

CHAPTER III

RESEARCH METHOD

This chapter presents the methods used in this research. They cover kind of research, research design, research subject, instrument, data collection and data analysis.

3.1 Kind of Research

Based on the result that the researcher has got in preliminary study, the researcher chooses Classroom Action Research to overcome the students' vocabulary problem that arose in the class. Classroom Action Research itself is a research conducted by teacher to an activity that is intentionally planned, applied in a class and accurately observed the result (Arikunto, 2010:130). Therefore, this research is intended to improve the students' vocabulary by using Education Song for the fourth year student in Sasnupatham Mulnithi Krabi Thailand.

3.2 Design of the Research

The design of the research is Classroom Action Research (CAR). This CAR is done collaboratively with the English teacher who teaches Fourth Grade of Elementary School in Sasnupatham Mulnithi Krabi. The collaboration focuses

on finding and solving the research problem, planning the action, implementing the research, observing, evaluating and analyzing the data.

Based on the research design, the actions of the research are implemented in four stages, in which explained by Kemmis and Mc Taggart (1988:68 in Arikunto 2010: 137). They are as follows:

1. The planning of the action

A plan is a stage where the researcher develops an action that he/she need to do to solve the problem found in the class. Which, in this research the problem is the students' vocabulary that need to be improved because they always forgot it. To improve their vocabulary, education song technique brought to solve the problem by improving their vocabulary mastery.

2. The implementation of the action

In this stage, the researcher, implement the technique to the students and collects the data from them based on their achievement in the class and the vocabulary multiple choices.

3. Observation and Reflection of the action.

Based on the data collected, the researcher observes whether the students have achieved the criteria of success. And the reflecting taken after students' performances in every cycle is evaluated to find weaknesses or problems. Then, the researcher decided which action is needed to overcome the weaknesses or problems. The researcher recalled all information which provided the base for the revise plan for the next cycle and discussed with the collaborator to get feedback.

The design of this action research is illustrated in diagram 1.

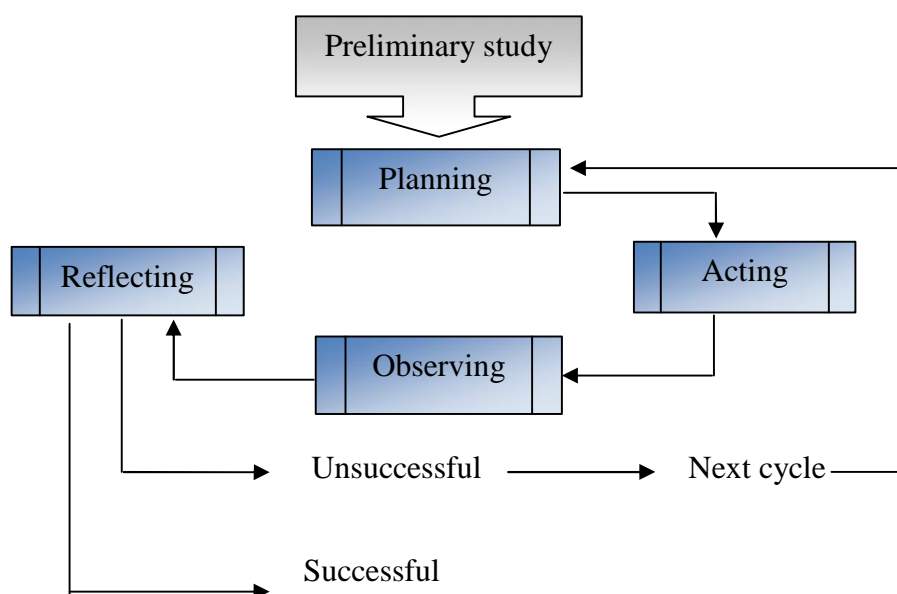


Diagram 1: The Model of Classroom Action Research

(Adapted from Kemmis and McTaggart in Arikunto 2010:137)

3.3. Subject of the Research

The population of this research is the fourth Class at Sasnupatham Mulnithi Krabi, Thailand consists of 22 students. The subjects are taken by using purposive sampling. It means that the researcher selects a sample based on the prior information, which provide the data she needs. There is only one class in the fourth grade, which consists of 22 students. In this case, the subjects were chosen based on the consideration that their vocabulary needed to be improved since their vocabulary mastery mean score in the preliminary study was 50. Based on the interview with the English teacher the vocabulary mastery of this class was the lowest among all the classes in Sasnupatham Mulnithi Krabi.

