

CHAPTER III

METHODS OF INVESTIGATION

A. Methods of Research

1. Design of Research

The design of research used by the researcher is classroom action research. According to Harmer, action research is the name given to a series of procedures teachers can engage in, either because they wish to improve aspects of their teaching, or because they wish to evaluate the success and or appropriacy of certain activities and procedures.¹ In Ghony's book, action research is the systematic collection of information that is designed to bring about social change. Action research is a type of a applied research in which the reasearch in actively involved in the cause for which the research is conducted. Both qualitative and quantitative methodes can be used in action research (Robert C. Bogdan & Sari Knopp Biklen, 1982).² Arikunto states that action research is one of the type investigation that has characteristic reflective participative, collaborative, and spiral that have purpose to repair and to increase the system, method,

1 Jeremy Harmer, *The Practice Of English Language Teaching*, (England: Pearson Education Limited, 2012), P. 414.

2 M. Djunaidi Ghony, *Penelitian Tindakan Kelas*, (Malang: UIN Malang Press, 2008). P.7

process, substance, competence, and situation.³ Wiriaatmadja said Classroom action research is method how a group of teacher can organize their teaching learning condition and learn from their own experience. They can try an idea as reparation in their teaching learning process, and look the real effect of those efforts.⁴ Kemmis and Mc. Taggart add in Nunans' book explain that action research is a group of activity and a piece of descriptive research carried out by the teacher in his or her own classroom, without the involvement of others, which is aimed at interesting our understanding rather than changing the phenomenon under the investigation that would not be considered by these commentators to be 'action research', the essential impetus for carrying out action research is to change the system.⁵

From all the definition above, the researcher concluded that classroom action research is a classroom action in a research, which can be done by teacher, researcher, and teacher with his or her colleague, etc. with involving a group of students to improve teaching and learning process or to enhance the understanding of the students to the lesson. This research uses data observation toward

3Suharsimi Arikunto, *Penelitian Tindakan Kelas*, (Jakarta: PT Bumi Aksara, 2008), P. 104.

4Rochiati Wiriaatmadja, *Metode Penelitian Tindakan Kelas*, (Bandung: PT Remaja Rosdakarya, 2012), P. 13.

5David Nunan, *Research Method in Language Learning*, (Cambridge: Cambridge University Press, 1992), p.18.

teaching vocabulary using word jar game; this data was analyzed through some cycles in action.

2. Characteristics of a Classroom Action Research

Kemmis and Mc. Taggart in Nunan's book argue that there are three defining characteristic of action research, they are:

- a. It is carried out by practitioners (for our purposes, classroom teachers) rather than outside researchers,
- b. It is collaborative, and
- c. It is aimed at changing things.⁶

3. Aim of an Action Research

According to Geoffery, action research is any systematic inquiry conducted by teacher researchers, principals, schoolcounselor or other stakeholders in the teaching learning environment, to gather information about the ways that their particular schools operate, how they teach, and how well their students' learn.⁷ This information is gathered with the goal of gaining insight, developing reflective practice, effecting positive changes in the school environment (and on educational practices in general), and improving student outcomes and the lives of those involved.

⁶David Nunan, *Research Method In Language...* , P. 17.

⁷Geoffrey E Mills, *Action Research: A Guide for the Teacher Researcher*, (USA:

Prentice Hall, 2000), p. 6.

From the definition above, the writer concluded that actionresearch is an action in research that can be done by teacher, researcher and teacher with his or her colleague, etc which involves a group of student to improve the quality of teaching and learning process or to enhance the understanding of the understanding of the students to the lesson.

