

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

Research is a process of steps use to collect and analyze information to increase our understanding of a topic or issue. In a study, several methods are needed to find out problem solving in research. Using methods in research helps researchers to analyze, collect information and to obtain data from the sample under study. At a general level, the research consists of three steps: Pose a question, collect data to answer the question, Present an answer to the question (Creswell, 2012).

1. Research Design

Research design is the basis for conducting research. This study used a descriptive approach to describe the object of research or research results. Descriptive method can be interpreted as a problem solving procedure that is investigated by describing the state of the subject or object in the study, which can be in the form of people, institutions, communities and others which are currently based on visible facts or what they are. According to Sugiyono (2015:29), descriptive research is a method that serves to describe or provide an overview of the object under study, data, or samples that have been collected as is without analyzing and making generally accepted conclusions. Descriptive research design is a quantitative research procedure in which the researcher conducts a survey to a sample or the entire population to describe attitudes, opinions, behaviors, or characteristics. Descriptive research uses a questionnaire to collect quantitative data, numbered data, and statistically analyze the data to describe trends in response to questions and to test research questions. They also interpret the data by connecting the results of statistical tests to previous research studies (Creswell, 2012). The researcher chooses to describe the population's opinions and facts based on the above opinion.

This study aims to determine the problems faced by students in making presentations using English in the second semester of the English Education study program at IKIP PGRI Pontianak. It is also intended to determine the factors that cause problems in class presentations.

B. Population, Sample, and Sampling Technique

1. Population

The population is all variables related to the topic in research. Population is a collection of objects, variables, concepts, or phenomena. We can examine each member of the population to determine the nature of the population in question (Morissan 2012:19).

The population for this study was third semester students of the English Education Study Program, IKIP PGRI Pontianak, which has 127 active students this semester. Which consists of four classes: Class A Morning (33 students), Class B Morning (28 students), Class A Afternoon (33 students), and Class B Afternoon (33 students).

2. Sampling Technique

Sampling is a technique used by researcher to collect samples for research purposes. According to Sugiyono (2018: 82), probability sampling is a sampling strategy that gives each member of the population an equal chance of being chosen as a sample.

The researcher used a simple random sampling technique to determine the research sample. Simple random sampling involves randomly selecting samples and populations without regard for the strata that exist within the population (Sugiyono 2018: 82). To determine the size of the population sample, the researcher generates a number at random for each element that exists. This procedure is carried out with the help of numerical-based applications such as Microsoft Excel. Only then can the first required sample be taken.

3. Sample

The sample is a representative member of the population that is used to create an overall picture of the research population. Sample as part of the number and characteristics possessed by a population (Sugiyono 2015, p.80). Sampling was used because researcher face time, energy, and financial constraints when conducting research on a large population. The researcher will take each 50% in each class in the population. Then the number of samples that will be used is 62 students in the third semester of the English education study program.

C. Technique and Tool of Data Collection

1. Technique of Collecting the Data

This section discusses how researcher collect primary data from participants. In this study, the data are students' problems in English presentation. In this study, researcher used direct and indirect communication techniques. Direct communication is a communication process that is carried out directly or face to face without any intermediary or communication media as a messenger or information carrier. While indirect communication is the process of a communication that is done indirectly alias requires the help of a communication tool whose function is as a communication medium. Direct communication techniques are carried out through observation while indirect communication techniques are carried out using questionnaires.

2. Tools of Data Collection

The tools of data collection in this study are follow:

a. Questionnaire

The questionnaire is a tool used for data collection in this research, Lodico *et al* (2010:204) explained that "a survey or questionnaire is the main tool or instrument for data collection in descriptive research". The researcher uses several questions or statements related to the research questions in the questionnaire, "which the questionnaire is the medium of

communication; the researcher articulates the questions to which he or she wants answers, and the subjects' responses are conveyed back to the researcher via the questionnaire" (Brace, 2004:4). The use of questionnaires in research is very useful in helping researchers obtain relevant information quickly and effectively.

