# CHAPTER III

# RESEARCH METHOD

This chapter discusses the steps of researcher in conducting research method. The method consists of research design, research variable, population of the study, sample of the study, the instrument of the study, data collection and data analysis.

## A. Research Variable

### 1. Independent Variable

Independent variables are those that researchers chose that are thought to have an impact or cause changes in other variables. Johnson & Christensen (2020) states that independent variables are variables that are thought to cause changes in other variables. Basically, an independent variable is what we, as researchers, control or modify to see its effect on the results. The small group discussion strategy is used as the independent variable in this study. The independent variable is the variable that effect the result and cause the dependent variable to occur (Creswell, 2018). Additionally, the controlled class was used in this study in order to compare the experimental class.

### 2. Dependent Variable

According to Creswell (2012) a dependent variable is a property or quality that is either impacted by or dependent on the independent variable. The variable that the independent variable affects is known as the dependent variable. In short, the dependent variable is the variable that can be determined in an experiment and the variable that effects it. The dependent variable in this research is fishbowl

strategy, obtained from students reading comprehension. The researcher also compared the control and experimental classes to the pre- and post-test results in order to assess the effectiveness of the treatment. As a result, the researcher used Creswell's research design for this research.

**Table 3.1**

**Research Design**

| **Group** | **Test** | **Treatment** | **Test** |
|---|---|---|---|
| Control Class | Pre – test | Fishbowl Strategy | Post – test |
| Experiment Class | Pre – test | Small Group Discussion | Post – test |

The researcher involved two classes in conducting this study, the experimental class classified as the first and the controlled class as the second. In the first class, which was the experimental class, the students would be treated by using Small Group Discussion strategy as learning method. However, in the second class, which was the control class, students would be treated by using Fishbowl Strategy as learning method.

**B. Research Design**

The research design used by researchers in this study is a quasi-experimental research design combined with quantitative metho0dology. This method divides research participants into control and treatment groups, where the treatment group is given a specific treatment or intervention (Akbar et al., 2023). Quasi experimental design involve taking from the experiment and control group setting, so the subjects are not assigned randomly (Leavy, 2017). However, an

unrandomized sample was a part of the quasi-experimental technique that the researchers employed in this study. This indicates that the subjects were not randomized in the treatment and control groups at randomly. This was due to the researchers recommendations, received from an English teacher at SMAN 1 Purwoasri that the two classes selected contained students with low reading comprehension and low reading enthusiasm.

## C. Population and Sample

In this study, the population was the tenth grade students of SMAN 1 PURWOASRI in the academic year 2024/2025. There are ten classes, and each class consists of about 34 and 35 students. Table 3.2 presents the population of this study.

**Table 3.2**

**Population**

| No. | Class | Amount |
|---|---|---|
| 1. | X- 1 | 35 |
| 2. | X – 2 | 35 |
| 3. | X- 3 | 35 |
| 4. | X – 4 | 34 |
| 5. | X – 5 | 35 |
| 6. | X-6 | 35 |
| 7. | X-7 | 33 |
| 8. | X-8 | 34 |
| 9. | X-9 | 34 |

| | | |
|---|---|---|
| 10. | X- 10 | 35 |
| Total | | 345 |

The sample of this study is class X- 9 as the experiment group and X- 7 as the control group sample. Experiment class consists of 34 students and control class consist of 33 students. These classes are chosen based on the teachers' consideration in which both are quite similar in ability.

**D. Instrument of the Study**

An instrument is a tool that is used to operationally define a variable, according to Ary (2010). The instrument is a research tool in gathering data or information, which is used to measure and process data. In addition, the instrument aims to answer and solve problems in

research. This study, the researcher use test as an instrument ( pre test and post test ).