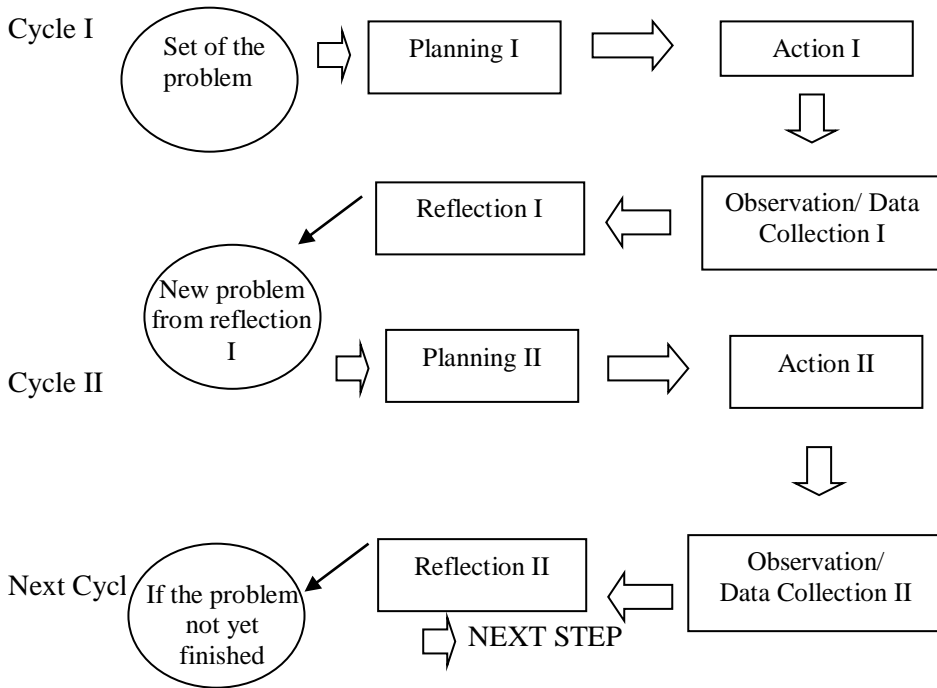
Action research is regularly done to improve a learning process. With this research, the teacher will know his or her weakness in teaching their students. They will know the effective methods in teaching children.

4. Model of Classroom Action Research

There are four components in one cycle for conducting classroom action research. It consists of planning, action, observation, and reflection. The four phases of the classroom action cycle were conducted integrated like spiral. Each phase was concluded based on the previous one and the next. It means that the activities in the classroom action research were based on planning, action, and observation, then, the researcher could make a reflection to determine the next cycle. In this study, the researcher used words jar game to enriching students' vocabulary.

The Steps of Action Research

Taken from: Penelitian Tindakan Kelas, LP3 (UNNES: 2007)



Before conducting the cycle in action, the researcher will do an initial observation at first. Then she does some procedures and steps as follows:

a. Initial observation

In initial observation, the researcher intended to find out:

- 1) Data collected such as documentation includes the number of the students, students' list, and pretest

- 2) The researcher interview an English teacher related to teaching learning process in English subject
- 3) Identify the problem.

Based on the interview with the English teacher, the researcher can identify the problem of teaching learning process at MI Tinjomoyo. The problem of this research is students' lack of motivation in learning activity in which the problem may come from teaching learning process which is not satisfied, lack of students' activity during teaching learning process, and students' understanding in vocabulary.

b. Planning in action

In this research, the researcher plans to conduct three cycles in classroom action research. There are four steps process in each cycle for doing classroom action research.

1) Planning

Planning an action research by focusing on who, what, when, where, and how the action will be done.

2) Action

The planning strategy will be applied in teaching learning process.

3) Observation

An observation is the next step to monitor and watch closely teaching learning process and collects the data from result of action. The researcher prepared the

observation paper to know class condition when the action done, then the researcher and the collaborator (English teacher for fifth graders) discuss about the result of observation, what the problem faced when teaching learning process and look for good solution to solve the problem.

4) Reflection

Reflection means to analyze the result based on the data that have been collected to determine the next action in the next cycle. In this phase, the researcher could observe the activity that results any process, the progress happened, and also about the positives and negatives sides.⁸

B. Time and Setting of the Study

This research was conducted on the second semester in the academic year 2013/2014. The researcher has time schedule for doing the research and she uses the time to do observation and getting familiar with school conditions, doing the research and analyze the result. The explanation of time and setting the research are such as below:

1. Time for research

The researcher did the research start from 20 March until 20 April 2014. This is the schedule time for research:

⁸Suharsimi Arikunto, *Penelitian Tindakan Kelas...*, P. 75-80.

