# CHAPTER III RESEARCH METHODOLOGY

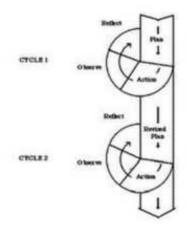
#### A. Research Design

The research design for this research is Classroom Action Research (CAR). This kind of research has systematic procedures done by the teachers (or other individuals in an educational setting) to gather information and to improve the ways educational setting involved teaching and students learning. According to Iskandar in (Qomar et al., 2020) action research is a research conducted by educators, and also a type of research that aims to give teachers opportunity to resolve the problems of teaching and non-teaching in the classroom carefully, systematically by using the existed rules. This classroom action research will investigate using cycles. Each cycle consist of four phases; planning, action, observation and reflection. It means that CAR is aimed to overcome problems in teaching learning process in order to improve educational practice.

Based on the explanation above it can be conclude that Classroom Action Research is a problem-based research which its aims to solve the problems that arise in the class and to make an improvement in teaching learning activity through cycle process which involves some phases of planning, acting, observing, and reflecting.

#### **B.** Procedure in Classroom Action Research

The researcher use CAR design by Kemis & McTaggart cycling. According to Kemmis & McTaggart, cited in (Ningrum et al., 2019), Action research typically includes four major phases in the research cycle. The initial cycle can be a continuous or repetitive spiral of cycles repeated until the action researcher reaches a satisfactory result and feels it is time to stop. "McTaggart's cycling consists of his four phases of planning, action, observation and reflection.



# Figure 2 Cycling procces of Classroom action research Kemmis & McTaggart in (Ningrum et al., 2019)

Johnson cited (Munawaroh, 2019) in Action research is a learning process that enables learning and creation of knowledge through critical reflection on experience, forming abstract concepts, and testing the implications of these concepts in new situations. The action in this research is as follows:

#### 1. Planning

Planning are preparation before teaching and learning activities. The activities of the planning are carried out by teachers. Teacher develops the lesson plans, prepare the material, and prepare audio-visual media for use in the classroom.

# 2. Action

At this stage, the researcher teaches using digital animated stories inform of videos. Teachers teach based on lesson plans that have been planned.

#### 3. Observation

This activity is performed during the data collection process. All activities such as students' attitudes toward learning, classroom atmosphere, and material provided by the teacher, teacher-student interaction, student-to-student interaction, and incidents are monitored during data collection. In process of learning, fixing the lesson situation during the activity is the use of field notes and observation lists.

#### 4. Reflection

Reflecting is an evaluation by the teacher on the process and results or the impact of the actions taken by the researcher. The steps in reflection are analyzed data from the observation sheet, field notes and test results to find out the improvement in listening skill by using digital animated stories inform of video and discussing the teaching and learning process that has been carried out and planned for the next activity.

In this classroom action research, the success criteria will be based on students' scores in the listening test. The implementation will be considered successful if 40% of students achieve an average score of 75 or more. Setting the success criteria at 40% of students who achieve an average score of 75 is a strategic step that considers realistic gradual improvement, diversity of student abilities, and time and resource constraints. This target allows teachers to monitor student progress measurably, accommodate differences in abilities, and evaluate the effectiveness of the learning methods applied. This criterion will be the main measure to determine the effectiveness of the research implementation.

#### C. Research Variable

There are two variable in this research. They are independent variable and dependent variable.

#### 1. Independent variable

Digital animated stories: This variable is related to the introduction of digital animated stories as a teaching media to improve students' listening skill.

#### 2. Dependent variable

Listening skill: This variable is relate to student skill in listening. The students' skill in understanding the main idea of the clip and the massage being conveyed.

#### D. Research Population, Sampling technique, and Sample

#### 1. Research population

In this research, the researcher used classroom action research. This research will conducted at eleventh grade at SMK AL-FAJAR. The researcher will conducted at financial accounting class at eleventh grade with the population of students are 66. The research choose one class at financial accounting class at Institution consist 31 students as a sample since student of this class have lowest score in listening.

# 2. Research Sampling technique

The researcher used Purposive Sampling technique. Purposive sampling is a type of non-probability sampling technique where the researcher intentionally selects participants based on specific characteristics or criteria in research objective by Thomas (2022). In this technique, researcher deliberately selects samples that are considered to have information that is relevant to the problem. The researcher gets the data from the teacher when the researcher conducted the pre-survey.

#### 3. Research Sample

The research chooses one class at financial accounting class at Institution consist 31 students as a sample since student of this class have lowest score in listening. This research will be conducted at eleventh grade at SMK AL-FAJAR.

