

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher presents the research design, research subjects, data collection techniques and instrumentation, and data analysis used in the research. Then, the explanation of this chapter can be seen as follows.

A. Research Design

Research design is known as the main step in the arrangement of the research methodology in which it talks about the type of research that is going to be used by the researcher in order to carry out the upcoming research. In general, the research design can be defined as a guide in order to conduct the research in which consists of several steps and a model of the research that basically involves an action of the researcher to apply it in the field in order to obtain the research data.

So based on the problems the researcher found at school, the researcher wanted to identify teaching about improving students' speaking skills in English by using a guessing game and student participation in learning after using the guessing game, so the researcher used classroom action research (CAR). Which is Class Action Research is a research method that aims to improve and modify the work system of a class in a school or institution to improve students' skills.

According to Burns (2010, p. 2) classroom action research is related to the ideas of reflective practice and the teacher as researcher based on this explanation For simply, it means that the action research is known as a

method in which it can be used as an approach in the teaching and learning activity which it also involves the participation of the teacher and student or even between the researcher and the researched.

Meanwhile, according to Stringer (2014, p. 33) Classroom action research is a collaborative approach to inquiry or investigation that provides people with the means to take systematic action to resolve specific problems. From this explanation collaborative approach it is mean like, a combination of two methods like is mix method, so collaborative approach or mixed methods research is an approach to inquiry involving collecting both quantitative and qualitative data, in integrating the two forms of data, using distinct designs that may involve philosophical assumptions and theoretical frameworks.

Based on the above explanation, researcher had found that Classroom Action Research (CAR) is a type of research that examines the role of teacher and student in specific classroom activity with the aim of influencing the process of education and learning. The researcher was concluded that this research design is also known as a method that both teacher and researcher can use to solve problem related to teaching and learning activity, and also to improve the student understanding. It is suitable ability in their learning process.

Then based on Burn (2010, p.7) stated that classroom action research typically involves four broad phases in a cycle of research. The first cycle may become a continuing, or iterative, spiral of cycles which recur until the

action researcher has achieved a satisfactory outcome and feels it is time to stop. Adapted from Kemmis and McTaggart (1988) For simply, it means that the implementation of a research generally is involving of several steps in which each step has to give a continuous influence in order to make the implementation can be done in smooth and directed. This is model of action research has often been illustrated through the diagram in to show it iterative or recursive nature.

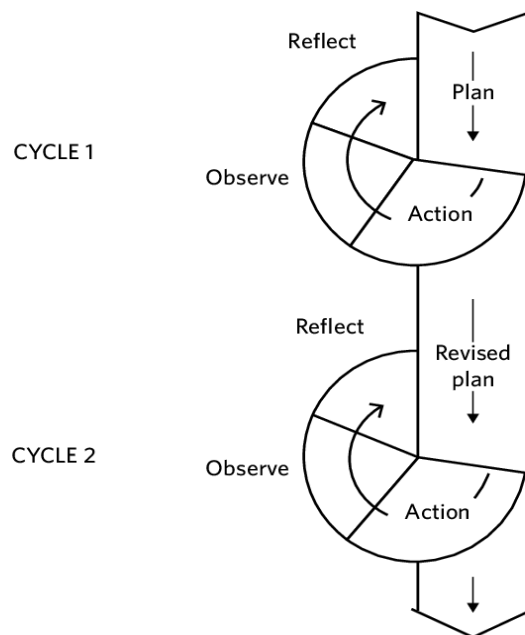


Figure 3.1 Cyclical AR model based on Kemmis and McTaggart (1988).

In conducting the classroom action research, the researcher used Kemmis and Mc Taggart as cited in Burn (2010, p. 9) in which each cycle consists of four steps. They are plan of action, implanting of action, observing and evaluation analysis and also reflection. The main steps were preceded by reconnaissance (preliminary study), analysis and identification of problem.