√√Task description	Time schedule						
	13 Mar	20 Mar	27 Mar	03 Apr	10 Apr	17 Apr	20 Apr
Asking permission to the head master to do research and getting familiar with the school situation	√						
Doing pre test		√					
Doing the first cycle (explain the vocabulary on material and applying word jar game in teaching and learning process)			√				
Doing second cycle (give students new vocabulary and applying word jar game in teaching learning process)				√			
Doing third cycle							

(Reviewing the last vocabulary on material and asking students to work the writing test)					√		
Analyzing data						√	
Writing the report							√

2. Setting of the study

The researcher conducted the classroom action research at MI Tinjomoyo on fifth graders academic year 2013/2014. It is located on Jl. Kebunbinatang Kel. Sukorejo Kec. Gunung Pati, Semarang.

C. Participant

In a classroom action research, there are populations that will be investigated. Population simply means the group that you are interested in investigating.⁹ In this study, the population that is used by the researcher is the students at MI Tinjomoyo Semarang. Sometimes it is not possible to investigate the whole population directly, so we have to take a sample. Sample is a part of population that can represent all the population observed. There are 6 classes at MI Tinjomoyo. Total number of the students in MI Tinjomoyo are 74 students.

⁹ Michael J Wallace, *Action Research for Language Teachers*, (USA: Cambridge University Press, 1998), P. 26.

There is one class in fifth grade; a class consists of 11 students. The researcher uses this class as sample in her research. So participant in this study are students on class V at MI Tinjomoyo Semarang in the academic year 2013/2014.

Tabel 1.

Students' Name on Class V at MI Tinjomoyo Semarang in the Academic Year 2013/2014

No	Name	Sex
1	Ainun Khakim	Male
2	Anatias Ragillia	Female
3	Baltazar Rizal Achivu	Male
4	Kurniawan	Male
5	M. Shofiurohman	Male
6	Nadia Puspita Sari	Female
7	Nandiyah Antari	Female
8	Rismi Palelaning Gusti	Male
9	Riyan Wahyudi	Male
10	William Taufik S.	Male
11	Yasin Maulana	Male

D. Collaborator

Collaborator in classroom action research is person who helps the researcher to collect the data. The collaborator in this research is English teacher who teaches English in MI Tinjomoyo for fifth graders, he is Mr. Moh Turkhamun, S.Pd.I.

E. Data

The source of the data in this research is from what the researcher gets during the research. In a qualitative research, source of primary data are the actions and the words, and additional data like the written data, document, picture, or statistical data.

The source of data in this research are from the headmaster who gives further information about school and school curriculum, the teacher who gives some further instructional information, teaching materials, learning assessments, and teaching methods applied in fifth graders of MI Tinjomoyo, and from school documents (the data of teacher and students, lesson schedule, students' exercise book, and so on).

F. Technique of Data Collection

The classroom action research needs the data to support the investigation. There are several ways to collect data like questionnaire, observation, field notes, interview, documentation, test, and etc. In this research, the researcher gathered the data to support above. The

researcher chooses some of which are appropriate to her school environment, and can be done there. The techniques and methods which are used by the researcher to collect the data are documentation, observation, test, and interview.

1. Documentation

It refers to archival data that can help the researcher to collect the data. The researcher uses this method to obtain documents which is related with this research. This method is used to know geographical location, profile, documentation of teaching learning process in English subject, the list of students' name, and other documents at MI Tinjomoyo Semarang.

2. Observation

Observation is the next step to monitor and watch closely teaching learning process and collect the data from result of action. The researcher prepare the observation paper to know class condition when the action done, then the researcher and the collaborator (English teacher for fifth grade) discuss about the result of observation, what the problem faced when teaching learning process and look for good solution to solve the problem. The researcher used the checklist observation to make it more systematic, containing list of students' activities and response or happening which might happen.

3. Test

A test, in simple terms, is a method of measuring a person's ability, knowledge, or performance in a given domain.¹⁰ Test is an important part of every teaching and learning experience. Both testing and teaching are so closely interrelated that it is virtually impossible to work in either field without being constantly concerned with the other. Tests may be constructed primarily as devices to reinforce learning and to motivate the students' performance in the language. Test is an instrument or procedure designed to elicit performance from learners with the purpose of measuring their attainment of specified criteria.

This research uses an achievement test to measure the student's progress in memorizing new vocabulary. The forms of tests are multiple choices and matching test. With those forms, the scoring can be done quickly and easily.

