

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

In this study, the method used was Classroom Action Research (CAR). Mu'alimin (2014: 5) states that Classroom action research meaning research conducted in a classroom to find out the consequences of actions related to the research topic used in that classroom. Furthermore, Hamid (2015:16) states that CAR is research that carried out systematically and reflects the various actions of the lecturers as a researcher, starting from the formulation of the program and ending with practical action research in the classroom in the form of teaching and learning activities, to improve learning conditions. In addition, the specific purpose of CAR is to overcome real problems to improve or improve the quality of learning processes and outcomes (Hamid, 2015:17).

Classroom Action Research (CAR) can be concluded as research conducted by teachers, lecturers, and researchers to fix problems that occur in the classroom during the learning process through the application of a method, strategy, or technique in teaching.

In this study, the CAR method was chosen because it fits the background or problems that occur. Researchers wanted to apply a technique, namely small group discussion to support students' speaking learning activities because students are considered lacking in speaking aspects.

The CAR model used in this study was the Kemmis and McTaggart (1998) model. Kemmis and Mc Taggart's CAR model is essential in the form of tools or strands with one set consisting of four stages: planning, action, observe, and reflect.

a. Plan

Planning is the earliest stage carried out before research. At this stage, the researcher explains what, why, when, where, by whom, and how the action will be taken. At this stage, the researcher make a lesson plan following the syllabus related to the material that wanted to be taught,

namely congratulating others. Then, the researcher prepared a test of speaking skills by using a speaking scoring rubric. Furthermore, the researcher also prepared instruments of observation such as an observation checklist, field note and reflection sheets. The collaboration that applied was between researcher and english teacher. Collaboration was done to avoid subjective research.

b. Action

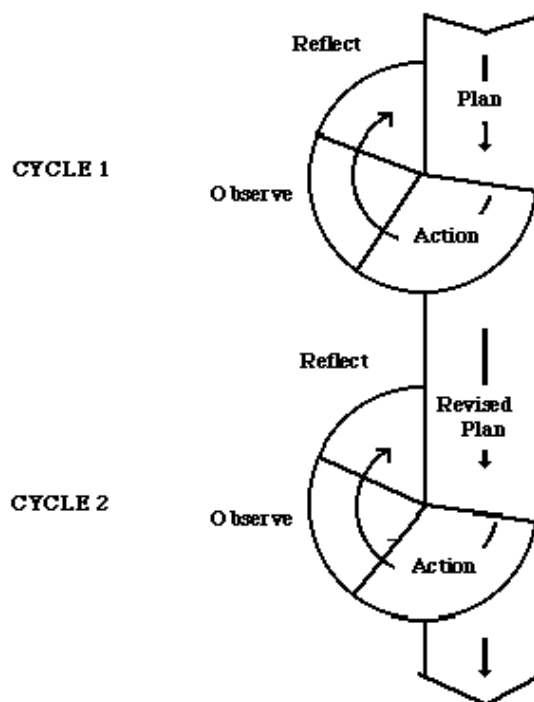
This stage is the stage of implementing small group discussion technique to improve students' speaking skill in the classroom by the teacher or collaborator based on the lesson plan that already made.

c. Observe

At this stage, the implementing of teacher using small group discussion technique was observed by collaborator based on what happened in the class to obtain accurate data for the improvement of the next cycle. At this stage, researcher evaluated the learning process by using observation checklist and field note.

d. Reflect

Reflection is the stage of expressing or rephrasing what has been done. In this stage, the teacher tried to find things that were already satisfying because they were following the design and carefully identifying things that still need to be improved. If there are several cycles, in the end of first cycle reflection need to written the plan for next cycle.



Picture 3.1 *The Classroom Action Research (CAR) Model Developed by Kemmis and Mc Taggart (1998).*

B. Subject of Research

The subject of this research was tenth grade students of SMKN 1 Rasau Jaya majoring in TKJ in the first semester by the academic year of 2022/2023. TKJ (Computer and Network Engineering) is one of the majors in SMKN 1 Rasau Jaya. In this major, students taught from the basic level about assembly, computer repair, peripheral repair, web design, networking, to network security.