**1. Pre – test**

According to Creswell pre-test allows the researcher to determine particular traits or qualities of the study participants before treatment is given. Before starting treatment, a pre-test will be conducted. Before to the treatment being given, the pre-test enables the researcher to assess specific characteristics or attributes of the study participants. There will be a pre-test before the treatment begins. In other words, the purpose of the pre-test is to assess students' readiness before they receive treatment; the treatment plan is available in the appendix. Students in the control classroom completed a written multiple-choice exam as part of the pre-

test.And the experimental classrooms completed a written multiple-choice exam as part of the pre- test with a group size of 3-5 members.

**2. Post – test**

A post-test is an assessment of a particular trait or quality evaluated for an experimental participant after a treatment period. This indicates that the post-test will be conducted after the treatment period . The post-test is used by the researcher to determine how the treatment affects the Small Group Discussion Strategy on students reading comprehension in the experimental class as well as the controll class after they have received the treatment. The complete blueprint for pre test and post test is presented in Table 3.3.

**Table 3.3**

**Blue Print of Pre – Test and Post – Test**

| **Learning Outcomes** | **Indicators of Achievement of Learning Objectives** | **Item Number of Pre-test** | **Item Number of Post-test** |
|---|---|---|---|
| Compare the social functions, text structures, and linguistic elements of several oral and written personal recount text by giving and requesting information related to personal experiences in the past, short and simple,according to the context of use. | Identify specific detailed and information from the personal recount text (What,Who, Where, When, Which,How).<br><br>Understand the use of simple past tense, sequence connective and time connective | 2,4,5,6,7,8, 9,11, 12,13, 16,17,18,21, 22,24,25 | 26,27,28,29, 30,31,32,33, 34,35,36,37, 38,39,40,41, 42,43,44,45, 46,47,48,49,50 |
| | Identify the social function contained in the recount text related to personal experiences in the | 1 | |

| | | | |
|---|---|---|---|
| | past. | | |
| | Determine the right expressions/ sentences that match the personal recount text. | 3,14,15,19 ,20,23 | |

There are 50 questions for both tests. There are 25 questions for the pre-test and 25 questions for the post-test. Both tests have the same learning outcomes and different indicators of achievement of learning objectives.

### 3. Instruments Validity

Validity to measure the validity of a test. Test validity in this study was determined using item validity. The researcher conducted the validity instrument in SPSS using Pearson Product Moment. It was obtained from 25 test item of pre-test and post-test, there were 25 test items which were valid from pre-test and post-test.

**Table 3.4**

**Validity of Each Item Pre-Test**

| No. | Result | | Notes | | Result | | Notes |
|---|---|---|---|---|---|---|---|
| | R count | R table | | | R count | R table | |
| 1. | 0.3240 | 0.2387 | VALID | 14. | 0.3124 | 0.2387 | VALID |
| 2. | 0.3210 | 0.2387 | VALID | 15. | 0.3188 | 0.2387 | VALID |
| 3. | 0.3371 | 0.2387 | VALID | 16. | 0.3184 | 0.2387 | VALID |
| 4. | 0.3488 | 0.2387 | VALID | 17. | 0.3330 | 0.2387 | VALID |
| 5. | 0.3063 | 0.2387 | VALID | 18. | 0.3363 | 0.2387 | VALID |
| 6. | 0.3207 | 0.2387 | VALID | 19. | 0.3208 | 0.2387 | VALID |
| 7. | 0.3598 | 0.2387 | VALID | 20. | 0.3181 | 0.2387 | VALID |
| 8. | 0.3159 | 0.2387 | VALID | 21. | 0.3210 | 0.2387 | VALID |
| 9. | 0.3424 | 0.2387 | VALID | 22. | 0.3576 | 0.2387 | VALID |
| 10. | 0.3533 | 0.2387 | VALID | 23. | 0.3243 | 0.2387 | VALID |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 11. | 0.3440 | 0.2387 | VALID | 24. | 0.3292 | 0.2387 | VALID |
| 12. | 0.3172 | 0.2387 | VALID | 25. | 0.3237 | 0.2387 | VALID |
| 13. | 0.3426 | 0.2387 | VALID | | | | |