3.4. Area of the Research

The area of this research was Sasnupatham Mulnithi Krabi, Thailand. This school was determined purposively for some considerations:

1. It was easily accessible, both the headmaster and the teacher gave the researcher permission to conduct the research in that school.
2. As informed by the English teacher in the preliminary study, the fourth grade students still had problems in memorizing English vocabulary.
3. Education Song had never been applied by the English teacher in teaching vocabulary.

3.5 Procedure of the Research

Based on the research design, the actions of the research are implemented in four stages, in which explained by Kemmis and McTaggart (1988 in Arikunto:137), they are the planning of the action, the implementation of the action, class observation and evaluation, and reflection the actions.

3.5.1 Preliminary Study

This research began with a preliminary study on August 31st to September 25th 2015.

- Monday, August 31st 2015

The researcher observed the class and interviewed the school principal and English teacher to investigate whether the students had problem in memorizing vocabulary. There was only one class on the fourth grade in Sasnupatham Mulnithi Krabi, Thailand. It consisted of 22 students. The

teacher used the Teacher-Centered method which focuses mainly on teacher's activeness, not the students'. In every meeting, the teacher always used the text book and work book. That makes the students feel bored with English teaching method and eager to try something new. Based on the interview, the students were still unable to use the target language to fulfill the need in their daily activity and the students' score were still low that is 32% of the students got 55. The rest of them got below 55. It can be known that the score did not reach the standard score of English. Fortunately, the score already focused mainly on vocabulary mastery. So, the researcher took the vocabulary score data from the English teacher as the preliminary study.

- Friday, September 4th 2015

The vocabulary score data could not reach the mean of students standard passing score ($M = 50$) and the requirement of students scoring higher than 60 must be, at least, 60% of students in the class. Based on the previous data, the students' vocabulary mastery needed to be improved.

3.5.2 Planning

In this classroom action research, the planning of the action was activities done by researcher before the implementation of action. It is done collaboratively with the English teacher before doing the actions of the research. They were as follows:

- a. Selecting the education song which are suitable for the fourth grade students
- b. Constructing the lesson plans and observation guide for each meeting

- c. Constructing the vocabulary test and the observation guide in the form of checklist and the way to score the test.

3.5.3 Acting

The implementation of this research is planned to be done during the school hours. The actions given are teaching vocabulary by using Education Song. It is given to the research subjects in every meeting of each cycle. The implementation of the action in Cycle 1 is based on lesson plan 1 and 2. Each meeting is provided 90 minutes. If Cycle 1 is not successful, the lesson plans for Cycle 2 will be revised based on the lesson plans in Cycle 1 and the obstacles faced in the Cycle 1 will be fixed.

3.5.4 Observing

After implementing education song in the class, the researcher gives a task related to the topic. To observe, whether the technique is effective to develop students' vocabulary mastery or not.

Observation will be done by the researcher and the English teacher. It is used to observe the activities and the applications of the action in this research. The researcher and the English teacher used checklist paper to record the students' activities in the teaching learning process through education song in each cycle. Observation is focused on the implementation of the song technique by both the teacher and the students, and the activity of the students in teaching learning process.

3.5.5 Reflecting

The researcher and the collaborator will do the reflection after analyzing the result of Cycle 1. To measure the student percentage of their vocabulary achievement, the researcher uses this formula:

$$E = \frac{A}{N}100\%$$

Where:

E : The percentage of students who achieve the target score

A : The total number of the students achieving the minimum standard scores.

N : The total number of the students

(Cohen, 2007:243)

This reflection is intended to find out whether the action that is done in this cycle still has weaknesses or not and to identify what points is well done. The cycle will be stopped if the target of the research has been achieved. But if it has not, the researcher should revise the action and continue to the next cycle.

After doing the reflection, the researcher and the English teacher discussed the result in detail to find another alternative or solution to solve the problem encountered both by the students and the English teacher, which is used as the consideration to conduct Cycle 2 if Cycle 1 is not success.

3.6 The Criteria of Success

The criteria of success are used to find out whether the goal of the action is achieved. The score target of vocabulary mastery is 55 based on the minimum standard score requirement of Sasnupatham Mulnithi Krabi, Thailand. The actions are regarded successful at least 60% of students achieve the minimum standard

score requirement that is 55. However, if the requirement above could not be achieved in Cycle I, the action will be continued to Cycle 2.

3.7 Instrument of the Research

Research instrument are some tools used when a research is conducted in a particular method (Arikunto, 2010:192). They are needed in order to get the data for the research. The instrument of this research is using a class observation and test as a tool to collect a data.

