## CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

This research used classroom action research as the design. The researcher conducted this actions research as mean to overcome students' problems in reading comprehension. Action research in education can be defined as the process of learning a school circumstance in order to find out and develop the quality of the educative process, Johnson (2012). According to Elliot (1991), action research is the study of a social condition in the sense that it could raise the quality of the action in it. Similarly, Schmuck (1997) defines the action research as an effort to learning real school situations in order to get the improvement action capacity and results. Then, Burns (2009) also adds that the crucial purpose of action research is to distinguish a 'problematic' case from the participants that include in it such as teachers, students or even parents.

In histories, action research has been seen as a cycle's process, Mertler and Charles (2011). Kemmis and McTaggart (1988) states action research is cyclic process that consists of planning, action, observation and reflection. The cycles of the action research can be seen in the following figure:

Figure 3.1 The Model of Classroom Action Research
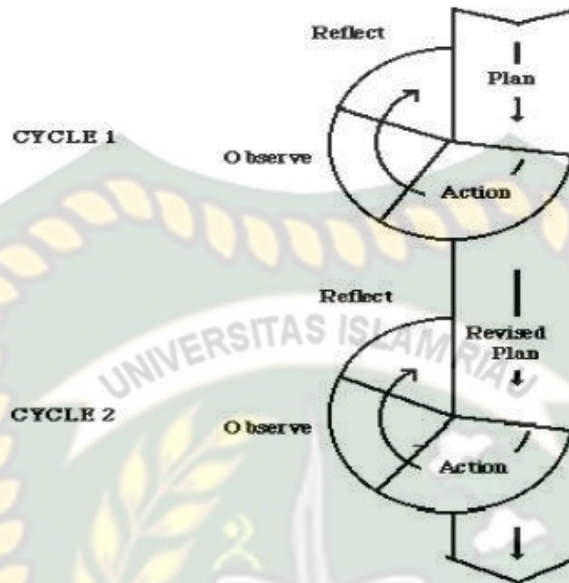
Kemmis & McTaggar (1988) in Burns (2009)

3.2 Location and Time of the Research

The researcher conducted the research at the first grade students of SMAN 4 Pekanbaru on 3rd January 2018 in giving test for base score until 15th February 2018 in giving test for cycle 2. It was located at Adisucipto street number 67, Maharatu, Marpoyan Damai. The reason of researcher chose this school as research location because the researcher interested to improve the students' problems in reading comprehension of descriptive text.

3.3 Participants of the Research

The researcher ran this research in the first grade student of SMAN 4 Pekanbaru especially in X science 4. The numbers of students were 36, consisted of

20 females and 16 males. The researcher chose this class because this class was very

problematic in reading comprehension and the researcher wanted to overcome that.

3.4 Instruments of the Research

In collecting the data, the researcher used four kinds of instruments. They

were; test, observation, interview and field note.

3.4.1 Observation Sheet

The researcher collected the data through the observation sheet. The

researcher prepared two observations sheet; students' observation sheet and teachers'

observation sheet.

Table 3.1 Teacher's Observation Sheet

No.	Component	Yes	No
1	Teacher shows a picture related to the topic		
2	The teacher asks the students to think of ideas that might be related to the topic.		
3	The teacher asks the students to categorize their ideas into five indicators of reading		
4	The teacher makes pre-assignment map before the students complete it		
5	The teacher distributes the text and asks the students to read it		
6	The teacher asks the students to complete the map		

Table 3.1 Teacher's Observation Sheet (Continued)

No.	Component	Yes	No
7	The teacher discusses the students' maps together with the students		
8	The teacher gives evaluation to the students individually which consist of some questions related to the topic		
9	The teacher makes a conclusion together with the students		

Table 3.2 Students' Observation Sheet

No.	Component	Yes	No
1	Students pay attention to the picture that shown by the teacher		
2	Students mention some vocabulary related to the topic		
3	Students categorize their ideas that they already give to the teacher		
4	Students copy the pre-assignment map		
5	Students read the text		
6	Students complete the map		
7	Students discuss their maps together with the teacher		
8	Students answer some questions individually in evaluation sheet		
9	Students make a conclusion together with the teacher		

3.4.2 Field Note

Function of field note was to cross check data and support data observations. It was related to the activities during teaching and learning process.

Table 3.3 Field Note

Topic : _____ **Date** : _____ **Meeting/Cycle** : _____/_____

Collaborator

(………………...)

3.4.3 Test

The test is one of the ways in collecting the data. The researcher gave reading texts and asked the students to find out the information of the text. The test that used in this research can be seen in appendix 7. Then, the test was constructed based on the following indicators:

Table 3.4 Indicators of Reading

Variable	Indicators	Item Number	Total
Reading Comprehension	Finding main idea	1,6,11,16	5
	Finding factual information	2,7,12,17	5
	Guessing the meaning of vocabulary	3,8,13,18	5
	Identifying references	4,9,14,19	5
	Finding the inferences	5,10,15,20	5
Total			20

The texts used in the reading tests are as the following:

Table 3.5 Blue Print of the Test

No.	Reading Text	Total Number of Item
1	Dr. Abdulrachman Saleh	5
2	Chairul Tanjung	5
3	National Monument	5
4	Bromo Tengger Semeru National Park	5
Total of Number		20

3.4.4   Interview

Interview used to collect supporting data related to the students' reading comprehension in descriptive text by using semantic mapping strategy.