4. Interview

Interview is the technique of data collection by asking question to the respondents and the answer will be noted or recorded. Interview was done to obtain further instructional information about English language teaching learning for fifth graders at MI Tinjomoyo Semarang.

¹⁰H. Douglas Brown, *Language Assessment Principles and Classroom Practices*, Longman. P. 3

In this study, the researcher had interviewed the headmaster and the teacher who teach English in fifth graders.

In interviewing the headmaster, the researcher asked about the aims of teaching English for the students, school curriculum, and when teaching English started. The researcher interviewed the headmaster once time that is on Thursday, 13 March 2014. In interviewing the teacher, the general idea includes the teaching method, teaching material, the students list, and how assessing the students. The researcher interviewed the teacher on the same day, Thursday, 13 March 2014.

G. Instrument of the Study

Research instrument is a device used by researcher while collecting data to make her work becomes easier and to get better result, complete, and systematic in order to make the data easy to be processed.¹¹

An instrument could be in form of questionnaire, observation list, interview, test, etc. in this study, the researcher uses word jar game, observation, document, test, and interview.

1. Observation Check List

In arranging check list observation, the researcher lists some students' observable behavior that indicates their understanding on

¹¹ Suharsimi Arikunto, *Prosedur Penelitian, Suatu Pendekatan Praktek*, (Jakarta: PT. Rineka Cipta, 2002), p. 136.

the new vocabulary taught that teacher can see from their activities and response during teaching learning process. The instrument is attached.

2. Document

Document is every written data.¹² The researcher used this method to obtain documents which are related with this research. They are school file like the data of teacher and students, lesson schedule, students' worksheet, students' textbook, and so on.

3. Tests

In this research, the researcher uses an achievement test to measure the student's progress in memorizing new vocabulary. Related to the achievement test, there were many types of achievement test, such as essay test, completion test, multiple choice test, and so on. The researcher uses multiple choices and matching test. With those forms, the researcher can get score directly the specific skill and learning. The scoring can be done quickly and easily.

This research consists of five assessments test. They are pre-test, three formative tests, and posttest. The reason to give assessment test to the students was to measure the student progress in every cycle during the classroom action research. The researcher give pre-test to the student after the teacher teach vocabulary

¹²Suharsimi Arikunto, *Prosedur Penelitian, Suatu.....* p.135

without word jar game or still use conventional method with 25 questions, it consist of 15 multiple choice and 10 matching test. After that, the researcher begins to conduct action research cycle by using word jar game. They will be presented by three treatments. Every action after giving the treatments, the researcher give assessment, in cycle one that consists of 10 multiple choice questions and 5 matching tests. Cycle two, consist of 5 multiple choice questions and 5 matching tests. Cycle three, consists of 20 matching tests. And the last is posttest with 10 multiple choice questions and 10 matching tests.

4. Interview

In this study, the researcher had interviewed the head master and the teacher who teaches English in fifth graders.

In the interview, the researcher used semi-structural interview. In semi structural interview, the interviewer has general idea of what will do interview and what should come out of interview, but the interviewer does not use a list for predetermined question.¹³

H. Technique of Data Analysis

Technique of data analysis comes from the interpretation of the data collection. In analysis the data, the researcher gets the data from

13 David Nunan, *Research Method In Language....*, P. 149.

document, observing the teaching learning process, and the result of the students' test.

Processing of the data uses descriptive analysis. It is to explain the condition in raising indicator achievement every cycle, and to describe the success of the teaching learning process using word jar game in introducing new vocabularies.

The data from document and observation are described as detail as the researcher gets. Data from observation are grouped based on students' behavior and students' response that can be taken as a clue or indicator for students' understanding when the vocabularies introduced.

In this research, the researcher also uses mean formula to know the average of students' score and to check students' improvement in learning new vocabulary. The formula is as follow:

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

Explanation:

M : the average of students' score

$\sum x$: total score

N : the number of students

First step, the researcher gets score using conventional method from pre-test, then mean of score using conventional method will be compared with mean of score from one cycle. Mean of score from one cycle will be compared with mean of next cycle, and so on until the last cycle. It is to know how far the progress of students in this research.

