CHAPTER III

RESEARCH METHOD

A. Research Method

This research was a Classroom Action Research (CAR) type. It was a research conducted by teachers in their own classes through self-reflection, intended to improve their performance as teachers so that student learning outcomes increased. Suhardjono in Nurlidia (2015) stated that Classroom Action Research was one of the types of action research conducted in class and had specific objectives related to teaching and learning activities. Carr and Kemmis in Sari, et.al (2015) defined Action Research as follows:

> "*Action research was a form of self-reflective inquiry undertaken by participants (teachers, students, or principals, for example) in social (including educational) situations in order to improve the rationality and justice of (1) their own social or educational practices, (2) their understanding of these practices, and (3) the situations (and institutions) in which the practices were carried out*."

Meanwhile, according to Mettetal in Crisianita & Mandasari (2022), Classroom Action Research was the action research to find the best method in teaching learning activities, so that it could improve student learning outcomes. From the three statements about CAR, the researcher obtained the conclusion that Classroom Action Research (CAR) was a type of action research in the social field

that was conducted in a classroom. This research was done through several processes aiming to find the best learning method, so that it would increase educational value.

Classroom Action Research had several characteristics that differentiated it from other types of research. According to Wardhani in (Desak, 2015), there were four characteristics of CAR, namely:

The statements problem in the CAR was triggered by the teacher's awareness and desire to solve the teaching and learning activities problems in the classroom they had done so far.

1) The essence in CAR was self-reflective inquiry, where data was obtained from its practice through self-reflection. It was different from other research that got the data from another object.

2) The focus of this research was on learning activities in the classroom (teacher and student interaction).

3) CAR had the main goal: to improve learning gradually and continuously known as the implementation cycle, and was conducted until significant results were obtained.

The four characteristics above distinguished the Classroom Action Research from other studies, where the CAR was more specific to learning activities in class while other research was different in objects and fields.fields.
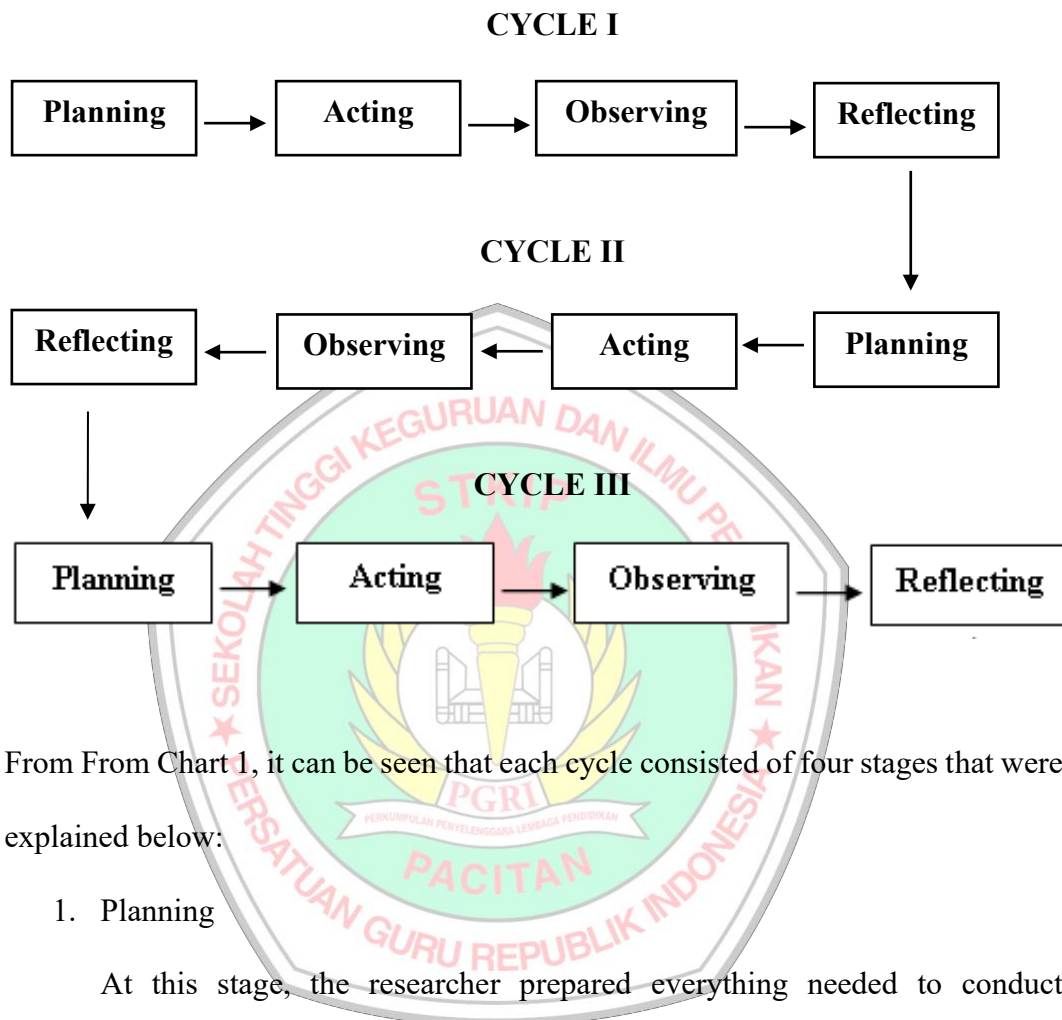
B. Research Design

