

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research design

This research is a pre-experimental research which took one group pre test-post test design. The experimental group was taught by using mind mapping strategy. Emzir (2007) states that experimental research is the most productive method. There are two variables, independent and dependent variable. The independent variable was applied mind mapping strategy and dependent variable was students' writing recount. The researcher chosed one class as an experimental class where the student received a pre-test before treatment and finally post test-test after treatment.

Table 3.1 Research Design

Class	Pre-test	Treatment	Post-test
VIII	T1	X	T2

Where :

X : Treatment of Experimental by Using Mind Mapping Strategy

T1 : Pre-Test

T2 : Post-Test

3.2 The Location and Time of research

This research was conducted on SMPN 5 SIAK HULU that is located desa lubuk siam kabupaten kampar. The reason why the writer choosed this school as the experimental research because the researcher solved this problem in this school. The research was applied on the second years students at SMPN 5 SIAK HULU. The time of research on September 2017.

3.3 Population and Sample of Research

3.3.1 Population of the Reseachr

According to Polit and Hungler (1999:37), population is part of groups that is more specifically divides in carrying out a research. The population of this research was all the second year students at SMPN 5 SIAK HULU in academic 2017-2018. In the second year students, there was one class with twenty three students.

3.3.2 Sample of the Research

Sample is a subset of a population that is used to represent the entire group as a whole. Wiersma (1987:247) said that sample is a subject of population to which the researcher intends to generalize the result. In this research the writer used 23 students, divided into some groups and they were be given strategy to assist their writing by using mind mapping strategy , especially in recount text.

Table 3.2 The Sample Research

Class	Population	Sample
VIIIA	23	23

3.4 The Research Material

The researcher was used the recount text material taken from the other sources and internet.

Table 3.3 Blue Print of Research Material Treatment

No	Meeting	Topics
1	Meeting 1	My Bad Day
2	Meeting 2	My Experience
3	Meeting 3	Daily activity
4	Meeting 4	Biography

3.5 Research Instrument

Gay (1987:127) says instrument is important device to collect data in a research. However, to collect the data writer used two series of test, pre-test and post-test. The post test used to know the students ability in writing English. After that, the treatment was done after the pre-test finished. It was did about six meetings. And the test of the study adopted from other sources and internet.

The experiment conducted at July 2017-2018 and the time of this experiment following the schedule of SMPN 5 SIAK HULU.

Table 3.4 Blue Print of Pre-Test and Post-Test

No	Indicators	Kind of text	Topics	
			Pre-test	Post-test
1.	Content	Recount text	Holiday	Holiday
2.	Vocabulary			
3.	Mechanics			
4.	Grammar			
5.	Organization			

3.6 The Research Procedure

1. Pre-test

The writer gave a pre-test in the first meeting. The purpose of the pre-test was to know the basic knowledge of students' writing ability. The writer gave the topic "**HOLIDAY**" for the students. Then, the writer asked the students to write a recount text based on the topic.

2. Treatment

After giving pre-test, the writer did the treatment using Mind Mapping Strategy to write paragraph. This treatment was taken in order to know is there any significant effect on students' ability in writing recount paragraph after using MindMappingStrategy. Treatment is for four meetings. The steps are:

a) Second meeting

In the second meeting, teacher introduced about recount text in order to makes the student understand what they learn. The teacher explained about generic structure, social function, language features of recount text. The teacher gave one example for students the title *“MY BAD DAY”*. After that, The teacher introduced about procedure of Mind Mapping Strategy applied in writing process to the students. The procedure of mind mapping :

1. It starts with a word or picture that symbolizes for the central ideas in the middle of the page. It would be much better if the paper is written in horizontal format. Because it helps our brains focus in generating ideas and develop our imagination. Besides, it can help us to stay concentrate with the central ideas.
2. Using wild colors it uses, fat colored larkers, crayons, or skinny felt tipped pens to draw the lines and write the words. It is because colors can stimulate our brain to think creatively. It is also can stimulate new ideas and its connections.
3. As ideas emerge, write one or two word descriptions of the ideas on lines branching from the central focus. And allow the ideas to expand outward into branches and sub-branches.
4. It is important to make sure that we think fast when we start to develop our ideas. Their brains works best in 5-7 minute, therefore capture the explosion of ideas as rapidly as possible. In addition key word so symbols and image provide a mental short-hand, to help us record ideas as quickly as possible.

5. It is also important to put everything down that comes to mind even if it is completely unrelated. It is to prevent the stuck ideas in our brain.
6. It is forget essential not to organization of their maps. Sometimes we see relationships and connections immediately and we can add sub-branches to a main idea. The organization steps can always come later, the first requirement is to get the ideas out of our head and onto the paper.