The researcher used a close-ended questionnaire to obtain information about the problem faced by students in conducting presentations using English. Close-ended questionnaires require respondents to select only the options provided by the researcher in order to answer questions. An online questionnaire will be used to collect research data, and it will be designed using a Google form. The main advantage of using an online questionnaire is that it eliminates the need for paper. Respondents can also easily access this tool because the sample of third semester students has internet-connected devices where the question is described as a written question and the respondent provides the answer. The closed-ended questionnaire provides alternative answers that the respondent can select as one of the correct answers.

In this research, the researcher used descriptive statistics to analyze the data quantitatively. The Likert scaling technique is used by the researcher. Likert scale (Ary *et al.*, 2010: 210) assesses attitudes toward a topic by presenting a set of statements about the topic and asking respondents to indicate whether they strongly agree, agree, neutral, disagree, or strongly disagree with each. This study employs four different response options: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The Likert scale is used to assess a person's or group's attitudes, opinions, and perception of a social phenomenon (Sugiyono, 2014: 93). The researcher will score the sample's responses on a scale of positive to negative. The researcher will give a score , 4 (strongly disagree) , 3 (disagree) , 2 (agree) , and 1(strongly agree).

Table 3.1
The Score of Likert scale

Description	Scale
Strongly Disagree	4
Disagree	3
Agree	2
Strongly Agree	1

Taken from Sugiyono,(2014: 93)

b. Observation sheet

Data is collected using observation sheets based on observation samples. To process data, use observation lists to analyze the data collection process with facts to support theories or points of view. The observation data collection technique according to Larry Cristensen (in Sugiyono,2014) states that “in research observation is define as watching of behavioral, patterns of people in certain situations to obtain information about the phenomenon of interest. Description means that observation is used to explain, provide, and detail the symptoms that occur. The main purpose of observation is to describe the situation observed.

D. The Validity of Data

A validity test determines whether the data used to measure a variable is valid or not. Validity is an individual score of an instrument that makes sense, is meaningful, allows you as a researcher to draw good conclusions (Arikunto 2002). According to Fraenkel and Wallen (2009, 148), validity refers to the degree to which evidence supports any conclusions reached by the researcher based on data collected using specific instruments. By testing the instrument's validity, the researcher hopes that the information obtained through this questionnaire will accurately represent the purpose. The researcher used bivariate Pearson validity testing (in SPSS 22).

To assess the questionnaire's validity at a statistically significant level ($\alpha=5\%$). If the calculated r obtained is higher than the r table, the questionnaire

statement items are declared valid. If the calculated r obtained is lower than the r table, the questionnaire is deemed invalid.

If the value of r observed $>$ r table = Valid

If the value of r observed $<$ r table = Invalid

The following presents the results of testing the validity of the students presentation problem in English in the third semester students at IKIP PGRI Pontianak 2022/2023

Table 3.2
Data of Validity Questionnaire

Number of Item	Rtabel	Corrected Item-Total Correlation	Result
1	0.254	.263	Valid
2	0.254	.370	Valid
3	0.254	.455	Valid
4	0.254	.520	Valid
5	0.254	.636	Valid
6	0.254	.685	Valid
7	0.254	.723	Valid
8	0.254	.692	Valid
9	0.254	.246	Tidak Valid
10	0.254	.499	Valid
11	0.254	.274	Valid
12	0.254	.314	Valid
13	0.254	.610	Valid
14	0.254	.557	Valid
15	0.254	.752	Valid
16	0.254	.620	Valid
17	0.254	.250	Tidak Valid
18	0.254	.663	Valid
19	0.254	.596	Valid
20	0.254	.514	Valid

E. The Reliability of Data

A reliability instrument is one that produces the same data when measured several times on the same object, Sugiyono (2015). The term reliability is derived from the word reliable, which means dependable, consistent, and stable (Anwar, 2009), as cited in (Nirmawati, 2015). Measurements with high reliability are referred to as reliable measures. As a

result, the instrument in question consistently displays correct data and can be trusted. The item questionnaire was stated reliable if the coefficient of reliability was a minimum 0,6 oriduct score (Sugiyono , 2014 : 197) . To measure the reliability score , the researcher utilized SPSS version 22, the instrument is reliable if Cronbach's alpha value more.0,6 otherwise if the value of Cronbach's alpha is less than 0,6 it is mean the instrument is not reliable . The reliability of this instrument produces the value of Cronbach's alpha 898, it means the questionnaire was acceptable to be used in this study

