher was doing the research, 4 students were absent, the researcher asked the students some questions related to the material then told the students the objectives of the lesson like "*apakah kalian tau tentang procedure text*". The students answered that they had already known about procedure text but some of the students had forgoten it but the author still remembered about procedure text. The writer asked again *"bisakah kalian memberikan contoh tentang teks prosedur".* They could give it like *"cara membuat mie instan, cara membuat nasi goreng, dsb.".* Then, the researcher gave them pre-test before explaining more about procedure text and mind mapping.

- Main activities

After that, the researcher explained about mind mapping to the students, the researcher asked then "apakah kalian sudah tahu apa itu mind map". The students said that "kami belum tahu pak, baru hari ini kami dengar". The researcher explain about mind mapping and how to make a mind map "first of all, you write down the topic you make a circle in the topic, from the topic we make some lines and we think the words as a keyword related to the topic, you can use a picture also, from the word that related to the topic, we make again some lines and we add the word related to the word before. We make it again and again until we think it is enough. We can make it in the sentences". The next, the researcher gave the example for the students to make students know more about mind mapping and procedure text also. After that the writer gave exercise for the students to make a mond mapping and develop it to procedure text. And then the writer gave evaluation about their mind map and procedure text.

c. Observing

The third part is observing. Based on the writer's observation during the teaching and learning process, some of the students forgot about the materials but, the other knew about the materials given by the researcher. Even though, some students made noise in classroom, the students also could give the example about procedure text well. This cycle can be said almost successful because the students could make procedure text well using mind mapping as post test I although some of them had more

mistakes.

d. Reflecting

The fourth part was reflecting. The researcher had done his teaching based on the lesson plan and the students' activity in learning process was well done. It was proved by students' participation in explaining about the materials given by the researcher and makes answer the question well. The researchers also thought that mind mapping was new for them so almost of the students were interested to the lesson. In the post test 1, there were some students who still failed the test so the writer decided to continue to the next cycle. During teaching and learning process the writer felt that he could not manage the class well so in the next cycle he would try to manage the class better.

4.1.1.2 Cycle 2 (29st October 2018)

a. Planning

The first part was planning. In this cycle, the writer prepared lesson plan, and all the materials needed in teaching and learning process.

b. Action

The second part was action. The action of cycle II was done on October 29st 2018. It was started at 11.25 am. The writer implemented the teaching and learning process based on the lesson plan that had been repaired. For the first, the writer opened the class by greeting the students and then checked the students' attendance list. It was the same in the cycle I, in cycle II there were only 23 students who were present. In the cycle two

the researcher explained again about Procedure text, the researcher asked them "apakah kalian sudah paham tentang teks prosedur yang kemarin kita bahas" the students said that almost all about procedure text, they had already known. And the researcher said again "bagaimana dengan mind mapping" they said that the had already know, but the researcher was not satisfied about their answer. So, the researcher explained about procedure text again about the meaning, the example of procedure text and how to make a mind mapping well, "first of all, write down the topic you make a circle in the topic, from the topic we make some lines and we think the words as a keyword related with the topic, you can use a picture also, from the word that relates with the topic, we make again some lines and we add the word related to the word before. We make it again and again until we think it is enough. We can make it in the sentences". After that, the researcher gave the example by using mind mapping. In cycle II the students almost knew and understood how to using mind mapping in procedure text. So, the researcher gave post test 2 to the students and the researcher helped students to do the task by answer their questions when they confused.

c. Observing

The third part was observing. In cycle II the writer saw that teaching and learning process were going well. If in cycle one the writer could not manage the class well, in this cycle the writer could manage the class well. The students also did not make noise and they did more carefully. They just called the researcher if they needed some help and the researcher saw the

students more interested in using mind mapping and they said to the researcher that mind mapping technique could help them to make a procedure text.

d. Reflecting

The fourth part was reflecting. The reflection was carried out after guiding the score result of reading test. The researcher felt satisfied in as much his efforts to improve writing ability by using mind mapping technique. The students could make procedure text easily by using mind mapping. It was proven by their improving scores from the pre-test, post test I and post test II. According to the result of the evaluating by the writer it could be assumed that the implementing of CAR in developing students' writing ability using mind mapping technique was effective.

4.1.2 Quantitative Data

4.1.2.1 Pre-Test in Cycle 1

Before the researcher implemented the Mind Mapping Technique to the students, he asked the students to take pre-test and the result of the test can be seen on the following table.

Table 4.1.2.1 the Students Writing Score on Pre-Test

NO.	Students number	score			Total score	Ability level
		Grammar	Vocabulary	Mechanics		
1	S1	2	2	1	5	Bad
2	S2	3	3	1	7	Below average
3	S3	2	1	3	6	Below average
4	S4	2	2	1	5	Bad
5	S5	3	2	1	6	Below average
6	S6	3	2	1	6	Below average
7	S7	2	1	1	4	Bad

8	S8	3	1	1	5	Bad
9	S9	2	2	1	5	Bad
10	S10	3	3	1	7	Below average
11	S11	4	1	1	6	Below average
12	S12	4	2	1	7	Below average
13	S13	2	1	1	4	Bad
14	S14	3	2	1	6	Below average
15	S15	4	3	2	9	Average
16	S16	3	3	1	7	Below average
17	S17	3	2	1	6	Below average
18	S18	2	2	1	5	Bad
19	S19	3	2	1	6	Below average
20	S20	3	2	1	6	Below average
21	S21	4	3	1	8	Below average
22	S22	4	3	1	8	Below average
Total		64	45	25	134	
Class average		2.90	2.04	1.13	6.09	**Below average**

Based on the result we can see that from 22 students who took the test only 1 student of the subject was able to pass it in "Average level", and the other students were able to pass it in "Below Average" and "Bad" result. The class got 6.09, it could be categorized as "Below Average" according to the standard of measurement applied.