**If r count > r table = H0 is rejected, valid**

**If r count < r table = H0 is accepted, invalid**

**Table 3.5**

**Validity of Each Item Post-Test**

| No. | Result | | Notes | | Result | | Notes |
|---|---|---|---|---|---|---|---|
| | R count | R table | | | R count | R table | |
| 1. | 0.3027 | 0.2387 | VALID | 14. | 0.3044 | 0.2387 | VALID |
| 2. | 0.3058 | 0.2387 | VALID | 15. | 0.3577 | 0.2387 | VALID |
| 3. | 0.3383 | 0.2387 | VALID | 16. | 0.4287 | 0.2387 | VALID |
| 4. | 0.3576 | 0.2387 | VALID | 17. | 0.3404 | 0.2387 | VALID |
| 5. | 0.3587 | 0.2387 | VALID | 18. | 0.3095 | 0.2387 | VALID |
| 6. | 0.3363 | 0.2387 | VALID | 19. | 0.3517 | 0.2387 | VALID |
| 7. | 0.3636 | 0.2387 | VALID | 20. | 0.3697 | 0.2387 | VALID |
| 8. | 0.3081 | 0.2387 | VALID | 21. | 0.3895 | 0.2387 | VALID |
| 9. | 0.3271 | 0.2387 | VALID | 22. | 0.3290 | 0.2387 | VALID |
| 10. | 0.4346 | 0.2387 | VALID | 23. | 0.3533 | 0.2387 | VALID |
| 11. | 0.3259 | 0.2387 | VALID | 24. | 0.3713 | 0.2387 | VALID |
| 12. | 0.3103 | 0.2387 | VALID | 25. | 0.3524 | 0.2387 | VALID |
| 13. | 0.3181 | 0.2387 | VALID | | | | |

**If r count > r table = H0 is accepted, valid**

**If r count < r table = H0 is rejected, invalid**

**4. Instruments Reliability**

A good test should be valid and reliable. The researcher used the Cronbach Alpha to examine the reliability of the Pre-test and Post-test after obtaining valid items using the Pearson Product Moment calculation. The research instrument is considered reliable when the Cronbach's Alpha value >0.60 (Sugiyono, 2010). If the Cronbach's Alpha value is > 0.60, then the test items in the study can be considered reliable.

**Table 3.6**

**Instrument Reliability Category**

| **Koefisien *Alpha Cronbach*** | Kategori Reliabilitas Instrumen Test |
|---|---|
| 0.86-1.00 | Higher |
| 0.66-0.85 | High |
| 0.36-0.65 | Low |
| 0.20-0.35 | Lowest |
| 0.00-0.19 | Not Reliable |

(Sumber:Creswell,2012:347)

**Table 3.7**

**Reliability Pre-Test**

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .666 | 25 |

The reliability test results in the table above showed that the Cronbach's Alpha value is 0.665 which means high reliability, so it can be concluded that all valid question items can be declared reliable.

**Table 3.8**

**Reliability Post-Test**

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .697 | 25 |

The reliability test results in the table above showed that the Cronbach's Alpha value is 0.697 which means high reliability, so it can be concluded that all valid question items can be declared reliable.

## E. Treatment Procedure

In research, treatment relates to a method of establishing settings that will be evaluated for their impact. The control and experimental groups in this study will receive the same care and instruction on recount texts. However, there are variations in how the two groups handle each other in terms of the instructional techniques employed. To enhance students' comprehension of recount texts through reading, the Small Group Discussion strategy will be given to the experimental group. Students in the control group will get instruction in the fishbowl strategy, which aim to enhance their comprehension of recount texts through reading. The study's procedure for treatment is as follows.