This class was chosen because based on pre-observation and the teacher's statement, students' speaking ability was considered less than in other classes. In addition, this class also had the largest number of students, and students were considered passive in speaking English. While in the learning process TKJ major is closely related to English, therefore this class needed to be taken an action by using new learning techniques namely small group discussion.

C. Time and Place of Research

This research was conducted at SMK Negeri 01 Rasau Jaya, Kubu Raya regency. This school is located in Rasau Jaya 1 village, Rasau Jaya district. SMK Negeri 01 Rasau Jaya has 5 majors, namely Motorcycle Engineering and Business (TBSM), Computer and Network Engineering (TKJ), Food Crops and Horticulture Agribusiness (ATPH), Poultry Livestock Agribusiness (ATU), and Agricultural Product Processing Agribusiness (APHP). Each department has one classroom and a vocational practice lab. At grade X level, this school has 2 English teachers.

This research was conducted for two weeks from January 30th 2023 to February 10th 2023. Covering the planning stage to data collection.

D. Techniques and Tools of Data Collection

1. Technique of Data Collection

Technique of data collection is a method to collect research material. Techniques of data collecting is one of the most important parts in research. According to Sugiyono (2013: 224), "Techniques of collecting data are the most strategic step in research because the main purpose of research is to collect data". This means that data collection techniques are one of the most influential aspects of research obtaining data. In this study, the data to be collected were qualitative by using observation and quantitative by using measurement. Qualitative was data from observations of students' behavior during implementing of small group discussion technique in the classroom. In addition, quantitative was the results of the data on student speaking scores in each cycle after the application of the small group discussion technique.

a. Qualitative Data

1) Observation

Observation helped to observe the process of action in class for the researcher. According to Narbuko (2010:70), observation is the tool for collecting data by systematically observing and

recording the phenomenon under the study. Furthermore, Mu'alimin (2014:31) states that observation is an observation activity when carrying out CAR activities. Observations can be done by the teacher himself or by other teachers. Based on this theory, observation was one of the techniques used to observe actions or phenomena that occur. Observation techniques were emphasized in the learning process and action. So, the observations in this study were used to observe the students' behavior and ongoing process of applying the small group discussion technique during learning speaking.

b. Quantitative Data

1) Measurement

Measurement helped researcher in calculating student scores in each cycle. Because the value in the speaking ability aspect was in the form of numbers, then measurement was a suitable technique. According to Burns (2010: 121), measurement is a single value given to a set of quantitative data. The numbers show where the set of data is collected around a central point. Then, Stevens in Ary et al. (2010:101) stated that measurement is assignment to objects or events according to rules in numerals. It can say that measurement gives a number to that property and is always made using an instrument of some kind.

In this study, measurement was used to measure students' speaking ability after using the small group discussion technique.

2. Tools of Data Collection

a. Qualitative Data

Tools the researcher used for qualitative data:

1) Observation Checklist

An observation checklist is a questioning technique that helped observer of a person's behavior and assesses performance. According to Sanjaya (2013:274), a checklist is a guideline in observation that

contains the aspects that are observed, the observer gives a checkmark to indicate whether or not something is present based on the observations. Observation checklists helped the observer identify skills gaps and problem areas to improve instructional strategies, instructional environments, and student learning development. In this study, observation checklists in a yes/no format were used to monitor student performance against specific criteria. In the end, the researcher described the result of this observation checklist to create a conclusion.

2) Field Note

Field notes are one of the data collection tools used in this study. Field notes helped researcher to make it easier to make short research notes based on the real condition when applying the small group discussion techniques. According to Bogdan and Biklen (2007:119), field notes are written records of what is heard, seen, experienced and thought as part of data collection in qualitative research. Field notes contain notes about activities that are not listed in the observation sheet. In this study the field notes contained the day and date, the number of student attendance, the indicators developed at each meeting, the stages of small group discussion techniques at each meeting, the focus of the material at each meeting, the exercises given at each meeting and brief notes related to the activities carried out that happened at every meeting.

b. Quantitative Data

Tools the researcher used for quantitative data:

1) Test

Test helped the researcher measured students' ability to speak English. At this stage, the test that used was the achievement test. According to Sandu (2015:79), an achievement test is used to find out a person's achievement after he has learned something. Researcher conducted the test to determined student speaking skill

after applying the small group discussion technique. Furthermore, Sandu (2015:76) states that specifically for learning achievement tests commonly used in schools are teacher-made tests and standardized tests made by special national and international teams. From this statement, the researcher used speaking test based on the applicable material that take from RPP, Syllabus and curriculum standards, namely K13.