Research design referred to the plan and structure that a researcher created to guide their study and gather relevant data to answer their research questions or test hypotheses. It outlined the procedures and methods that would be used to collect, analyze, and interpret information during the research process. Classroom Action Research (CAR) was composed of several procedures and rules that had to be applied. Arikunto (2013) stated that CAR was conducted in several cycles until significant results were obtained. One cycle consisted of four stages, namely: Planning, Implementation, Observation, and Reflection. This was in line with the research model developed by Kemmis and Mc. Taggart in Sari, et.al (2015) sathat a cycle consisted of planning, acting, observing, and reflecting stages. The sequence of steps that had to be passed were: the first was planning, the second was acting, the third was observing, and the last was reflecting.

The four stages were interconnected with each other to form a cycle. If the first cycle had not shown significant results, the researcher had to conduct a second cycle with the same stages as the first cycle, but the implementation of the next cycle referred to the results of the first cycle's reflection. It was to enhance the deficiencies in the first cycle. Classroom Action Research, where each cycle consisted of Planning, Acting, Observing, and Reflecting, had to be conducted coherently based on the procedures and rules.

Figure 3.1. The stages in Classroom Action Research developed by Kemmis and Mc. taggart :

CYCLE I

| Planning | → | Acting | → | Observing | → | Reflecting |

CYCLE II

| Reflecting | ← | Observing | ← | Acting | ← | Planning |

CYCLE III

| Planning | → | Acting | → | Observing | → | Reflecting |

From From Chart 1, it can be seen that each cycle consisted of four stages that were explained below:

1. Planning

At this stage, the researcher prepared everything needed to conduct Classroom Action Research. Things that had to be prepared were teaching plans, teaching media, observation instruments of the student learning process, and instruments for observing the teaching-learning process. The researcher also needed to formulate problems that would be corrected in class referring to the applicable curriculum. At this stage, the researcher prepared the lesson plan, observation instruments, learning media, and formulated the problem to be corrected.

2. Acting

This stage was the implementation of the research plan. A researcher who took action had to understand the practical stages and rules. The researcher had to comply with the plans that had been prepared, but learning activities had to continue as usual.

3. Observing

At the observation stage, there were two activities to be observed, namely students' learning activities and teaching-learning activities. Observation of the students' learning process could be carried out by the researcher while teaching. And teaching-learning observation could be carried out by the collaborators based on instruments that had been prepared by the researcher. The observation results from collaborators would become reflection materials.

4. Reflecting

Reflection was an activity of evaluating, analyzing, interpreting, explaining, concluding, and identifying follow-up actions in planning the next cycle. Reflection was carried out when the collaborator had finished observing the researcher. The reflection results could be used as material for consideration in designing the next cycle if there had been no significant changes.

Based on the explanation above, it can be concluded that each cycle in CAR had four stages, namely research planning, implementation of the research plan, observing researcher and research subjects, and finally reflecting on the actions that had been carried out.

C. Subject of the Research

The subjects of this research were seventh-grade B students of SMPIT AR-Rahmah Pacitan. This class consisted of 32 female students. SMPIT Ar-Rahmah seventh graders were divided into four classes, namely classes A and B for female students, while classes C and D for male students. The female classes A and B were located on the second campus, while the male classes C and D were on the first campus. This research was conducted in the second campus located at Street RE. Martadinata 58, Craken Kulon, Sumberharjo, Pacitan. The researcher found the main problem in the female class B. They still lacked speaking skills, so the researcher decided to improve the students' speaking skills in the seventh-grade female students specifically class B. The female school of SMPIT AR-Rahmah. The explanation below is the detail of the research subject :

a. **School Profile**

School Name : Sekolah Menengah Pertama Islam Terpadu Ar-Rahmah Pacitan

Accreditation Status: A

Address : Street RE. Martadinata 58, Craken Kulon, Sumberharjo, Pacitan sub district, Pacitan Regency, East Java, Indonesia. (Campus 2)