**Table 3.9**

**Treatment Procedure**

| **Treatment Procedure** | |
|---|---|
| **Experiment Group**<br>**( Small Group Discussion)** | **Control Group**<br>**(Fishbowl Strategy)** |
| **Pre- Teaching** | |
| 1. Opening and greeting<br>2. The teachers check students attandance<br>3. Ice Breaking<br>4. The teacher asks triggering questions that are relevant to the material to be learned.<br>5. The teacher conveys the learning objectives | 1. Opening and greeting<br>2. The teachers check students attandance<br>3. Ice Breaking<br>4. The teacher asks triggering questions that are relevant to the material to be learned.<br>5. The teacher conveys the learning objectives |
| **While Teaching** | **While Teaching** |
| 1. The teacher presents a video about recount text " going to kubu beach" and the learners are asked to watch the video and listen carefully.<br>2. The teacher asks questions related to the video such as:<br>• What is the content of the story?<br>• When did the writer go to beach?<br>• What is your most memorable vacation | 1. The teacher presents a video about recount text " going to kubu beach" and the learners are asked to watch the video and listen carefully.<br>2. The teacher asks questions related to the video such as :<br>• What is the content of the story?<br>• When did the writer go to beach?<br>• What is your most memorable vacation experience? |

| | |
|---|---|
| experience?<br>3. The teacher describes the recount text's definition, generic structure, type and language features.<br>4. The teacher give examples of recount texts.<br>5. The teacher divided students into groups of 3-4 people.<br>6. Using Small Group Discussion, students will be asked to read and evaluate recount text in groups | 3. The teacher describes the recount text's definition, generic structure, type and language features.<br>4. The teacher give examples of recount texts.<br>5. The teacher divided students into 2 groups consist of inner group and outer group. In the inner group there are 4-8 students, and for the outer group can be more than 20 students.<br>6. Using the Fishbowl Strategy, students will be asked to read and evaluate recount text. |
| **Post – Teaching** | **Post - Teaching** |
| 1. The researchers give the assignment's following the discussion.<br>2. After discussing with their groups, 2 students will represent in their groups to write down the answers of their respective groups.<br>3. Afterwards, the group member who is not in charge of writing the answer is in charge of conveying the results of their discussion to other groups in front of the class.<br>4. The teacher and all | 1. The researchers give the assigment's following the discussion.<br>2. After discussing with their groups. Invite the inner circle students to change into the outer circle students to change into the inner circle.<br>3. Let the outer circle observe and take notes on the structure of the inner circle's recount text while the inner circle uses their observation notes to continue working on the structure of the recount text. |

| | |
|---|---|
| students start a discussion about the right answer and discuss the results of analysis.<br>5. To asses the students comprehension of the content taught in class for the assignment score, the teacher assigns assignment to them on projects that include recount text.<br>6. The teacher reviews the material that has been learned.<br>7. The teacher informs the learning activities that will be done on the next meeting.<br>8. The teacher ends the learning activity by providing feedback and motivation with a closing prayer / greeting. | 4. Turn the inner circle to the children in the outer circle and have a discussion about the questios. Bring the circles back after that.<br>5. The teacher and all students start a discussion about the right answer and discuss the results of the analysis.<br>6. To asses the students comprehension of the content taught in class for the assignment score, the teacher assigns assignment to them on projects that include recount text.<br>7. The teacher reviews the material that has been learned.<br>8. The teacher informs the learning activities that will be done on the next meeting.<br>9. The teacher ends the learning activity by providing feedback and motivation with a closing prayer/ greeting. |

**Table 4.0**

**Schedule Meeting**

| Meeting | Date | Activity |
|---|---|---|
| 1 | 06 March 2025 | Pre – Test in the experimental class |
| | 07 March 2025 | Pre – Test in the control class |
| 2 | 13 March 2025 | First Treatment in experimental class |
| | 24 April 2025 | Second Treatment in the experimental class |
| 3 | 25 April 2025 | First Treatment in the control class |
| | 02 May 2025 | Second Treatment in the control class |
| 4 | 8 May 2025 | Post - Test in the experimental class |
| | 9 May 2025 | Post -Test in the control class |

## F. Data Collection

The technique collecting data used to collect the data needed in this research process. In the process of collecting data, the researcher used reading comprehension test. This following, there are some steps doing by the researcher. The first, the researcher collected data from the pre-test given to the experimental and control groups. The material for the reading comprehension test is recount texts be done individually for control class and done by group for experiment class . This test aims to measure the initial conditions and the ability of students in reading recount texts before being given the treatment. The pre-test of the experimental and control groups can be seen in Appendix 1.