4.1.2.2 Cycle I Post Test

At the end of cycle I students took a post-test and the result of this test can be seen on the following table.

Table 4.1.2.2 Cycle I Post-Test

No.	Students number	Score			Total score	Ability level
		Grammar	Vocabulary	Mechanics		
1	S1	4	5	4	13	Above average
2	S2	3	2	1	6	Below average

3	S3	1	2	1	4	Bad
4	S4	1	3	1	5	Bad
5	S5	3	3	2	8	Below average
6	S6	3	3	2	8	Below average
7	S7	2	2	1	5	Bad
8	S8	4	3	2	9	Average
9	S9	2	2	1	5	Bad
10	S10	2	2	1	5	Bad
11	S11	3	2	1	6	Below average
12	S12	3	2	2	7	Below average
13	S13	2	3	1	6	Below average
14	S14	3	3	2	8	Below average
15	S15	4	3	1	8	Below average
16	S16	2	2	1	5	Bad
17	S17	1	2	1	4	Bad
18	S18	3	2	1	6	Below average
19	S19	1	2	1	4	Bad
20	S20	2	3	1	6	Below average
21	S21	2	3	1	6	Below average
22	S22	1	2	1	4	Bad
Total		52	56	30	138	**Below average**
Class average		2.36	2.54	1.36	6.27	

Based on the post test result we can see that from 22 students, 1 student only who was able to pass the test in "Above Average level". And 1 student gets "Average". And the others get "Below Average", and "Bad" result. The average of the class is 6.27 in "Below Average level" according to the standard of measurement applied.

4.1.2.3 Post – Test in Cycle II

Based on the result of cycle I, the researcher decided to make cycle II to improve students' writing skill. In cycle II the researcher did not give a pre-test, he only gave a post-test. The result of post-test in cycle II can be

seen below.

Table 4.1.2.3 Cycle II Post-Test

No.	Students Number	Score			Total Score	Ability Level
		Grammar	Vocabulary	Mechanics		
1	S1	4	4	5	13	Above average
2	S2	4	5	5	14	Above average
3	S3	4	3	5	12	Above average
4	S4	4	5	5	14	Above average
5	S5	4	5	5	14	Above average
6	S6	4	4	4	12	Above average
7	S7	4	4	4	12	Above average
8	S8	4	4	5	13	Above average
9	S9	4	4	5	13	Above average
10	S10	5	5	5	15	Very good
11	S11	4	3	5	12	Above average
12	S12	5	5	5	15	Very good
13	S13	4	4	4	12	Above average
14	S14	5	4	5	14	Above average
15	S15	4	5	5	14	Above average
16	S16	4	3	4	11	Average
17	S17	4	4	4	12	Above average
18	S18	4	4	5	13	Above average
19	S19	4	4	4	12	Above average
20	S20	4	4	4	12	Above average
21	S21	5	5	5	15	Very good
22	S22	4	4	5	13	Above average
Total		92	92	103	287	
Class Average		4.18	4.18	4.68	13.04	Above average

The table shows that the total score of vocabulary is 92, grammar is 92, and the mechanics is 103. The total score of those three aspects of writing is 387/22=13.04 (Above Average) based on the standard measurement applied. From that data 3 students get "Very good" and the others get "Above average".

4.2   Discussion

After the researcher followed some procedures in analyzing the data collected during the research, the writer discussed the result of pre test, found in cycle 1 and found in the cycle 2.

In the pre test the researcher just made sure the students had the basic knowledge about descriptive text. After that, the researcher asked them to do the task, the task was that every student made a procedure text based on the picture and the students did it individually. While the students did the tasks the researcher was monitoring and helped them. After they did the task, the researcher got the result of that test.

In the cycle I the researcher found that the students had problem in grammatical, vocabulary and mechanics. The minimum vocabulary could change the meaning itself, and the grammar was wrong also. And the researcher explained to them about mind mapping technique gave an example and how to use it. The students did the task given by the researcher, they made mind mapping based on the pictures and used it in procedure text. The researcher controlled the class and they asked the researcher to help them when they got some difficulties to write. Based on cycle 1, the researcher thought that the result in this cycle was not sufficient too, so, he made cycle II to improve students' skill in writing.

In the cycle II the researcher gave the stress about using the simple present tense, gave them some words to add their vocabulary and some examples in writing the procedure text, and gave much time to do the task. The researcher explained again about mind mapping and gave them some

words. After that the researcher asked them to do post test 2. The researcher saw that the result in cycle 2 was good to improve their writing skill in descriptive text using mind mapping technique.