# E. Research Instrument

According to Ainak & Sari (2023) a research instrument is something that is used to collect data or Information related to research with the use of appropriate instruments greatly influences the quality of research results. That the instruments that researcher used in this research are as follows:

# 1. Test

Addition to Brown in (Qomar, 2013)Test is a method of measuring someone knowledge in given domain. The goal in giving the test is to measure the student achievement. Test usually used in two forms: pre-test and post-test. The test will use multiple choice and fill in the blank to test whether the students understood what they have listened or not. The pre-test will used to determine students' listening skills before using digital animated stories, while the post-test was designed to determine whether there was an improvement in students' listening after using digital animated stories.

#### 2. Questionnaire

A questionnaire is a tool to collect the information with the way to give a nonverbal question to answer written by margono in (Sari & Aminatun, 2021). A questionnaire is a tool or instrument used to collect data from respondents. Questionnaires usually contain a series of questions designed to obtain information relevant to the research objectives

# 3. Observation

Observation is an instrument to make observations on the activity and creativity of learners in learning, both in class and outside the classroom. In conducting the observation, the researcher used the observation scheme to make it more systematic, containing list of activity or happening, which might happen in learning process by Mulyasa (2020). The observation sheet is conducted during the teaching learning activities in the class. The researcher

observe the student participant and class situation while listening activity in the learning process. The information that obtained from this observation sheet is use as a basis to determine the planning for the following cycle.

# F. Data Collecting Technique

Data Collecting Techniques that the researcher will use in gaining data are:

# 1. Test

Researcher will do a test about the material to measure students' listening skill after and before digital animated stories in their teaching and learning process.

#### a. Pre-test

The researcher gives the learners the pre-test at the first meeting. The researcher make a test to measure the students' listening skill and to know whether the test success or not. The test will be given in about 40 minutes. The students will answer 15 fill in the blank and 15 multiple choice question while listening an audio. The test have the purposes to know how far comparison the student's listening skill of digital animated stories inform of video before given treatment.

#### b. Post-test

The post-test is done at the last meeting according to the cycle created by the researcher. In this case Post-test is examined to the students after implementing the digital animated stories in teaching listening skill as a treatment in order to know the improvement of student's achievements before and after giving the treatment. The researcher analyzed the differences between mean of pre-test and two evaluations of test scores.

#### 2. Questionnaire

To collect data on students' perceptions using digital animated stories in the classroom, the researcher will utilize a Google Form questionnaire. In google form questionnaire Include fields for name, gender, and grade level. The researcher will use a variety of liker scale questions to assess different aspects of students' perceptions. Questionnaire will use likert scale to get students' response about how the student interested in listening and learning using digital animated stories. The questioner to expand to 20 statement. likert scale answer are given from "strongly disagree", "agree", "neutral", "disagree", "strongly agree".

#### 3. Observation

The researcher will use observation to get the data about students' activity during teaching learning process which is observed by researcher. the researcher uses observation as data collecting approach to know how teaching listening using digital animate stories in the classroom, how the students respond to the teacher, answering question, doing an assignment and filling out the attendance from using digital animated stories.

#### G. Technique Data Analyzing

Data analysis involves the transformation of collected data into meaningful and interpretable information by Taherdoost (2020). In this research the researcher will use qualitative and quantitative as a data analyzing technique. The analysis qualitative data is used to measure data from observation and questioner, while the analysis of quantitative data is used to measure data form test. In analyzing the numerical data, the researcher gains the average of students score per action in one cycle. To get the mean of students listening skill within one cycle, the formula used is:

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

(Singh in Nugroho, 2019)

Note:

M = Mean or Average Score  $\sum x =$  Total Product of Score N = Number of Score

The formula to figure out the percentage of the students who pass the Minimum Mastery Criteria (MMC) in each cycle as follow:

$$\mathsf{P} = \frac{F}{N} \times 100$$

(Singh in Nugroho, 2019)

Note: P = Percentage F = Frequency N = Total Number of Students

The last, after mean of students' scores per action is gained, the researcher will analyses whether there is or there are no improvement scores in listening from pre-test up to post-test score in cycle I and cycle 2. The researcher use the formula:

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

(Sudijono in Pratama, 2018)

P: Percentages of students' improvement y: Pre – test result y1: Post – test 1

$$P = \frac{y^2 - y}{y} \ge 100\%$$

(Sudijono in Pratama, 2018)

P: Percentages of students' improvement y: pre – test result y1: post – test 2