The second, the researcher gave treatment to the control group and the

experimental group after the pre-test done. The experimental group get treatment using the small group discussion method. Meanwhile, the control group get treatment using fishbowl strategy based on the direct teaching steps usually carried out by the teacher. This treatment to aim of seeing the effect of the experiment given the small group discussion method and the control group was given the fishbowl strategy .

The third, after getting treatment, the researcher gave a post-test to the experimental and control group at the end of the learning process. This post test aims to determine the extent of students' reading comprehension in recount texts after being given treatment. This can be seen from the comparison of the results of the post-test scores in the experimental and control group. Then the last process the results of the pre-test scores were compared with the results of the post-test scores to determine the progress of students before and after being given treatment. The post-test in the experimental and control groups can be seen in Appendix 2.

## G. Data Analysis Technique

One of the procedures used in research to examine what was collected is data analysis. Data analysis is an essential step in the research process. All of the data must be assessed, described, and highlighted by the researcher. The data analysis process for this study involves multiple steps. After subsequently, IBM SPSS statistical software was employed for all tests. In order to look into the data, the researcher completed:

### 1. Normality Test

A statistical process called a normality test examines if a dataset contains a

normal distribution, sometimes referred to as a Gaussian distribution. This is important since a lot of statistical tests depend on the assumption that the data is distributed constantly. These tests can give inaccurate findings if the data is not normal. According to Nuryadi, Astuti, Utami and Budiantara (2017), they stated normality test is a procedure used to determine whether data comes from a normally distributed population or is in a normal distribution. The purpose of the normality test is to determine whether or not the data is normal. The P value greater than 0.05 suggests that the data is probably normal, which can be used to confirm the data's normality. If the P value is less than or equal to 0.05, the data is not normal.

**2. The Test of Homogenity**

The researcher computed homogeneity to figure out the degree of homogeneity between the two classes using the Levene test of homogeneity of variances. Using SPSS version 25.0, the homogeneity test is used to assess whether or not both classes are homogeneous. The criteria of the test as below:

a) Ho: The data is not homogeneous since Sig < Alpha 0.05.

b) Ha: Since Sig > Alpha 0.05, the data is homogeneous.

**3. Homogeneity Regression Test**

Another presumption before researchers use ANCOVA to do hypothesis testing is regression homogeneity (SLOPE). This test evaluates the interaction between covariates and independent variables in order to estimate the dependent variable. It is believed that there is no interaction between the independent and covariate variables if the significance result is higher than 0.05. Additionally, if the significance value is higher than 0.05, ANCOVA can be used to calculate the

data.

**4. Linearity Test**

After using ANCOVA for hypothesis testing, researchers make the final assumption that there is a linear relationship between covariates and dependent variables. Determining the importance of the variables' influence on the dependent variable is the goal. To continue using ANCOVA analysis, significant correlations between covariates and significant correlations between covariates and dependent variables must be less than 0.05.

**5. Testing Hypothesis**

A statistical test called ANCOVA can be used to calculate the difference between the means of two groups in quasi-experimental conditions. The following are the significant values of the acceptance/rejection criteria for the hypothesis :

1. Ha is rejected and H0 is accepted when the p Value (sig) is higher than^(5% or 0.05). It suggests that there is no significant differences between students who are taught using the Fishbowl Strategy and those who are taught using the Small Group Discussion Strategy.
2. Ha is accepted and H0 is rejected when the p Value (sig) is smaller than α (5% or 0.05). It suggests that students taught the Small Group Discussion Strategy and those taught the Fishbowl Strategy had significantly different learning outcomes.

The following is an interpretation of this study. The Small Group Discussion Strategy becomes ineffective in enhancing students' reading comprehension if the significance value exceeds 0.05. Additionally, the Fishbowl

Strategy is considered successful in improving students reading comprehension if the significance value is less than 0.05.