CHAPTER III
RESEARCH METHOD

A. Research Design

This research applies CAR (Classroom Action Research) because it aims to solve students' reading comprehension problems. According to Ndruru (2020) Classroom action research (CAR) is the planning of learning activities as an action that is deliberately raised and occurs in a class together. These actions are carried out with directions from the teacher by students. It is further explained that the CAR includes four stages of the action research model planning, implementing, observing, and reflecting.

The goal is to identify students' problems in tenth-grade to improve the quality of learning, especially for reading comprehension. The design of this study is CAR research, which means collaborative classroom action research that will be carried out with an English teacher in tenth-grade at SMK Taruna Utama Melinting.

In conducting this research, the researcher acts as a designer of the learning method that will be researched and as a teacher who teaches reading comprehension using the Carousel Brainstorming strategy that has been designed by the researcher and also provides materials and assignments and also fills in the student attendance list. Meanwhile, teachers and students have prepared beforehand because this classroom action research is intended to improve the learning process faced by teachers and students in class, whether there has been a change or not. Researcher will observe the learning process of reading comprehension.

B. The procedure of Classroom Action Research

Classroom Action Research (CAR). According to Ndruru (2020) Classroom action research is the planning of learning activities as an action that is deliberately raised and occurs in a class together. These actions are carried out with directions from the teacher by students. It was further explained that the CAR includes four stages of the action research model: planning, implementing, observing, and reflecting.

Four components repeated in cycles consisting of planning, acting, observing and reflecting. CAR is the considerable form of study with systematic reflective, done by the teacher in specific purpose, to improve the condition of learning process continuously. This CAR integrates many aspects such as students' responses, teacher-students interaction, and intra-students interactions to solve the research problems and increase student's reading achievement (Rukminingsih et al., 2020).

From the statement above, it can be assumed that research is able to solve the problems and find scientific support in the process of problem solving the writer can continuously analyse and control the situation. This research is expected able to improve and

increase in quality of learning. And they can do some experiences in teaching based on their own idea then evaluate and see how it works. According to Ndruru (2020) the researcher uses classroom action research in some steps of this research four stages of the action research model:

1. Planning

In this plan, the researcher aims to improve students' comprehension of recount texts and make them more active in class. The researcher changed the teaching-learning style with the collaborative teacher by using Carousel Brainstorming This method was implemented in one cycle by preparing the lesson plan and teaching strategy. Every meeting is based on the activities designed in the lesson plan, which has three steps called pre-, main-, and post-activity.

Applying the Carousel Brainstorming strategy means that the making plans before presenting the material. The researcher made the lesson plan to make the teaching and learning process run smoothly and easier. Some materials were taken from internet sources. The written test measures students' abilities and progress in understanding recount texts. The tests are in the form of essays and gave in cycle 1. The researcher will give 40 minutes for each test and distinguish the recount text in each question.

2. Acting

The implementation of the actions is the implementation of appropriate activities in a lesson plan made by the researcher. The cycle has three meetings. In the first meeting, the researcher applied the Carousel Brainstorming method in teaching reading comprehension of recount text in stages. They are class presentations; teamwork, quizzes, individual improvement scores, and team recognition. First, the subject matter is presented in class by the teacher. The method used is usually direct instruction or teacher-guided class discussions. During class presentations, students should pay attention because it can help them in the individual que that will determine the group's score.

Next is teamwork, in which each group consists of 4-5 students who are heterogeneous and consist of two or three men and women from different tribes with different abilities. After the teacher explains the material, each member of the group learns and discussed worksheets, compares answers with a group of friends, and gives mutual help between members if there is a problem. After discussing the exercise in a group, the researcher gave an individual test to students to know the students' improvement after the group discussion The group which got the highest average of improvement based on the score from the English teacher got a reward from the teacher.

3. Observing

The researcher observes problems, advantages, disadvantages, and conclusions from implementing Carousel Brainstorming to improve students reading comprehension. The

researcher wrote the important thing on the observation sheets and field notes to see all of the events before, during, and after the implementation of the Carousel Brainstorming method and whether it could improve students reading comprehension in recount texts. The observation is conduct while implementing the Carousel Brainstorming method in the classroom.

