

CHAPTER III

RESEARCH METHOD

This chapter discussed the implementation of the research based on data gained during the research. It presents and discusses several sub contents consist of the research design, subject of the research, research instrument, procedures of data gathering, and technique of data analysis.

3.1 Research Design

This study was conducted to know the effectiveness of using mind mapping technique in teaching reading skill. For present study the writer used an action research method. It was done by systematically collecting data of one's everyday practice and analyzing it in order to come to some decisions. About what the researcher future practice should be. This process essentially what is meant by action research (Wallace:1). Bogdan and Biklen (in Bruns,1999:30) states the action research is the systematic collection of information that is designed to bring about social change.

The writer conducts classroom activities under action research method which covers observation, analysis and clarification that would bring a better understanding of teaching and learning process in the classroom, and to bring about a better change or improvement in classroom practice.

Richad (1998) shares similar idea of Kemmis and Metagart. He states that action research typically involves small scale investigative projects in the teachers

own classroom, and consists of a number of phases which often recur in cycles: planning, action, observation and reflection. These phases are covered in one cycle.

1. Planning

In this part, the researcher will prepared anything for applying the action such as: designing lesson plan, preparing performance indicator.

2. Implementation/action

The researcher will conduct this research intrinsic cycle consist of three meetings.

a. Pre-test

In this stage, the researcher would like to collect the data about students ability in reading

b. Treatments (using mind mapping technique in teaching reading)

In this stage the researcher applying mind mapping technique in teaching reading to the students. The reading will be devided into three categories such as:

- Pre reading
- While reading
- Post reading

c. Post-Test

The cycle is for the students English scores that they get from the text given by the researcher

3. Observation

This is to see the students' performance and activeness during the research taken. This way is important to decide how to treat the students especially using mind mapping technique. The students' weaknesses were also noted in the observation sheet.

4. Analysis and Reflection

After that the researcher makes reflection of learning results with the English teacher.

3.2 Subject of The Study

This study was conducted at SMAN 1 Kupang. The writer will take the eleventh grade students. There were 22 eleventh grade classes consisting of 40 students each class. However, the writer only took language class to be the subject of the study with 38 students because they were better than the other classes. The writer applied purposive sampling technique to take the language class because this class had better English compared to other classes.

3.3 Research Instrument

There were two instruments used by the writer to get the data needed, they were test and observation sheet.

1. Test

According to Brown (2001: 384), test is a method of measuring a person's ability or knowledge in a given domain. Qualitative data can be gotten by using tools mentioned previously. However, those instruments cannot gather quantitative

data. Thus, in order to gather quantitative, the writer decides to hold pre-test and post-test. Pre-test will be given to know how far the knowledge first of students about the materials will given by researcher, and post- test will be done at the last of this research. the purpose is to find out the Students development towards the material given.

2.Lesson Plans

Teaching learning process was conducted based on the lesson plan, which had been prepared before.

3.Students' products evaluation sheet

The Mind Map made by students were collected to check students' understanding to make sequences of idea and also their ability to comprehend the main idea of a paragraph and put it into a meaningful keyword on each branch of the Mind Map.

4.Observation sheet

The Observation was taken place during the teaching learning process regarding he students' behavior towards the teaching learning activity and the classroom management skill of the researcher using the observation sheet. The result of this observation was taken as a consideration in the reflection stage to better the next cycle.

3.4 Procedures of Data Gathering

This study is start by identifying the problem that faces by the students in performing reading activity. In gathering the data, the writer follow the following steps:

1. Pre-cycle

The first step in making classroom action research, the researcher makes lesson plan. The researcher chooses narative text as her learning material that is related to mind mapping technique. Than, researcher give pre test to asses the students ability in reading. In this activity the researcher tought students using conventional method. The researcher explain the reading aspects that are uses to measure their reading ability. Then, the researcher give the example of reading topic. After that, the researcher ask the students to read in front of the class one by one. After the researcher get the data from the pre test and the observation of the teaching and learning process with the subject teacher of the school researcher analysis the result to determine the use of mind mapping technique in reading. After recognizing the possible cause of problems faces by students that are they need more time to present their topic orally and it take long time so the researcher explore ways that mind mapping became an aid in teaching reading.

2. Cycle I

2.1

Planning

In this phase, the writer and the teacher made a planning for the action based upon the problems faced by students toward reading ability. In this case the writer arranged a lesson plan about narrative text through mind mapping technique.

Besides of making lesson plan, the writer also prepared observation checklist to observe the students and the teacher performance during the teaching learning process and the writer also prepared observation sheet, the material that would be distributed to the students.

2.2 Acting

In first cycle the writer applied mind mapping technique in teaching narrative text. As acting, the researcher opened the teaching and learning process by greeting the students and asked students to pray together, after that the researcher checked their attendance. Then the researcher gave their brainstorming by asking students some questions related to the narrative text such as “What do you know about narrative text? Have you ever heard the story about Snow White? What do you know about Mind Mapping Technique?”. The students answered the questions in Bahasa Indonesia mixed with English sometimes. Then the researcher explained the material about narrative text and the teaching of mind mapping.

The researcher then continued by performing the pre-test for about thirty minutes. The pre-test consist of five questions based on a narrative text. Then the researcher gave them a pretest, such as a exercise to test their reading comprehension. Secondly, after the pre-test the researcher delivered the objective of the lesson, show an example picture of mind map and giving an introduction about mind map, motivated the students by giving real example of how Mind Map had helped the researcher and another students getting better in their academic achievement, teaching the students to make a Mind Map and how to apply it in

their reading activity, and provided time for the students to read the text carefully and make a mind map on their own based on the text. After that the students took the posttest of cycle I for about forty minutes. The students answered the different question based on the text.