E. Techniques of Data Analysis

1. Analysis Data of Qualitative

The researcher used the interactive model to analyze the qualitative data that suggest by Miles and Huberman. Miles and Huberman (1994:10) described that there are three steps for qualitative data analysis including: data reduction, data display, and conclusion drawing/verification.

a. Reduction Data

Reduction data refers to the process of selecting, summarizing, selecting basic things, focusing on the important things, and discarding the unimportant. Thus, reduced data provide a clearer picture and facilitate the researcher to conduct further data collection and look for it when needed.

b. Display Data

Display data is an organized and compressed assembly of information. Display the data, it can make it easier to understand what is happening to every detail chronology.

c. Conclusion Drawing and Verification

In this step, the researcher made conclusions and verified. While collecting, organizing, and thinking about the result before deciding what the data mean and making the conclusion of the result of the data

2. Analysis Data of Quantitative

a. Test

Test used to measure students' speaking skills using a score. Sandu (2015:76) states that specifically for learning achievement tests commonly used in schools are teacher-made tests and standardized tests made by special teams nationally and internationally. Based on this statement, the researcher used the speaking assessment rubric following the applicable standards, namely the 2013 curriculum.

1) Students' Individual Score

Brown (2001) mentioned they are categories for testing speaking proficiency, they are; Grammar, Vocabulary, Comprehension, Fluency, and Pronunciation. Therefore, the researcher analyzed the students' individual scores according to the speaking test based on the scoring speaking rubric below:

Table 3.1 Speaking Scoring Rubric

No.	Categories	Score	Aspects
1.	Grammar	1	Speaker can be understood, but mostly errors in grammar
		2	Usually able to manage an elementary- constructions pretty accurate, but does not have confident control of the grammar.
		3	Control of grammar is good. Can speak with acceptable structural accuracy to participate effectively mostly formal and informal conversations on practice, social, and professional themes.
		4	Can accurately use the language on all normal levels related to professional needs. And rare of error in grammar.
		5	Comparable of an educated native speaker.

2.	Vocabulary	1	Speaking vocabulary is inadequate to convey anything
		2	Has speaking vocabulary is acceptable to express himself simply with some words than are necessary or circumlocution
		3	Can speak with suitable vocabulary to participate in formal and informal conversations on practice, social, and professional topics. Their vocabulary is wide enough that rarely words groping.
		4	Can understand and following in any conversation based on their experience range with a high degree of precision in vocabulary
		5	Speech on full accepted in any levels by educated native speakers in all its aspects including breadth of vocabulary, idioms, and pertinent cultural references.
3.	Comprehension	1	The scope of students is quite limited language experience. They can understand simple questions and statements if slowed delivered in speech, repetition, or paraphrasing
		2	Mostly can get the point of conversations on the nontechnical subject
		3	Comprehension is in a normal rate of speech
		4	Able to get any conversation within the range of speaker experience
		5	Comparable to an educated native speaker.
4.	Fluency	1	Fluency can't specifically describe.
		2	Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events, as

			well as work, family, and autobiographical information
		3	Certain competence is easily discussed and rarely has to grope for words.
		4	Can use the language fluently on normal levels related to professional needs. Can up to any conversation within the range of this experience with a quite high degree of fluency.
		5	Has complete fluency in speaking comparable like educated native speakers.
5.	Pronunciation	1	Mostly have errors in pronunciation but can be understood.
		2	The accent is understandable but often have mistakes
		3	Errors is rarely interfered and rarely disturb that native speaker. An accent kind of sounds like foreign.
		4	Pronunciation of error are quite rare
		5	Comparable and fully accepted by educated native speakers.
Total Score:			

Taken from Brown (2001: 406-407)

2) Students' Mean Score

After the researcher scored the students' individual scores, the researcher calculated to find average score of students by using the following formula:

$$M = \frac{\sum x}{N}$$

Where :