Table 3.6 Interview

No.	Teacher's Question	Student's Answer
1	How do you feel about the lesson today?	
2	What makes you feel happy / unhappy during the lesson?	
3	What is the most interesting activity you do during the lesson?	
4	Do you have problem during the lesson? If you have, what are they?	
5	Does the teacher help you to solve your problem in the lesson?	
6	How does the teacher help you?	
7	Is the teacher's help make you more easily to comprehend the material?	

3.5 Procedure of the Research

This was classroom action research which had cycle process. The design of classroom action research used in this research was a cyclic process adapted from the model proposed by Kemmis and McTaggart (1988). It consists of four main steps namely; plan, action, observation, and reflection.

3.5.1 Plan

In this phase, the researcher made some planning based on the finding of preliminary study. The following activities in this action planning were designing lesson plan, preparing of semantic mapping strategy, preparing materials and media, preparing the instruments, preparing the test and arranging the score system.

3.5.2 Action

In action, the researcher implemented the plan and material that had arranged. The procedure of semantic mapping strategy in teaching learning process conducted in following activities:

Pre-teaching

a. The teacher gives greeting to the students.

b. The teacher checks the students' attendance list.

c. The teacher does the apperception.

While-teaching

Teacher	Students
Introducing the topic	***Introducing the topic***
a. The teacher introduces the topic to the students by displaying a picture relate to the topic to stimulate the students' thoughts. Then, the teacher writes the title of the topic and circles it on the white board.	a. Students pay attention and think of ideas relate to the picture.
Brainstorming	***Brainstorming***
b. The teacher asks the students to think of ideas and mention some vocabularies that might be related to the topic.	b. Students mention some vocabularies relate to the topic.
Categorization	***Categorization***
c. The teacher encourages the students to see relationships among their ideas.	c. Students categorize their ideas into main idea, factual information, difficult words, pronoun and conclusion while copy the pre-assignment map
d. The teacher asks the students to categorize their ideas into main	

idea, factual information, difficult words, pronoun and conclusion while drawing it on the white board.	that drawn by the teacher on the white board to their paper.
Personalizing the map	***Personalizing the map***
e. The teacher distributes the descriptive text to the students in group (each group consisted of 4 people). f. The teacher asks the students to read it and also complete the map in previously activity. In this section, the students can modifier a map based on the information acquired.	d. Students in group read the text and also complete the map based on the information acquired.
Post-assignment synthesis	***Post-assignment synthesis***
g. The teacher discusses the students' maps together with the students.	e. Students discuss their maps together with the teacher.

Post-teaching

a. The teacher gives evaluation to the students to answer the questions relate
to the topic individually.

b. The teacher concludes the material together with the students.

Then, this research held in four meetings including test in cycle 1. The
materials of descriptive text were about people, tourist destination and historical
places. These materials were based on English Syllabus for the first students of
Senior High School.

Table 3.7 Blue Print of the Material

Meetings	Topic
1	Lyliana Natsir
2	Way Kambas National Park
3	Siak Sri Indrapura Palace
4	Test for Cycle 1

3.5.3 Observation

The researcher collected the data during the teaching learning process in
teacher and students' observation sheet and also field note which was helped by
collaborator.

3.5.4 Reflection

The reflection was the last activity in the procedure of the action research. The
researcher and collaborator were working together to make conclusion and analyze

the observation sheet and the result of test in every cycle to find out the strengths and weaknesses of the students.

After reflecting on the result of the research, the researcher revised the plan when there was no progress in students' reading comprehension by using semantic mapping strategy in cycle 1. Therefore, the researcher continued to cycle 2.

3.6 Data Collection Technique

3.6.1 Qualitative Data

The data of research were collected by using some techniques of data collection including; observation sheet, interview, and field note.

3.6.2 Quantitative Data

In this research, the researcher has written test to measure the students' achievement in reading comprehension of descriptive text.

3.7 Data Analysis Technique

After collecting both qualitative and quantitative data, the next step of the research was analyzing the data. In this research, the techniques of the analyzing data are described in following

3.7.1 Qualitative Data

The qualitative data were gained through observation sheet, interview, and field note. Gay (2000) explains the steps of analyzing the data qualitative as in the following:

1. Data Management

Data management involves creating and organizing the data collected during the study. There are two main purposes for data management. The first is to organize the data and check data for completeness. The second is to start the analytical and interpretive process.

2. Reading and Memorizing

Reading the field notes, transcript, memos, and observer's comments to get an initial sense of data. Read for several hours at a time and make marginal notes of your impressions, thoughts, ideas, etc.

3. Description

The aim of description is to provide a true picture of the setting and event that take place on it so the researcher and the reader will understand of the context in which the study take place.

4. Classifying and Interpreting

Qualitative data analysis is basically the process of breaking down data into small units, determining the importance of these units, and putting pertinent units together in a general interpretive form.

3.7.2   Quantitative Data

After teaching reading using semantic mapping strategy, the researcher used the formula of the means offered by Gay and Airasian (2000) as follows:

$$X = \frac{\Sigma x}{N}$$

Where: X : Mean of score

            Σx : The sum of the students' score

            N : The numbers of the students

To know score of each student has been calculated by applying the formula

$$\text{score} = \frac{right}{items} x100$$

After the researcher adopted the formula above, the researcher referred to the minimum score or Kriteria Ketuntasan Kurikulum (KKM) to identify the students' level of the students percentage score in reading comprehension of descriptive text. In this case, the KKM of the school was 80. The percentage score was reflected into following range:

Table 3.8 Classification of Students' Score

No.	Score	Classification
1	90 – 100	Excellent
2	81 – 89	Very Good
3	71 – 80	Good
4	60 – 70	Fair
5	<59	Poor

(Hughes, 1993)