3.3 Observing

In this part, the writer asked English teacher observed the teaching process when the writer was teaching. The writer was observed in three major steps of teaching, they are; opening activities, main activities and closing activities. Opening activities consist of opening the class by greeting, asking students to pray together, checking the students attendances, conditioning the class, told the material to the students that will be learned and stated the learning objectives. While the main activities in this cycle, the writer prepared a narrative text to students. The students read the text and answered the questions from the text . The Writer asked the students to make mind map based on the text. While closing activities of teaching are, the writer asked students' difficulties when they answered the questions and when the students made the mind mapping. The observer also observed students' response and attitude when they where given explanation and also when they answered the question based on the text.

3.4 Reflecting

In this stage the researcher and the observers discussed about the result of the observation, students' ability to comprehend a text and made a reflection of action. The result show that most students were not really motivated when they have to

draw and had to put extra work in understanding the article they read in order to determine the most suitable keywords. there was also lack of vocabulary in general proved by many questions about difficult words from the students. Furthermore, the posttest score had not fulfilled the require score. Therefore correction was needed and the implementation was proceeded to cycle II.

3. Cycle 2

3.1 Planning

In the last cycle of this research, the writer prepared some important matters as in cycle one to support this research could be done well. The writer prepared lesson plan about narrative text through mind mapping as the technique to improve the students' reading ability in teaching and learning process. Besides, the writer prepared present list, the instrument of post test 2 and observation sheet.

3.2 Acting

After analyzing the result of the first cycle, the research decided to teach once more about mind mapping technique by giving the students post test two with the different text about narrative text. The writer opened the class by greeting the students as usual and proceeded with apperception. The researcher then delivered the objective of the lesson and explained that they would continue making mind map. Most of the time during this session was used by the students to continue their mind map and discussed about the text with their fellow students while the researcher went around the classroom to check the students' progress an provided help when needed. They were allowed to do that as long as it was their original

idea and not the copy of the mind map on the board. This time whenever a students' faced a difficulty the researcher would stop and explained it to the whole class thus the same difficulty did not arise again. By the end of the session everyone had finished their mind map. The end of the session, the researcher gave the students questions to answered, to measure their comprehend after they used mind map technique.

3.3 Observing

During the teaching learning process the collaborators observed the students' behavior towards the teaching learning activity and classroom management skill of the researcher using observation sheet. The researcher herself also used journal to record the event that occurred during the implementation of the study.

3.4 Reflecting

In this stage the researcher and the observers discussed about the result of the observation. students' ability to comprehend a text and made a reflection of the action. The result showed an improvement and the students got more enthusiasm in their reading activity and outside the classroom they tried to find the information about the article from other resource. Furthermore, the posttest score fulfilled the required score. Therefore correction was no longer needed and the implementation was stopped.

3.5 Technique of data analysis

The techniques of data analysis used in this study consist of observation analysis and investigating mastery/ ability level analysis.

3.5.1 Observation Analysis

To analyze the observation of the students' behavior and products of Mind Map during the implementation of the action, the writer used observation evaluation sheets which were scored in range of 1 to 4.

4 points : for "very good"

3 points : for "good"

2 points : for "average"

1 point : for "below average"

The calculation of the final score was used the formula as follow

$$\frac{\text{Score}}{\text{maximum score}} \times 4 = \text{final score}$$

The standard of measurement applied here is as follow.

Score	Description
3.56-4.00	Very Good
2.56-3.55	Good
1.56-2.55	Average
0-1.55	Below average

3.5.2 Investigating Mastery/ Ability Level Analysis

As suggested by Erom (2013: 76-78) it involves eight steps as follow.

1. Correcting the students' answer sheets.

The questions given were in different level of difficulty according to the Bloom's Taxonomy thus each correct answer got different score. the researcher only used knowledge, comprehension, analysis, and evaluation level of thinking.

- a. Knowledge Level of Thinking (e.g. Define, describe, label, list, match, reproduce, select, and state) gets 1 point.
- b. Comprehension Level of Thinking (e.g. Convert, defend, explain, infer, summarize, rewrite, distinguish, predict, and find the main idea) gets 3 points.
- c. Analysis Level of Thinking (e.g. break down, differentiate, discriminate, out line. and classify) gets 4 points.
- d. Evaluation Level of Thinking (e.g. Justify, support, appraise, judge, and conclude) get 5 points.

2. Counting the correct answers for each students.

3. Giving grade or score to each students.

4. Classifying grades or scores based on the standard of measurement range from 0 to 100.

Pass : Equal or more than 70

Fail : Less than 70

Score	Description
90-100	Excellent
80-89	Very Good
70-79	Good
60-69	Average
50-59	Below Average
40-49	Less Than Adequate
30-39	Poor
20-29	Very Poor
10-19	Bad
0-9	Very Bad

5. The students' answer sheets were grouped on the basis of the standard of measurement proceeded by determining both score and ability level for each students and the students as a class using the formula below.

- a. Individual Score and ability level

$$\frac{\text{total student correct answer}}{\text{maximum score}} \times 100$$

- b. Students' score and ability level as a class:

$$\frac{\text{total students correct answer}}{\text{total response}} \times 100$$

6. Counting the passing students and the failing ones in the subject investigated based on the scores that were based on the standard of measurement applied. 60% of the subject was expected to pass the test.
7. Tabulating the scores of the students to be easily read and understood.
8. The data was described, explained, interpreted, and then concluded.