M : the score of students' mean

$\sum x$: the score of students' sum

N : the total of students

Taken from Singh (2006:286)

Students' scores classified by using range interval score below:

Table 3.2 Students' Range Score

No.	Interval Score	Level
1	80 – 100	Very Good
2	61 – 80	Good
3	41 – 60	Average
4	21 – 40	Fair
5	0 - 20	Poor

Adapted from Antoni (2014: 59)

F. Technique for Validating Data

According to Sugiyono (2012:455), validity is the degree of accuracy between what happened in the study subjects and what the researcher can reported. In this study, the data validation technique that used was Triangulation. According to Hamid (2015: 92), one way to increase the validity of the CAR is to minimize subjectivity through triangulation. In CAR, researcher can use a collaborative perspective to obtain a more objective picture.

According to Wijaya (2018: 120), triangulation is a technique of examining data from different or various sources in various ways and at various times. In this study, researcher used several research instruments such as an observation checklist and reflection sheets which will be determined by agreement between researchers and collaborator, namely the school teacher.

G. CAR Procedures in Implementing Small Group Discussion Technique

The procedures in implementing the small group discussion technique to improve students speaking skill was summarized in table. The following paragraphs describe what the researcher did in every stages.

Table 3.3 CAR Procedures

	Activities	Tools		Products
1	CYCLE 1			
	Plan	-		Lesson plans, instruments, etc
	Action & observe	Action	Observe	
	Meeting 1	Lesson Plan, Materials, etc	Observation sheets, Field Note	Data in forms of: Observation sheet 1 Field Note 1
	Meeting 2	Lesson Plan, Materials, etc	Observation sheets, Field Note	Data in forms of: Observation sheet 2 Field Note 2
	Measurement Test 1	Speaking test		Data in forms of: Students scores 1
	Reflect	Reflection sheet		Supporting data 1
	Planning for the next cycle	-		-
2	CYCLE 2			
	Plan	-		Lesson plans, instruments, etc
	Action & observe	Action	Observe	
	Meeting 3	Lesson Plan, Materials, etc	Observation sheets, Field Note	Data in forms of: Observation sheet 3 Field Note 3
	Meeting 4	Lesson Plan, Materials, etc	Observation sheets, Field Note	Data in forms of: Observation sheet 4 Field Note 4
	Measurement Test 2	Speaking Test		Data in forms of: Students scores 2
	Reflect	Reflection sheet		Supporting data 2

1. Cycle 1

a. Plan

In this phase the researcher and collaborator prepared a plan for the first cycle. The researcher made a lesson plan following the syllabus related to the material to be taught, namely congratulating others. Then, the

researcher prepared a test of speaking skills by using a speaking scoring rubric. Furthermore, the researcher also prepared instruments of observation such as an observation checklist, field note and reflection sheets. The collaboration that applied were between researcher and English teacher. Collaboration was done to avoid subjective research.

b. Action and Observe

In this phase the researcher acted as the teacher in the class implemented or taught the students using small group discussion technique. The teacher as an observer observed teaching activities used an observation sheet and field note to saw the classroom activities and students' behavior during learning progress.

1) Meeting 1

Date	: Monday, 30 th January of 2023
Duration	: 2 x 45 minutes
Teaching Materials	: Congratulating Others (Lesson Plan in Appendix)
Main Activities	: Learned about definition of congratulating others, expression of congratulations and how to responses.
Teacher	: The Researcher
Observer	: The English Teacher
Data Collected	: Observation sheet 1 (Appendix) Field Note 1 (Appendix)

2) Meeting 2

Date	: Wednesday, 1 th February of 2023
Duration	: 2 x 45 minutes
Teaching Materials	: Congratulating Others (Lesson Plan in Appendix)
Main Activities	: Created the dialogue related to the expression of congratulating others and responses and practice of speaking in each of group.
Teacher	: The Researcher

Observer : The English Teacher
 Data Collected : Observation sheet 2 (Appendix)
 Field Note 2 (Appendix)