Classroom action research is done by teacher in their classroom. As English teacher, they have to solve their classroom problems or improve the quality of their classroom practices to result in better English achievement of their students. As researcher, they have to produce an innovative classroom strategy that contributes to the improvement of English teaching-learning practices in schools of the same level.

Then according that the figure above displays that the implementation of Classroom Action Research (CAR) is divided into 4 steps in 2 cycles in which it includes of plan of action, implanting of action, observing and evaluation analysis and also reflection. Next, the explanation of each step can be seen as below:

1. Planning

Planning is known as the first step in conducting the classroom action research in which it provides an explanation about the researcher's plan and preparation before the researcher is taking an action in the field. Referring to the researcher's plan for the upcoming research, firstly, the researcher is going to prepare several stuffs in which it includes of media, instrumentation, lesson plan, and others which all of these things are going to be used in order to support the continuity of the research activity in the field. In addition, the researcher is also going to collaborate with the teacher in order to carry out the next step.

2. Action

Action is an activity carried out by someone either directly or indirectly to get the result. The plan is a carefully considered one which involves some deliberate interventions into your teaching situation that you put into action over an agreed period of time Kemmis and Mc Taggart in Burn (2010, p. 9) so based on that statement, the action is the implementation of planning which had been prepared by the researcher.

Action is known as the second steps in classroom action research in which it emphasizes on the action of the researcher in conducting the research during the lesson in the classroom. The action that is taken by the researcher usually is related with the process to apply the technique and give a task or test to the students in which this process is also going to be observed directly by the teacher. Afterwards in the upcoming research, the researcher and collaborator are going to divide the duty during the lesson in which the researcher is going to focus in delivering the material and teaching the students, while the collaborator is going to watch and observe the situation. Then during its implementation, the researcher is also going to apply the context clue in the lesson and give the students some tasks that relate to the use of context clue in speaking especially about thing of around us.

3. Observation

Observation is known as the third steps which it involves an action of individual to observe the situation during the action of research activity in

the classroom. Furthermore, this step also requires an individual to make a note and give a mark toward the field note and observation checklist which it has made and prepared by the researcher in order to make it as additional information and data for the research report.

In regard to the explanation in this step, the researcher is going to collaborate with the teacher in order to get the suitable data that fits with the situation during the research implementation. In this step, the role between the researcher and collaborator are going to divide in which the researcher is going to focus in teaching and delivering the material, while the collaborator becomes an observer during the lesson. On the process of implementation, the collaborator has a duty to observe the situation in the classroom which it includes of the atmosphere and the activeness of the students. Then, the collaborator also has to fill the field note and observation checklist in order to describe and determine the deficiency from the action of the researcher or even the researched during the lesson. Afterwards, the data that is gained later it can be used in order to determine the result in the next step.

4. Reflection

Reflection is known as the last step in classroom action research in which it involves an action of the researcher and collaborator to review, compare, and determine the result that has obtained during the implementation in the previous cycle. In addition, after the researcher and collaborator have made a reflection and find a deficiency that is existed,

the implementation for the next cycle can be prepared in order to cover the deficiency that is found. Referring to this explanation, the researcher is going to collaborate again with the collaborator in order to review and determine the deficiency in the first cycle also to consider the next action that is going to do in the second cycles.

B. The subject of the study

The subject of this study is involving of thirty-five students from seventh grade in SMPN 3 Sungai tebelian and it consists of sixteen female also nineteen male students. The researcher only takes the students from seventh grade as the subject in order to conduct the research and obtain the data because their comprehension toward English lesson especially in speaking skill are lacked and they have a hard time to overcome it. Therefore, the researcher intends to help and solve it by applying the context clue during the process of teaching and learning activity later by used guessing game about thing of around us based on context from the picture. So that students can more easily speak English and more actively participate in the teaching and learning process.

C. Data Collection Technique and Instrumentation

a. Data collection technique

In general, data collection technique is known as a series of techniques or way which it commonly uses by the researcher in the research activity in order to dig and obtain any information about the research data in the field. Then, the data collection technique usually

consists in various forms such as interview, observation, measurement, questionnaire, and others in which the implementation of each technique is also different between one another.