Table 3.3
Reliability of Data

Reliability Statistics	
Cronbach's Alpha	N of Items
.898	20

F. The Technique of Data Analysis

In this research, after the data was obtained from the respondents, the researcher would then analyze the data using Ms. Excel 2007 for windows. As stated by Cohen *et al* (2007-501) that " numerical analysis can be performed using software ". Furthermore, the data will be displayed in a graph, where the chart can show the problem faced by students in conducting presentation using English.

1. Questionnaire

The use of questionnaire is to know what are the problems faced by students in conducting presentation activity using English. From the answer to the questionnaire the researcher used organize the data into number and displays them in the table. Then the researcher used a simple descriptive statistical analysis to answer the research question. To analyze the data, the researcher obtain the average score of each strategy of all students. The researcher was obtain and organize the students in each strategy with the formula:

$$R = \frac{f}{N}$$

Where:

R= average score of the students

F = score of students answer in each part

N = the number of total question in each part

2. Observation sheet

To analyze the result of observation, the researcher used a scoring rubric. Rubric is a chart that describes the criteria used to evaluate or assess a person's performance. Rubric is an assessment guide that is very helpful in assessing and describing the desired assessment criteria in assessing student performance. According to Butler and McMunn (2006) a rubric is a score guide that contains the criteria used to evaluate student performance. What is meant by criteria is something that is used as a guide for student performance that will be adjusted to the assessment criteria. The rubric will explain the description based on research indicators. Indicators are also known as score criteria. The criteria in the rubric serve as a performance guide that will be adjusted to the form of assessment carried out by the researcher. The criteria also play a role in identifying student responses to their performance abilities. In a rubric, a score is needed to guide the assessment, which is often referred to as a scoring rubric. According to Nitko (2001), a scoring rubric is a tool that contains a set of rules used to assess the quality of performance or performance. This rubric is used as a benchmark in analyzing student presentation processes and for evaluating various indicators. The process of assessing each indicator item is carried out when the process of observing student presentations is carried out.

To assess what problems students face in carrying out presentations using English, the researcher conducts them by direct observation, so that a guide rubric is needed to assess student performance that can accurately and accurately describe every aspect or descriptor that exists in the process of student performance, known as the analytic rubric. (Soeprijanto, 2010) said that in the analytic rubric the scoring elements are carried out at the descriptor level. Furthermore, the analytic rubric initially in several scores,

followed by assumed total score, their use represents assessment on a multidimensional level (Mertler, 2001). Analytical rubrics are used by researchers to measure students' presentation difficulties from various indicators and then each value is added up to make a total score. The scoring is done on the indicator items that appear when the observations are made. According to Arter and McTighe (2001) analytic rubrics are suitable for assessing complex student performance which has several dimensions. It is also used to provide specific information or feedback on student performance. Appropriate feedback or feedback provides an overview to find out in detail each indicator that requires attention from lecturers and students.

G. Research Procedure

1. Pre-observation

In this stage, the researcher makes observations before starting the research. In this case the researcher wants to find out the conditions or places that will be used for the research location, where this research was conducted on students of the English language education study program at IKIP PGRI Pontianak

2. Selection of research subject

Participants in this study were third semester students of the English language education study program at IKIP PGRI Pontianak. This study used 62 participants from each class in the third semester.

3. implementation of observations

Before distributing the questionnaires the researcher made observations, namely by entering the class to participate in and observe the process of implementing the presentations carried out by semester 3 students of the English education study program

4. Share and fill out the questionnaire

At this stage, the researcher distributed the questionnaire to participants in class A morning, B morning, A Afternoon and B afternoon,

with a total of 62 students and asked participants to fill out the questionnaire via a link that had been sent via WhatsApp connected to the questionnaire on the Google form.