3.7.1 The observation is a tool to collect data based on the students' activeness and their idea development during the class. Which, this tools will be observe by the English teacher, while the researcher teaches the students about the news item and journalistic question as a technique to brainstorm the ideas. And the observation checklist will be provided bellow:

Table 3.1 Sample of the Students' Active Participation Checklist

No	Name of student	Participations				Active	Passive
		1	2	3	4		

The indicators of observation are:

1. Answering Question
2. Making Note that they heard
3. Doing vocabulary test
4. Singing the song

The students will categorize active if they fulfill at least 3 indicators.

3.7.2 Test

Test is a set of questions or other instruments used to measure skill, aptitude, knowledge, intelligence of individual or groups (Arikunto, 2006:150). In this research, achievement test is used to measure the fourth grade students' vocabulary achievement by using education song. As it is cited in Arikunto (2006:151) achievement test is a test used to measure the individual's achievement after learning something.

Heaton (1991:41) states that an achievement test is used to measure the students' mastery of knowledge that has been taught. The achievement test in this research is constructed by the researcher based on the competency based curriculum principle (Arikunto, 2006:128). Vocabulary test in a form of multiple choice test in number 25.

3.7.2.1 The Validity of the Test

The most complex criterion of an effective test is validity, as stated by Gronlund (1998:226) in Brown (2001:22) "a test has a curricular validity if it measures fairly the extent to which pupil have learned what the curriculum was intended to teach them".

a. Content Validity

In this research the researcher uses content validity that the test item based on the curriculum. This test is valid because the material about vocabulary mastery has been taught and the test item of the test based on the curriculum (Basic Education Core Curriculum, 2008:269). See the Competency Based Curriculum in Table 1.

Table 1: Basic Education Core Curriculum of Thailand

Strand 1:	Question
<p data-bbox="300 584 692 618">Language for Communication</p> <p data-bbox="300 636 496 669">Standard F1.1:</p> <p data-bbox="300 692 810 893">Understanding and ability in interpreting what has been heard and read from various types of media, and ability to express opinions with reasons</p> <ol data-bbox="347 969 810 1955" style="list-style-type: none"> <li data-bbox="347 969 810 1149">1. Act in compliance with request, instruction, clarification and explanation heard and read. <li data-bbox="347 1189 810 1592">2. Pronounce and spell the given words; accurately read aloud groups of words, sentences, simple text and chants by observing the principles of reading. <li data-bbox="347 1632 810 1883">3. Match the pictures or symbols or signs with the meanings of sentences and short paragraphs heard or read. <li data-bbox="347 1924 735 1955">4. Answer the question from 	<p data-bbox="837 1240 1337 1319">Choose the best and correct answer by crossing (X) a, b, c, or d!</p>

listening and reading sentences, dialogue and simple tales.	
Material:	Education Songs

Indicator	Answer
I. Identifying the song.	
II. Singing the song.	Based on key answer
III. Doing vocabulary exercise.	

3.7.2.2 The Reliability of the Test

According to Arikunto (2006:178), reliability is determined by the carefulness of evaluation instrument and the importance of reliability consistence. Meanwhile, Ary, Jacobs and Surenson (2010: 224) state that reliability indicates how consistent a test measures whatever it does measure. In this research, inter-rater or inter-observer reliability is used as the way to measure the reliability. Then, this research uses Pearson Product Moment formula to measure the reliability of the test. Which means, the researcher correlates the result of the score from tester 1(x) and the score from tester 2(y).

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)}}$$

r_{xy} : Coefficient correlation between X and Y variable

- N : The total number of students
 X : The students score given by the teacher
 Y : The students score given by the researcher
 X^2 : Sum of the students of X^2 score given by the teacher
 Y^2 : Sum of the students of Y^2 score given by the researcher
 XY : The total score of variable X and Y

(Adopted from Purwanto, 1984:143)

The result of this formula is 0,66. To get the reliability coefficient for the whole items by using Spearman-Brown (Split Half Formula) is as follows:

$$r_{11} = \frac{2xr_{\frac{1}{2}/\frac{1}{2}}}{(1+r_{\frac{1}{2}/\frac{1}{2}})}$$

Note :

r_{11} : The reliability of the test

$r_{\frac{1}{2}/\frac{1}{2}}$: r_{xy} as the index correlation between two split instrument

(Ary, 2010:244)

The criteria of correlation coefficient are as follow:

Criteria of Correlation Coefficient	
0,00 – 0,20	Very Low
0,21 – 0,40	Low
0,41 – 0,70	Medium/Enough
0,71 – 0,90	High
0,91 – 1,00	Very High/Perfect

The result of the reliability of the tryout test is 0,79. Then, based on the criterion above it can be concluded that the test is reliable with high index reliability.