4. Reflecting

Reflecting stage all data obtain through the observation sheets, the questionnaire, and post-test 1 will be evaluate and make as the basis for preparing and planning the next cycle. Based on the evaluation, the researchers found that Carousel Brainstorming will be very potential to implement to improve the students' reading comprehension. Although cycle 1 was conduct only in five sessions, the participants' reading comprehension performance had increase quite significant, their view of reading comprehension had turn to be more positive, and their accept of the use of Carousel Brainstorming will be quite high.

After checking up the data from the observation sheet, it was found that three out of the eight teams form in cycle 1 will not work optimally. The main cause will be that the members of those three groups will be students having relative low interest in reading comprehension. Considering this, the researcher plans to reshuffle the membership of the working groups so that in cycle 2 the working groups would consist of members with mixed gender and reading abilities and interests can continue to the next cycle.

In this classroom action research, the criteria for success will be based on students' scores in reading tests. The implementation will be considered successful if 75% of the students achieve an average score of 77 or higher. Additionally, student involvement in the teaching and learning process will be deemed successful if at least 75% of the students actively participate in reading activities. These criteria will serve as the primary measures for determining the effectiveness of the research implementation.

C. The Subject of the study

The subject of this research is the students of tenth-grade SMK Taruna Utama Melinting in the academic year 2023/2024. It is located in Melinting, East Lampung, Lampung 34198.

D. Instrument of the Research

The researcher will be an observer to collect data and collaborate with the teacher, while the teacher is the person who acts to research the class action research. Meanwhile, tenth-grade students will be observers. In this study, the researcher used instruments namely, observation checklists, and tests:

1. Observation Check List

During observation, the researcher lists the students' names in tenth-grade. The researcher observes students and teachers while participating in learning activities such as

responding to the teacher, answering questions, doing an assignment, and filling out the attendance form using the Carousel Brainstorming method. The following is the table of success indicator to observe the student's participation in the class:

Table 1 Success indicator of student's participation in the class

No	Activities	Frequency	Percentage (%)
1	Students respond to teacher's teaching process	37	100
2	Students are able to answers questions raised by the teacher	37	100
3	Students are able to complete the assignment/task given by the teacher	37	100
4	Students consistently attend the class	37	100

The researcher's role is to individually observe each student's participation in these activities and record the frequency of their engagement. A frequency of 100% for each activity suggests that all students are actively participating in the corresponding activity. However, it's essential to note that the overall percentage of active participation depends on whether all students engage in all activities. If any student does not participate in a specific activity, it would affect the overall percentage of active participation. Therefore, achieving 100% in all activities would indicate full participation from all students across all observed criteria.

2. Reading Comprehension Test

A reading comprehension test is an assessment tool used to evaluate an individual's ability to understand and interpret written texts. These tests typically involve reading passages or excerpts followed by a series of questions designed to assess various aspects of comprehension. The reading comprehension test comprises 30 questions designed to assess various aspects of students' comprehension skills.The researcher uses criteria of scoring reading comprehension in each cycle as mention on the table below:

Table 2 Criteria of Scoring Reading Comprehension

Variable	Sub-Variable	Indicator

	Main idea	The students can identify the main idea of the reading passage well.
	Supporting Details	Identify specific pieces of information that support or explain the main ideas.
	Inferences	The students can understand where the text is refers to. So, they can understand even they vocabulary of the text were changed in its pronouns, etc.
Reading comprehension	Predicting	The students can encourage them selves to look at the subject or title of the passage, and to think about the possible content. If does not matter if the learner do not predict correctly. The activity still helps prepare them for reading.
	Vocabulary	The students can try and guess the general sense difficult word, and there are a number of activities which help the reader deal with unfamiliar vocabulary without using dictionary or asking the teacher to explain and translate.

The following is the blue print for the pre-test and post-test reading comprehension for the students:

Pre-test Questions	Numbers	Total

Main idea	1, 6, 14, 18, 23	5
Supporting details	3, 4, 8, 9, 10, 15, 16,	7
Interferences	2, 7, 16, 22, 27	5
Predicting	9, 10, 17, 19, 20, 21, 30	7
Vocabulary	5, 12, 11, 13, 19, 25	6
Total		30

Table 3 Blue print of Pre-test Reading Comprehension

Table 4 Blue print of Post-test Reading Comprehension

Post-test Questions	Numbers	Total
Main idea	1, 7, 14, 19, 23	5
Supporting details	4, 10, 12, 25, 28, 29, 30	7
Interferences	2, 8, 15, 20, 24,	5
Predicting	3, 6, 9, 13, 16, 18, 21, 26,	8
Vocabulary	5, 11, 17, 22, 27	5
Total		30

E. Data Collecting Technique

Data collection technique is the way to collect the information and data about this research in the process of improving students' reading comprehension by using Carousel Brainstorming strategy. Observation checklist, interview guide, field notes, test instruments were used to collect the data.