In the upcoming research, the researcher is going to use three techniques of data collection in order to get the research data in the field in which it includes of the observation, interview, and measurement. Next, the researcher uses the observation and interview in order to gain the qualitative data, while the measurement is used to obtain the quantitative data that can be used to support the result of this research.

1. Observation

In this study, researcher conducted observations to improved students' speaking skill and to improve student participation in learning English lesson by used guessing game about thing of around us based on context clue from the picture. So that, there are several things that must be considered in conducting observations, namely as follows: focused, objective, reflective, documented, evaluated and re-evaluated Burns (2010, p. 57).

In reference to this statement, the observation can be defined as a technique in data collection that is arranged in a planned way so that it is suitable to use in the research activity that generally has a scientific nature or requires additional accurate information for the research data. Besides, the process of implementation toward the use of this technique is involving an action of the researcher to observe the

activity and atmosphere in the field while the researcher is taking a note or giving a mark to the observation checklist that has prepared.

2. Interview

An interview protocol serves the purpose of reminding you of the questions and it provides a means for recording notes Creswell (2012, p.225). To get valid data, in this study the researcher will use interview techniques. Interview activity occurs when the author asks a general open-ended question to one or more participants and records their responses. Interviewing also has two functions. The first function is the primary strategy for data collection such as interview transcript data and the second function is a supplementary strategy for other techniques such as participatory observation, document analysis and take a photo.

3. Measurement

A measuring system exists to provide information about the physical value of some variable being measured. The term measuring instrument is commonly used to describe a measurement system, whether it contains only one or many elements, and this term will be widely used throughout this text Morris (2001, p.8). Thus, the measurement is used to assess the student's ability and the results achieved in learning activities by organizing the test. So that researcher can determine the correct results and conclusions based on data obtained in the field when the research occurred.

4. Documentation

The documentation is a kind of data that consist of notes, book transcript, photo, videos, summary, agenda, and soon. Documents include public and private documents that reach a site or a research participant, and these may include diaries, meeting minutes, personal diaries, and correspondence. This method can know the status of students and teachers, records and location of the school. In this study, the author used photos and videos to document Creswell (2012, P. 223).

b. Instrumentation of Data Collection

Instrumentation in data collection can be defined as a tool, medium or even equipment which it is prepared and used by the researcher in order to conduct the technique of data collection in the field during the research activity. The instrumentation in data collection commonly is split into some forms in which it is based on the use of each technique. In order to conduct the upcoming research, the researcher is going to select some instrumentation in order to use it to obtain the data during the research activity in which it consists of observation checklist, field note, interview guideline, and test.

1. Observation checklist

Observation is used in so-called systematic or structured observation. This observation involves the use of a coding system or a checklist prepared before the start of the lesson. In this observation, the observer records what he observes as a type of event, such as behavior

or interaction pattern. Observational checklists are used to collect data that can be processed quantitatively and summarized in numerical form. Observation sheet is a table used to observe and measure success or achievement of learning goals in classroom teaching and learning activities Burns (2010, p. 62).

Pertaining to this statement, the observation checklist is kind of an instrumentation that consists of some steps in which it takes a form of a brief statement that emphasizes on the action of the researcher or even the researched. Then, if the action that is done is similar with the instruction which it is attached, so that the observer can give a mark to the statement that relates to it. Besides, this instrumentation also displays a qualitative data as the result of the observation activity.

2. Field Notes

Field notes are decisions made during the research process which in the end will have a major impact on the final research report. The researcher wrote the effect of the action in the field notes about the processes that occurred during the teaching and learning activities. Collaborators collect all information about what happened during the teaching and learning process, collaborators will write comments, suggestions and some obstacles or problems faced by students and teachers in class. The collaborator will also write down the strengths and weaknesses of the researcher when teaching students, and the

results obtained will be compared by the researcher to determine the results of the research.