I. Procedure of the Study

This research uses a classroom action research. The method is to know how the teacher can organize his teaching and learning condition from their own experience. He can try an idea as reparation in their teaching learning process and look the real effect of those efforts.¹⁴

There are four components in one cycle for doing classroom action research. It consists of planning, acting, observing, and reflecting. This classroom action research is arranged into five cycles. They are pre-test, cycle I, cycle 2, cycle 3, and posttest. The researcher will collaborate with the English teacher who teaches in class of first year. The activities that will be done in each cycle is as follows:

1. Pre-test

The researcher observes the class on how teacher introduces new vocabularies directly. The English teacher does not use word jar game yet in teaching learning. The teacher still uses the conventional method. He only translates the words and the students repeat what the teacher said. In this teaching process has passive communication. It means the teacher speaks and the students just listen, the students are not brave enough to ask question if they do not understand yet. The topic is things around us, in the end of lesson, the students do the tests. The tests consist of 25 questions related to the material that are taught by the teacher, it consists of 15 multiple choice and 10

¹⁴ Rochiati Wiriadmadja, *Metode Penelitian Tindakan Kelas...*, p. 13.

matching tests. After the researcher get the data from pre-test and observation, the researcher analyzes the result to determine the method would be used in teaching English vocabulary using word jar game.

2. Cycle 1

The teacher uses word jar game to introduce new vocabularies. The procedure as follow:

a. Planning

- 1) Prepare list of words that appropriate with the material
- 2) Prepare the teaching material
- 3) Make lesson plan
- 4) Prepare checklist observation
- 5) Prepare students attendance list
- 6) Prepare formative test

It purposes is to guide the researcher and collaborator in teaching process.

b. Action

English teacher with the researcher begin the teaching learning process based on lesson plan. They introduced the students about new vocabularies. The procedures of teaching and learning process are as follows:

- 1) The teacher introduces the words that are represented with list of words on the blackboard
- 2) The teacher asked the students to repeat the words.

- 3) The students pronounce the words together for two until three times.
- 4) The teacher gives the students the meaning of the word in Bahasa Indonesia, and the students repeat the meaning of the words.
- 5) Play the word jar game as follows:
 - a) Ask the students to write down one of new words on the blackboard into slips of paper.
 - b) These slips of paper then stuffed into a jar.
 - c) The teacher give an example, takes one of slips of paper from jar, read the word and mention the meaning in Bahasa Indonesia.
 - d) Then the teacher asks one student to come forward and takes one slip of paper from the jar, read the word and mention the meaning in Bahasa Indonesia. And take one more; give it to the next student.
 - e) The next student reads the slip of paper and mention the meaning in Bahasa Indonesia. Then take one slips and give it to the next student, etc.
 - f) If there is student who can't mention the meaning of word in Bahasa Indonesia, ask him/her to find out the meaning in the dictionary.
- 6) The teacher asked the students about their understanding of vocabularies.

7) The teacher gives quiz and reviews all of vocabularies.

8) The teacher gives tests.

c. Observation

The observation on the students in first cycle was to check:

1) The students' activity in learning new vocabulary.

2) The students' response during teaching and learning process.

3) The students' achievement in memorizing new vocabulary.

d. Reflection

1) In the first cycle, the researcher gets the data from the test and observation.

2) Evaluate the activities that have been done.

3) The classroom teacher and the researcher discuss to make a reflection what should they do to repair the problems.

4) Analyze the data to repair the next cycle.

5) Make a temporarily conclusion for classroom action research in cycle 1.

3. Cycle 2

The second cycle is done based on the result of reflection from the first cycle. If the result from observation tell that the quality it is still low, it is needed another action in order to make improvement of the quality for the next cycle. The procedures are as follow:

a. Planning

- 1) Identify the problem and make the solution for the problem,
- 2) Prepare the teaching material,
- 3) Arrange the lesson plan based on the teaching material,
- 4) Prepare word jar game that appropriate with the material,
- 5) Prepare checklist observation,
- 6) Prepare students' attendance list, and
- 7) Prepare formative test.

b. Action

The teacher and researcher do the second cycle which is appropriate with lesson plan as follow up from evaluation of cycle 1. In this cycle, the teacher introduced to the students new vocabularies. The procedure of teaching learning process as follows:

- 1) The teacher asks students to mention some vocabularies that are discussed at the previous meeting,
- 2) The teacher shows the new words and pronounces the words,
- 3) The teacher asks the students to repeat what he says,
- 4) The students pronounce the word together for two until three times,
- 5) The teacher gives the meaning in Bahasa Indonesia and the students repeat the meaning of the word,
- 6) Play the word jar games follow:
 - a) Line up the students into two groups

- b) Ask them to write one of new verb on the blackboard into slips of paper. These slips of paper then stuffed into a jar.
 - c) The teacher gives an example, takes one of slips of paper from jar, and show students by perform/act according the word from the paper.
 - d) Then the teacher asks one student to come forward and takes one slip of paper from the jar, and start play the game.
 - e) Then correcting together, the winner is group whose get the best score.
- 7) The teacher gives the quiz for the students and reviews of all the vocabulary,
- 8) In the end of the lesson, the teacher gives the assessment test.
- c. Observation

Observation is conducted together with the action or teaching, the researcher observed the teaching learning process and compare with cycle 1. The observation on the students in second cycle was to check:

- 1) The student's activity in learning new vocabulary,
 - 2) The student's response during teaching learning process,
 - 3) The student's achievement in memorizing new vocabulary.
- d. Reflection
- 1) Evaluate the activity that has been done,
 - 2) Analyze the data from the test and observation,

- 3) Analyze the activity, whether they still find out the problem or not. If still find the problem, what should the researcher do to repair the problem,
- 4) The teacher and the researcher discuss to make a reflection what they should do to repair the problem,
- 5) Analyze the data to repair the next cycle,
- 6) Make a while conclusion in second cycle.

4. Cycle 3

The third cycle is done based on the result of reflection from the second cycle. The procedures as follows:

a. Planning

- 1) Identify the problem and make the solution of the problem,
- 2) Prepare the teaching material,
- 3) Prepare the lesson plan based on the teaching material,
- 4) Prepare word jar game that are appropriate with the material,
- 5) Prepare checklist observation,
- 6) Prepare students' attendance list,
- 7) Prepare formative test.

b. Action

The collaborator teacher and the researcher do the third cycle which is appropriate with lesson plan as follow up from evaluation of cycle 2. In this cycle, the teacher introduces to the students new vocabulary. The procedure of teaching learning process as follows:

- 1) The teacher asks the students to mention some vocabularies that are discussed at the previous meeting,
- 2) The teacher shows the list of words and pronounced the word,
- 3) The teacher asks the students to repeat what she said,
- 4) The students pronounce the word together for two until three times,
- 5) The teacher gives the meaning of the word in Bahasa Indonesia and the students repeat the meaning of the word,
- 6) Play the word jar game by the “draw and write” game as follows:
 - a) Line up the students into 3 groups,
 - b) Give each group one paragraph of short story. There are 5 new words in the paragraph.
 - c) Ask them to listen the instruction; all of groups draw the word that related with the material (adjective).
 - d) After that, group A’s paper move to group B, group B’s paper move to group C, etc. then the next groups must write the name of the pictures.
 - e) And the papers move again. The last, the next groups write the meaning of the words.
 - f) Correcting together. The winner is the group that gets the best score.
- 7) The teacher gives the quiz for the students and reviews of all the vocabulary,

- 8) At the end of the lesson, the teacher gives the students assessment tests.

c. Observation

Observation is conducted together with the action or teaching. The researcher observes the teaching learning process and compares with cycle 2. The observation on the students in third cycle is to know:

- 1) The students' activity in learning new vocabulary.
- 2) The students' response during teaching learning process,
- 3) The students' achievement in memorizing new vocabulary.

d. Reflection

- 1) Evaluate the activity that has been done,
- 2) Analyze the data from the test and observation,
- 3) Analyze the activity, they still find out the problem or not
- 4) The collaborator teacher and the researcher discussed about to continue the next cycle or enough.

5. Post test

The last activity in classroom action research is post-test. The researcher would review the entire lesson using word jar game and evaluate students by giving post-test to know the students' achievement in understanding new vocabulary from first cycle until the last cycle. In this test, the researcher gives 20 questions that consist of 20 matching test questions (attached). The material of the test is vocabularies that have been taught at the previous meeting.

Hence, the researcher analyzes the result of post-test and compares the whole result of the students' achievement. As a result, researcher can make conclusion in conducting classroom action research.