After this, the teacher gave an example to the students how to make recount paragraph through mind mapping strategy. Finally, the students make their mind mapping strategy based on the topic given by the teacher.

b. Third meeting

In the third meeting, the teacher reviewed to explain about recount text and its generic structure, social function, language features of recount text. Next, the teacher gave students an example of recount paragraph, entitle "*MY EXPERIENCE*".

Then, the students were asked to make their own Mind Mapping Strategy based on the topic given by the teacher, moreover the students reviewed the maps to make their Mind Mapping Strategy based on the topic given by the teacher.

c . Fourth meeting

In the fourth meeting, the teacher gave the students an example of recount paragraph, entitle "*DAILY ACTIVITY*". After that, the students made a recount paragraph. Then, they presented the result of their task in class while the teacher also checked their paragraph to found their mistakes in writing the paragraph. After finishing the presentation, the teacher gave positive feedback about the

students' participation in the learning process and also asked to the students whether they still had questions about the lesson or not. Finally, the teacher concluded the material.

d. Fifth meeting

In fifth meeting was the last treatment to the students. In this meeting the teacher reviewed again to explain about all of recount text, from the generic structure, social function, and language features. After that, the teacher also gave an example a Mind Mapping Strategy to make a recount paragraph entitled "*BIOGRAPHY*". And then as the treatment before, the students were required to make their mind mapping. And after finishing, the teacher gave conclusion about material while giving time to the students sharing their difficulties in recount text.

3. Post Test

After treatment completed, the teacher gave post-test to the students to make recount paragraph that consist of three paragraph and its generic structure based on material in the test entitle "*HOLIDAY*". It is aimed to know there is an increase on students' recount on writing. It was done to figure out whether there was any significant or result of this class.

3.7 The Data Collection Technique

The data of the study were scores of the students writing skill that could be obtained by giving pre-test that was conducted before the treatment given post test after the teaching and learning process with six meetings in classroom. The test aimed to measure how many students understand the materials that given.

The writer gave pre-test in writing test a topic .the purpose of this test is to measure students' recount in writing text before treatment by mind mapping.

3.8 The Data Analysis Technique

The score of pre-test was taken as data of research. The writer gave some treatment to the students to practice of mind map from the sample of 23 students. The result of the pre-test to know the students ability in English writing, in this research, the writer found out the means scores and standard deviation of each other, the writer analyzed the data by using the formula.

Table 3.5
The Rubrics Score of Writing

The aspect of writing	Score	Description
Content	1	The topic is not clear and the details are not relating to the topic
	2	Topic is complete and clear but details are not relating with the topic
	3	The topic is complete and clear but the details are almost relating to the topic
	4	The topic is complete and clear and the details are almost relating to the topic

Vocabulary	1	Very poor knowledge of words, words forms, are not under stable
	2	Limited range confusing words and words form
	3	Few misuse of vocabulary, words forms, but not change the meaning
	4	Effective choice of words and words form
Mechanics	1	It is dominated by errors of spelling, punctuation and capitalization
	2	It has frequent errors of spelling, punctuation, and capitalization
	3	It has occasional of spelling, punctuation and capitalization
	4	It uses correct of spelling, punctuation, and capitalization
Grammar	1	Frequent grammatical or agreement inaccuracies
	2	Numerous grammatical or agreement inaccuracies
	3	Few grammatical or agreement inaccuracies but not affect in meaning
	4	Very few grammatical or agreement inaccuracies

Organization	1	Identification is not complete and description are arranged with misuse connections
	2	Identification is not complete and description are arranged with few misuse connections
	3	Identification is almost complete and description are arranged with almost proper connections
	4	Identification is complete and description are arranged with proper connections

(Adopted from Brown 2007)

The scoring rubric is used to assess the students' writing. The writing evaluation system is based on the five writing components include content, organization, vocabulary, grammar and mechanic.

3.9 Formula of Writing Assessment

To get the description of the total score of the aspects of writing by the students, the writer used the following formula.

$$TS = C + O + V + G + M$$

- TS** : Total score
- C** : Content
- O** : Organization
- V** : Vocabulary
- G** : Grammar
- M** : Mechanic

To know the final score of each student, it was calculated by:

$$FS = \frac{TS}{20} \times 100$$

FS : Final score of each student

TS : Total score of the aspects of writing

After the raters got the total score each student, the writer collected the each score from the rater. The next step to do is to know the real score of each student by using the formula below :

$$RS = \frac{Rater\ 1 + Rater\ 2}{2}$$

To know the students score of writing text, the writer analyzed the data by using descriptive statistics SPSS to find out the mean score, standard deviation, and standard error of the test by using SPSS version 22.0 program. Furthermore, to test the null hypothesis and alternative hypothesis are accepted or rejected, the writer used independent sample test to compare the post test between experimental class and control class. If the value of $t_{calculated}$ higher than t_{table} , it means that null hypothesis are rejected and alternative hypothesis are accepted.