1. Observation

The researcher conducts observation on students to observe process of the teaching and the behaviour, situation, and condition of the students during the implementation of the lesson plan by using observation checklist. Observation checklists will be used by the researcher to obtain data and get information about the increasing development of the students in understanding recount text by using Carousel Brainstorming method. The observation items will in the form of statement.

Field note is a description of students' activity, events, and conversation between students and teacher in the learning activity. This field note taking activity will conduct before until after the implementation of Carousel Brainstorming method. The researcher use field note to observe and note the situation happen in the learning activity in every meeting. The field note consists of classroom setting, date, students' and teacher's activity, students' responses during the learning and teaching process, ideas, and questions will on the

observation. From these observations, the researcher would find the problems, advantages, and reading comprehension test format use by the teacher.

2. Test

The researcher administers multiple-choice tests assessing reading comprehension. These tests are conducted using Google Forms and last approximately 90 minutes. They consist of a series of multiple-choice questions designed to evaluate students' understanding of written texts. Each question presents a passage followed by several answer choices, from which students must select the most appropriate option based on their comprehension of the text. The questions cover various aspects of reading comprehension, including main idea, supporting details, inference, vocabulary, and author's purpose. Students complete the tests online via Google Forms, allowing for efficient administration and automatic scoring. After completion, the researcher analyses the responses to assess students' comprehension skills and identify areas for further instruction or support. As for the group paper sets, these are provided to measure the collective skill, knowledge, intelligence, capacities, or aptitudes of either individuals or groups.

There will be 30 questions in reading comprehension test and post-test activity. In this research, the researcher will use two types of test namely pre-test and post-test. The researcher provided students a recount text and sets of question which have to be answered by them in the give answer sheet. The researcher will get the data by giving the pre-test from preliminary study and then analyse them to decide the plan, the implementation, and the reflection during the action.

Meanwhile, post-test will give to the students at the end of first cycle to know the students' improvement. This post-test is the questions provided test consisting of 30 multiple choices (see appendix) that was used to see the improvement of the student's reading comprehension. The researcher gave 45 minutes for post-test. Lastly, the researcher will obtain the students' test score by making average of all scores from each group.

F. Technique of Data Analysis

After collecting data, qualitative data analysis will use interviews and observation of the learning process. The researchers will use descriptive analysis in collecting data to explain how each cycle in the indicator helps the learning process improve students' reading comprehension by using Carousel Brainstorming strategy at the tenth-grade of SMK Taruna Utama Melinting.

The data from observation are grouped based on students' behaviour and responses, which can be used as instructions or indicators of Students activity during learning activities.

Moreover, students improve their reading scores by working on multiple choice. The results of the observation are analysed below:

$$score = \frac{\text{The Total Number of Activity}}{\text{number of students}} x100$$

(Ardiana, 2015)

In analyzing quantitative data, the researcher tries to accounting a test for pre-test and post-test will use formula as below:

1. For scoring the students correct answer of pre-test and post-test by using the formula:

(Ardiana, 2015)

$$score = \frac{\text{The Total Correct Answer}}{\text{Total score of item in test}} x100$$

2. In the collection of data from the students in answering the test. The researcher used a formula to get the mean score of the students as follows:

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

where :

$\bar{x}$ = Mean Score (symbol for the population mean)

Σx = The sum of all score

N   = The total number of students

(Ardiana, 2015)

3. The researcher tries to get the class percentage that passes the KKM 70. Computing the frequency and the rate of students' score of the students as follow:

$$P = F/N \text{ x } 100\%$$

Where:

P = Percentage

F = Number of correct answer

N = The total number of subject

(Ardiana, 2015)

4. Classification score evaluation.

Table 5 classification of the students' achievement

No	Classification	Score
1	Excellent	96-100
2	Very good	86-95
3	Good	76-85
4	Fairly good	66-75
5	Fair	56-65
6	Poor	46-55
7	Very poor	0-45

(Ardiana, 2015)

The researcher gets a score from one cycle conducted in the research. It is to know how far the student's progress in the teaching and learning process is. The researcher also used a formula to find the final score based on the criteria value 70 of the target score.