3. Interview Guideline

Interviewing is an exhaustive information-gathering activity undertaken by interviewers and service providers as part of an interview activity based on a targeted interview process. Interviewing is a question-and-answer activity involved in the interviewing process itself, including information on the general mechanism and relevant concepts. Interviewing is the practice of studying experiences, phenomena, and theories, and then presenting information to construct real and intellectual concepts in a human environment with transcription and transcriptional research.

Interview guideline is kind of an instrumentation which it uses in the interview activity and it includes of several questions that has organized for the interviewee. The use of interview guideline in the research activity basically has a specific purpose in which it is used to obtain the information about the interviewee's experience and opinion after they are following the whole activity and it is used as additional data for qualitative explanation.

4. Test

Test is known as an instrumentation in data collection in which it displays a quantitative data that is commonly obtained from the measurement activity. In general, the test is forming from several

questions both in multiple choices or even essay in which it needs an appropriate answer. A test is a tool used to measure the quality, ability, skill, or knowledge of a sample against a particular standard, which can often be considered acceptable or not. In the practice of the educational world, tests are methods used to determine a student's ability to perform certain tasks or to demonstrate mastery of skills or knowledge contemporary.

The test can be defined as an instrumentation, tool or even medium in which it is used in order to check and measure an individual aspect both in the form of comprehension, insight, knowledge or even ability toward a certain thing and it produces the result in the form of evaluation. Furthermore, in the process of conducting future research, the researcher will use a speaking test to check students' understanding of speaking in particular to describe something through descriptive text with guessing game media where this test will be measured using the rubric of speaking. In addition, the rubric can be seen as follows:

Components of speaking	Scores	Indicators
Grammar	1	Errors in grammar are frequent, but speaker can be understood by a native speaker used to dealing with foreigner
	2	Can usually handle elementary constructions quite accurately but does not have through or confident control of the grammar.
	3	Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively in most formal and informal conversations on practical, social and professional topics

	4	Able to use the language accurately on all levels normally pertinent to professional needs. Errors in grammar are quite rare.
	5	Equivalent to that of an educated native speaker.
Vocabulary	1	Speaking vocabulary inadequate to express anything but the most elementary needs.
	2	Has speaking vocabulary sufficient to express him-self simply with some circumlocutions.
	3	Able to speak the language with sufficient vocabulary to participate effectively in most formal and informal conversations on practical, social and professional topics. Vocabulary is broad enough that he rarely has to grope for a word.
	4	Can understand and participate in any conversation within the range of his experience with a high degree of precision of vocabulary.
	5	Speech on all levels is fully accepted by educated native speakers in all its features including breadth of vocabulary and idioms, colloquialism and pertinent cultural references
Comprehension	1	Within the scope of his very limited language experience, can understand simple questions and statements if delivered with slowed speech, repetition or paraphrase.
	2	Can get the gist of most conversation of nontechnical subjects. (i.e., topics that require no specialized knowledge)
	3	Comprehension is quite complete at a normal rate of speech.
	4	Can understand any conversation within the range of his experience.
	5	Equivalent to that of an educated native speaker.
Fluency	1	(no specific fluency description. Refer to other four language areas for implied level of fluency.)
	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 autobiographic al information.
	3	Can discuss particular interests of competence with reasonable ease. Rarely has to grope for words.
	4	Able to use the language fluently on all levels normally pertinent to professional needs. Can participate in any conversation within the range of this experience with high degree of fluency.
	5	Has complete fluency in the language such that his speech is fully accepted by educated native speakers.

Pronunciation	1	Errors in pronunciation are frequent but can be understood by a native speaker used to dealing with foreigners attempting to speak his language.
	2	Accent is intelligible though often quite faulty.
	3	Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously foreign.
	4	Errors in pronunciation are quite rare.
	5	Equivalent to and fully accepted by educated native speakers.