3) Measurement Test

Date : Friday, 3th February of 2023
 Duration : 2 x 45 minutes
 Test Material : Congratulating Others
 Data Collected : Speaking Test 1

c. Reflect

Based on the results of observations in the first cycle, researcher and collaborator evaluated using a reflection sheet. From the results of first cycle reflection sheet, students have experienced enough improvement. However, there are still some notes that need to be corrected and improved. As in the application of the small group discussion technique, students seem active but there are still some students in the group who are still passive. At the opening of the class, students also looked tense but still managed well. Besides that, the class atmosphere of the students was got a little out of track but still well controlled. However, in the middle of the discussion, the students seemed to lose focus and the class started to be noisy. Meanwhile, for reflection on the results of students' speaking scores, there is an improvement in all aspects compared to the pre-test score. It's just that some aspects of speaking are still in the average level category so these still need to be improved.

Based on the observational notes, the teacher and researcher looked for solutions to correct deficiencies in the first cycle. Such as, by providing brainstorming and games at the beginning and in the middle of learning in the next cycle to make students relax, focus, and get excited again. And give lots of praise to students who dare to be active or answer questions from the teacher so that passive students become enthusiastic in interacting. The teacher also add vocabulary exercises to train students' pronunciation to develop speaking skills.

2. Cycle 2

a. Plan

After getting the reflection results from the first cycle, the researcher and collaborator continued to the stage in the second cycle, namely plan. In this stage, researcher and teacher reprepare lesson plan (RPP) equipped with Small Group Discussion Technique procedures for core learning activities, prepare teaching materials in the form of print outs related to "congratulating others", prepare vocabulary games for brainstorming at the beginning of learning, prepare speaking assessment sheets, preparing research instruments for second cycle such as observation checklists and reflection sheets.

b. Action and Observe

In this phase the researcher acted as the teacher in the class implemented or taught the students using small group discussion technique. The teacher as an observer observed teaching activities used an observation checklist and field note to saw the classroom activities and students' behavior during learning progress

1) Meeting 3

Date : Monday, 6th February of 2023

Duration : 2 x 45 minutes

Teaching Materials : Congratulating Others
(Lesson Plan in Appendix)

Main Activities : Teacher gave students a vocabulary builder towards dialogue related to congratulating other and learned how to pronounced the words. And learned to identify the congratulating others expression and the responses in the dialogue.

Teacher : The Researcher

Observer : The English Teacher

Data Collected : Observation sheet 3 (Appendix)
Field Note 3 (Appendix)

2) Meeting 4

Date	: Wednesday, 8 th February of 2023
Duration	: 2 x 45 minutes
Teaching Materials	: Congratulating Others (Lesson Plan in Appendix)
Main Activities	: Created the dialogue related to the expression of congratulating others and responses and practice of speaking in each of group.
Teacher	: The Researcher
Observer	: The English Teacher
Data Collected	: Observation sheet 4 (Appendix) Field Note 4 (Appendix)

3) Measurement Test

Date	: Friday, 10 th February of 2023
Duration	: 2 x 45 minutes
Test Material	: Congratulating Others
Data Collected	: Speaking Test 2

c. Reflect

From the results of the second cycle's observations, researcher and teacher conducted evaluations based on the reflection sheets.

The results of reflection after the implementation of the small group discussion technique have been well applied. In second cycle students seem to enjoy more when learning to use this technique.

In addition, the evaluation results of the classroom atmosphere when the small group discussion technique was implemented were observed to be quite under control. Students looked neat and focused on sitting in their respective groups. Different from the previous cycle that students seemed to lose focus in the middle of learning and the class became crowded. In the second cycle, some students who were passive in the beginning became active and remained enthusiastic even in the middle of the discussion because the brainstorm in the form of a vocabulary game

was given by the teacher until the end of the lesson. Besides that, the teacher also give praise as a form of appreciation for students when they are actively interacting. There was a good interaction between teacher and students. In the time of speaking in front of the class to presented the dialogue, students also look more confidence.

Furthermore, from the results of the evaluation of the students' speaking scores there was also an improvement in all aspects. Such as, vocabulary and fluency with an average level categories improved to be a good level category in cycle 2. Besides, some students with the average level in cycle 1 were improved to be a good level category in cycle 2.

The researcher concluded that after the second cycle was carried out, the results of the reflection showed that the quality of students' speaking skill and students' behavior had improved. So, the next cycle would not be carried out.