Postal Code : 63518

b. **Class Profile**

The total number of students at SMPIT Ar-Rahmah in Academic Year 2022/2023 was 109 students. The researcher will focus on solving problems in 7B class (Female Students). The details of 7B class students at SMPIT AR-Rahmah are as follows:

Table 3. 1 List of 7B students information at SMPIT AR-Rahmah

Number	Name
1.	Almira Hitana
2.	Alya Aisha Rasid
3.	Amelia Intan Rahayu
4.	Anisa Fitri Septiani
5.	Aprilia Sherva Devika Luthfiah
6.	Aqiela Hamidah
7.	Asyifa Sukma Hapsari
8.	Aulia Naurani Zahwa
9.	Aura Syifa Azalia Azhar
10.	Aurellya Vicheza Agfreda
11.	Chenaya Nyswah Khontya
12.	Ersa Qawiyyu Pribadi
13.	Farhatunisa Riadi
14.	Felycia Kenza
15.	Hazima Shafi Zulfa
16.	Kalyani Aurelia Nisa
17.	Khanaya Khairunissa
18.	Khanza Chayara Arvano
19.	Khanza Yasmin Yasyfa'
20.	Launa Hanuun
21.	Luthfia Almaira Wahyudi

22.	Manha Sanika Zarin
23.	Nadhifa Faeyza Azahra
24.	Nasywa Chandra Illine
25.	Nazhifa Anindya Nurkholis
26.	Nurul Insani Muslimah
27.	Regina Athifa Mailahana
28.	Renata Ava Carisna
29.	Syakira Nadiatus Salma
30.	Syifa Andary Yuaningrum
31.	Vania Khansa Tsuraya
32.	Nadine Fadhya Hanun
33.	Zahrotusyifa Nur Fitri

Source : Presence List of class 7B Students SMPIT AR-Rahmah

c. Class Infrastructure

Class 7B has several infrastructure facilities as shown in the table below.

Table 3.2 List of facilities in 7B classroom

Number	Facilities Name	Condition
1.	White Board	Good
2.	Chairs	Good
3.	Tables	Good
4.	Board Ruler	Good
5.	Cupboard	Good
6.	Fan	Good

D. Object of the Research

The object of this research was to enhance 7B students' speaking skills by using the Collaborative Learning type Learning Cell. Based on observations,

students still lacked speaking skills. Therefore, the researcher overcame this problem with the Collaborative Learning type Learning Cell method because it was in accordance with the characteristics of students who liked to interact intensely with their deskmates. So, the researcher decided that the object of this research was to enhance 7B students' speaking skills by using the Collaborative Learning type Learning Cell.

E. Time of the Research

Research time management was effective using a time table. The time table contained sequential and detailed planning of research activities to make it easier for the researcher to manage research time. The researcher began compiling proposals in October 2022 and research results were reported in May 2023. So, the researcher used a time table to make effective research time management which was presented in the following table :

Table 3. 3 Time of the Research

No.	Activities	Time								
		Oct	Nov	Dec	Jan	Feb	March	Apr	May	June
1.	Research preparation	■								
2.	Research proposal writing		■	■						
3.	Proposal Seminar				■					
4.	Treatment and data collection								■	
5.	Data								■	

	analysis								▓	
6.	Research report									▓

F. Research Instrument

1. Observation Sheet

The observation sheet was used to collect data through observations in the field. Observations conducted by observing teaching and learning activities in the classroom in accordance with the observation guidelines. This observation sheet is divided into 2 (two), namely the observation sheet of teacher teaching activities and student learning activities. The observation sheet was filled in by the observer. The observer for student activity observation is the researcher (teacher) and the observer for researcher activity is the collaborator (a colleague).

2. Questionnaire Sheet

The questionnaire sheet was a set of questions or statements that had to be answered by respondents to collect data according to research needs. The questionnaire sheet consisted of two parts. The first part was the identity of the respondent, and the second part was the answer from the respondent. In this study, the questionnaire sheet was used to collect data on how students' perceptions of the implementation of the Learning Cell technique in class 7B SMPIT AR-Rahmah Pacitan.

3. Speaking Test

Students' speaking skills were measured using speaking tests. In this study, three types of speaking tests were conducted, namely speaking pre-test, speaking post-test, and speaking tests in each cycle. The pre-test and post-test were used to measure students' speaking skills before the Learning Cell techniques were applied and after the Learning Cell techniques were applied. Speaking tests in each cycle were used to measure students' progress in each cycle. By knowing the progress of students, the researcher could conclude the results of the methods applied.