Adapted to Brown (2003, pp. 172-173)

Table 3.1 Speaking Rubric

Appertaining to the table 3.1., the aspect that contains above is including of pronunciation, grammar, vocabulary, fluency and comprehension in which all of these aspects can be used by the researcher in order to determine and assess the students' understanding toward in practice speaking English.

Furthermore in order to determine the success rate of the implementation of research activity in the field, the researcher is going to use the achievement indicator. Afterwards, it can be seen as below:

Instrument	Description
Speaking test	65% of students are achieving the minimum passing score and the test result is reaching at least in the good level.
1. Observation checklist 2. Field note 3. Interview guideline	At least 70% of students are active in participating and giving a good response during the process of teaching speaking in the classroom by using guessing game with context clue.

Table 3.2. Achievement Indicator

5. Photos and Videos

The documentation is a kind of data that consist of notes, book transcript, photo, videos, summary, agenda, and soon. In this study, the researcher used photos and videos to document. The photo meant there was a series of activities carried out by researcher and students during the learning and teaching process. Whereas the video is concrete evidence of the results of students' practice in improving their English speaking skills using the media of guessing games based on the material being studied, which is about the things of around us.

D. Data Analysis

This Classroom Action Research (CAR) uses qualitative and quantitative data. In this study, the data collection techniques used was qualitative and quantitative data. Qualitative data were collected from observations, interviews, and documentation. In collecting quantitative data, the researcher used speaking test to get student scores in teaching descriptive text. After the data is collected, the next step is to analyze the data to be analyzed using qualitative and quantitative methods.

a. Qualitative data

The qualitative data can be defined as kind of data that has an explicit and non – numeric nature in which it provide an information in the form of description. Then, the qualitative data in the upcoming research is going to obtain from the observation checklist, field note, and interview guideline.

1. Observation Checklist

The process to collect the data by using this instrument is done during the research implementation in the classroom in which it involves the role of collaborator as the observer. This instrument takes the scale of score from one to five and it involves the activity of the collaborator to check, match, and give a mark to the checklist paper that has provided. Then, the whole scores are going to calculate by using a certain formula in order to find out the result.

2. Field Note

Field note is known as one of the instrumentations that uses in the observation activity in which it is used in order to record the students' activeness also the classroom atmosphere during the research implementation and it can be filled both by the researcher or even the collaborator. Besides, the result of this instrument is also used as additional information in order to emphasize the data result from the observation checklist.

3. Interview Guideline

Interview guideline is an instrumentation that is used in the interview activity in which it consists of several questions which it is based on the students' problem and progress during the research implementation. The process to collect the data by using this instrument is going to do after the researcher has finished the research implementation in the classroom in which it involves three students as

the representative in order to do the interview. Furthermore, the interview process is going to conduct at least three until five minutes for each interviewee and the result is going to transcript as the supporting data and information for the research report.

b. Quantitative data

Descriptive statistical methods were used to analyze quantitative data. This is done to compare students' speaking skills before and after the action by giving tests to students to determine the level of students' abilities. In this study, quantitative data were obtained from the results of students' speaking tests, from the results of these tests researcher were able to find out the increase in students' speaking which was marked by an increase in student scores. Researcher was analyzed student scores from the test to obtain quantitative data. For example, if student A gets a score of 70, it means that the student's speaking level is classified as good. The students' speaking level was obtained from the assessment rubric which was used as a guide in assessing students' speaking and it is going to calculate by using an average formula. Therefore, the formula can be seen as below:

$$\bar{x} = \frac{\sum x}{n}$$

Interpretation : \bar{x} = mean score
 n = the number of the data
 $\sum x$ = total score

Next step, the researcher identifies the improvement score on students' in speaking about things of around us from pre-test up to post-test score in cycle 1 and cycle 2 the researcher uses the formula interpretation:

P = Percentage of Students' Improvement

F = The number of students who passed the test

N = The total of students who followed the test (35)

$$P = \frac{y1 - y}{y} \times 100 \%$$

Final Score	Category
80– 100	Excellent
70 – 79	Good
65– 69	Average
< 65	poor

Table 3.3 level of score