G. Data Collection Technique

The data collection techniques used in the study were:

1. Observation

Observation was the process of obtaining information data by directly observing the object of research in the field. According to (Baker, 2006), observation was a method that required researchers to collect data using the five senses and certain roles. In education, observation was conducted by assessing the behavior of the students and educators in teaching and learning activities. So it could be concluded that observation in this classroom action research was a data collection technique by observation during teaching and learning activities. In this study, observations were made to observe the activities of students and the implementation of learning when English learning activities using CoLTs type Learning Cell occurred.

2. Questionnaire

Questionnaire was a data collection technique that was done by giving a set of questions or written statements to respondents to answer. The types of questions in the questionnaire were divided into two, namely: open questionnaire and closed quistionnaire.

3. Speaking Test

Tests in teaching and learning activities functioned to determine student understanding of learning materials. In this study, the test was conducted to determine the improvement of student speaking skills after applying Collaborative Learning Technique type Learning Cell. The tests given were pre-test, post-test, and tests in each cycle. The test results determined whether it was necessary to do the next cycle or not. The cycle was stopped after a significant increase in test results was obtained.

H. Technique of Data Analysis

The data analysis technique was a way to process data and present it into valid information that was easy to understand. The data in the study was analyzed quantitatively and qualitatively. Data obtained from tests were analyzed quantitatively, while data obtained from observations and questionnaires were analyzed qualitatively.

1. Quantitative Data Analysis

Quantitative data analysis in this study used descriptive quantitative methods. Descriptive quantitative was a method for making descriptions or interpretations of objective numerical data (Arikunto, 2006). The researcher analyzed students'

speaking scores on the pretest, post-test, and tests in each cycle to determine the improvement of students' speaking skills. Students' scores were presented in a class average score table. This data was then described and interpreted through meaningful paragraphs about how the students' speaking skills increased.

a. Scoring Criteria Rubric

To assest students' speaking skills and to determine speaking scores, researcher will use a scoring rubric with several aspects and indicators.

Table 3. 4 Scoring rubric of students speaking skill

No.	Speaking Components	Indicators	Points
1.	Pronounciations	a. Students have few traces of foreign accents	5
		b. Accents are conscious, but students always understand	4
		c. Students need to listen with concentration and have pronunciation problems that sometimes lead to misunderstandings	3
		d. students have problems with pronunciation and are very difficult to understand and are often asked to repeat	2
		e. The student has serious problems with pronunciation and the language is almost incomprehensible	1
2.	Grammar	a. The student makes some notable mistakes in grammatical word order	5
		b.Sometimes students make grammatical and word mistakes that may or may not obscure the meaning	4
		.Students often make mistakes in grammar and word order, making meaning difficult to understand	3
		d. students have grammatical and word errors that make comprehension difficult	2
		e. The student has errors in grammar and word order so severe that speech becomes virtually incomprehensible	1

3.	Vocabulary	a. Students' use of vocabulary and expressions is substantially native-like.	5
		b. Sometimes students used inappropriate terminology or had to repeat ideas due to lack of vocabulary.	4
		c. Vocabulary recognition is somewhat limited as students often lack vocabulary	3
		d. The student's misuse of words is very limited and so extreme that it is very difficult to understand	2
		e. Students have a very limited vocabulary so they can carry on virtual conversations	1
4.	Fluency	a. The student's language is as fluent and effortless as a native speaker.	5
		b.Student speaking speed seems to be affected by speech problems	4
		c. The speed and fluency of the students is very good.	3
		d. In other words, generally hesitant students are often forced into silence by language restrictions.	2
		e. The students' speech is so choppy that conversation is virtually impossible.	1
5.	Comprehension	a.The students seem to understand everything without difficulty.	5
		b. Students understand most everything at a normal pace, but may need to repeat themselves from time to time	4
		c the student repeats most of what is said later than usual	3
		d. students have great difficulty understanding what is said and can only understand slow social conversations	2
		e. Students cannot claim to understand even basic conversational English.	1

b. Score Calculation

To determine the scores obtained by students, it could be calculated using a formula from Nurgiyantoro (in Abdurahman and Elya Ratna, 2003).

$$N = \frac{Sm}{Si} \; X \; Smax$$

Note:

N = *Mastery level percentage*

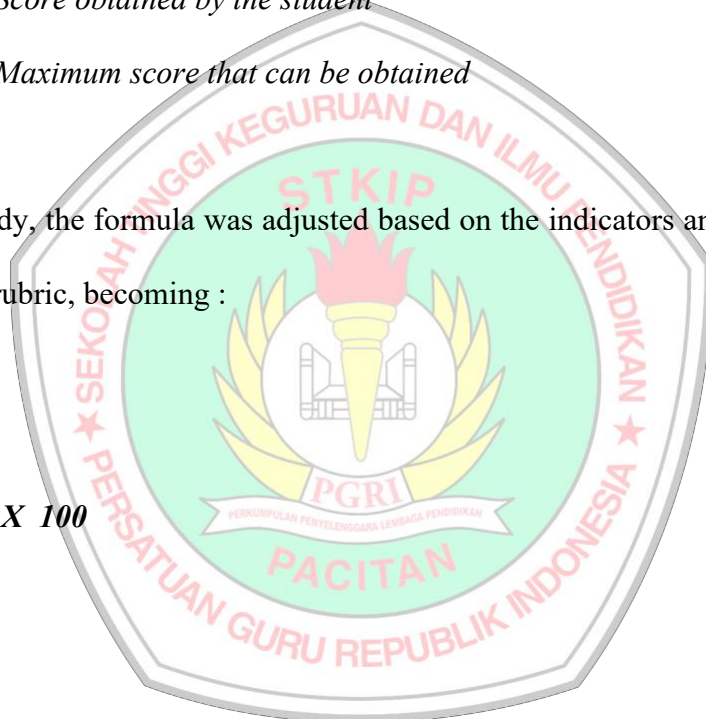*Sm* = *Score obtained by the student*

Si = *Maximum score that can be obtained*

In this study, the formula was adjusted based on the indicators and components in the score rubric, becoming :

$$N = \frac{Sm}{25} \; X \; 100$$

The way to find out the average score of students in a used a Mean formula that summed up all the students' scores and divided it by the total number of students in the class.

$$M = \frac{\Sigma Fx}{N}$$

Note :

M   *= Mean*

ΣFx   *= sum of all student scores*

N   *= Total number of students*

    c.   Score Level Categories

To describe the students' scores, the researcher used score level categories. It was done to make it easier to describe the students' abilities based on the scores obtained.

Table 3. 5 Score level categories

No	Score	Categories
1.	86-100	Excellent
2.	71-85	Good
3.	56-70	Fair
4.	41-55	Poor
5.	≤40	Bad

2. Qualitative Data Analysis

Qualitative data analysis in this study adopted the Miles and Huberman method. This method composed of 3 stages, namely after the data is collected then data reduction, data display, and conclusion drawing.

a.   Data reduction

Data reduction was classifying, analyzing, simplifying, and focusing the data. The goal was to summarize valid data and find the data pattern.

b. Data display

Data display was presenting the results of data reduction in an easy-to-understand display. The display includes charts, pies, diagrams, etc. The data that is presented in this graphical display will be easy to analyze and describe.

c. Conclusion drawing

Conclusion drawing was a process to find the data meaning. The conclusion is a new finding that has not previously existed and presented in the meaningful sentences.

I. Procedures of the Research

The research procedure in Classroom Action Research is divided into four steps in one cycle. The steps are planning, acting, observing, reflecting. This research does not limit how many cycles will be conducted. The action will be stopped after the students' speaking skills have significantly improved. The following is the research procedure that will be carried out:

a. Planning

The first procedure that must be carried out in this research is planning. Planning is a series of plans that will be conducted to prepare for research activities. In the planning procedure there are steps that will be carried out:

1) Making a lesson plan

2) Preparing observation sheets, questionnaire sheets, and test sheets.

3) Preparing learning media (materials, power points, instructions for Learning Cell techniques)

b. Acting

Acting is the stage for implementing the plans that have been prepared. This step is the main activity in Classroom Action Research. The following is the procedure for activities in the Acting step :

1) Researcher and students pray together

2) Checking the present list

3) Apperception for the class (giving mini question and answer)

4) Speaking Pre-Test

5) Giving instruction related to the Learning Cell method

6) Applying the Learning Cell method

7) Giving the speaking test

8) Speaking Post-Test (in the most recent cycle i.e. the test results have been significant))

9) Conclusion and closing

c. Observing

Observation was the stage for observing during teaching and learning activities. This meant that observation was conducted at the same time as the treatment or acting stage. Below was the procedure in the observation step:

1) The researcher observed the students' learning activities and recorded them in the observation sheet according to the observation guide that had been prepared.

2) The collaborator observed the researcher's teaching activities and recorded them in the observation sheet in accordance with the observation guide that had been prepared at the planning stage.

d. Reflecting

Reflecting was a step to reflect on actions and correct deficiencies in the acting stage. To reflect on actions, the results of observations during research activities were used. The results of this reflection served as a reference for improving actions in the next cycle.

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