CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher presents aspects used in conducting the research. They are including the research design, research subject, data collection, and data analysis.

3.1 Research Design

In a study, research design is considered as the basic component that influences the success of the research. There are two types of methodologies in research methods that can be used in research, namely *Quantitative* and *Qualitative*. According to Moore, as cited in (Balqis, 2018) *Quantitative* is research that analyzes trends, compares groups, or relates variables using statistical analysis and mathematical models to analyze and interpret numerical results by comparing them with previous research. Quantitative research can be classified into two, namely experimental and non-experimental. Meanwhile, according to Bogdan and Biklen, as quoted in (Balqis, 2018) *Qualitative* research allows researchers to focus on perceptions of behavior and experience. In other words, research data are mainly presented in forms such as examples, questionnaires, and interviews.

According to Denzin & Lincoln as cited in (Lewistianto, 2013) *Qualitative* research design focuses on explaining this research design also has qualitative information, such as observations, interviews, questionnaires and documents to understand and describe a social science and social phenomenon to enable researchers to study phenomenon-oriented and social culture. So this method can help to analyze students' difficulties in learning vocabulary at SMP Negeri 18 Malang. According to Lambert as cited in (Vidiarti, 2018), *Qualitative* descriptive is very useful when researchers want to know a particular event in detail about the content or results. In other words,

the data of this research are mainly presented in the form of words and pictures, including questionnaires and interviews. Furthermore, the aim of doing qualitative research is to find the fact of a situation or object.

In this study, researchers used Qualitative research with a descriptive approach. Using this Qualitative descriptive research because the research design is more flexible and developed, the data will be investigated from several phenomena that exist and are arranged naturally, emphasize meaning, analyze the data using words descriptively and reflectively rather than numbers and statistics. Qualitative research focuses on social phenomena and produces descriptive verbal such as setting, situation, and participants. In this study, the phenomenon that occurs is teaching and learning English activities at SMP 18 Malang. Researchers do not need to give special treatment to the research object, but only observe and describe the phenomenon without any manipulation.

3.2 Research Population and Sample

In this section, the researcher presents the classification of research data collection, techniques and instruments for collecting data, and the steps in collecting research data about analyzing students' difficulties in learning vocabulary in Class 7 SMP Negeri 18 Malang.

3.2.1 Population

The population and samples cannot be separated because they are connected in every aspect of the study. According to polit and Hungler as quoted in (Munawarah, 2022), Population is the entire group of people in which the researcher is interested, and the findings of the study can be generalized. The number of populations chosen is the number of students in one class. The researchers took seventh-grade students as a population in this study because some of them had difficulty studying vocabulary.

This research was conducted at SMPN 18 Malang by taking seventh grade students as the population. The population in this study was 264 seventh grade students from eight classes at SMPN 18 Malang, each class containing 33 students. According to Creswell as quoted in (Lewistianto, 2013) a population is a group of individuals who have the same characteristics. The reason why the population of this study was taken from one of the seventh graders of SMP Negeri Malang 2021 is that according to the survey, and the teacher's explanation for the seventh grade students still has a lot of vocabulary. Especially in seventh grade, some students have difficulty in learning and understanding vocabulary.

3.2.2 Sample

To determine the sample is called sampling. According to Fridah as quoted in (Vidiarti, 2018) Sampling is an act, process, or technique of choosing a suitable sample or part that represents a population for the purpose of determining parameters or characteristics of the entire population. Therefore, in this study, the method used to select the sample is simple random sampling.

In simple random sampling, each member of the population under study has an equal chance of being selected, and the probability of selecting a member of the population is not affected by the selection of other members of the population. According to Kothari as quoted in (Alqahtani, 2015) Simple random sampling is also known as probability sampling, where each item in the population has an equal chance of being included in the sample and each sample that may have an equal chance of being sampled is selected or fair. Therefore, this method is a very effective method because the population is known and determined by the researcher, so that the researcher can easily determine the sample without looking at differences between populations.

Samples were taken as representatives of the entire population to be treated in order to collect data in this study. Therefore, from the population of seventh grade students at SMPN 18 Malang, researchers took a sample of 64 students from eight classes as samples.

3.3 Data Collection

In this section, the researcher presents the classification of research data collection, techniques and instruments for collecting data, and the steps in collecting research data about analyzing students' difficulties in learning vocabulary in Class 7 SMP Negeri 18 Malang.

3.3.1 Technique and Instrument

In collecting research data, the researcher must first find the right techniques and instruments in obtaining research data. The techniques and instruments used in this study are as follows:

a. Observation

In qualitative research, one of the basic techniques for obtaining data is using observation. According to Fraenkel and Wallen as cited in (Saniyah, 2011) states there are two types of observations, non-participant observation and participant observation. In non-participant observation, the researcher does not participate in the activity being observed, but rather "sit on the sidelines" and watch. In this study, researchers were not directly involved in the situation they were observing at that time. If in participant observation, the researcher participates in the situation they observe. Researchers interact with group members as naturally as possible to collect data. Observations can be used to record data about events in observation activities. Observations can record how people react to a question, or a case and what their actions differ from what they say or mean.

In this study, the researcher uses non-participant observation because later, the researcher is not directly involved with the situation to be observed. Researchers only join online classes or have no effect on the learning process. This observation was made during the teaching and learning process in the online class. During this observation, the researcher used instruments in the form of a checklist and field notes to collect data about the difficulties experienced by students when learning vocabulary. Observations can help researchers to focus more attention on the problems that researchers want in-depth because researchers will better understand the actual condition of students.

b. Questionnaire

This study also uses a questionnaire to obtain maximum data. According to Pandey as quoted in (Lewistianto, 2013) the questionnaire is a design to obtain respondent data by using a particular question design according to the title being studied. This is because researchers need to know in detail the difficulties of students.

(Liyaningsih, 2017) Questionnaires are divided into two types, namely open questionnaires and closed questionnaires. Open questionnaire refers to allowing students to answer questions based on their own experiences. In comparison, the closed questionnaire refers to giving questions with a choice of each question. Then students will fill in the answers with references to answers that have been prepared by the researcher.

In this study, researchers will use open-ended questions to obtain data on students' difficulties in learning vocabulary based on the experiences faced by seventh-grade students in SMP Negeri 18 Malang. The researcher wants to identify their difficulties in learning vocabulary, what causes difficulties in learning vocabulary and how students fix

these problems. For filling out the questionnaire, students have no time limit on completing the questions in this questionnaire because of the online learning situation. And they will answer it without haste.

3.3.2 Procedure

This study aims to identify students' difficulties in learning vocabulary, the causes of vocabulary learning difficulties and how to overcome the difficulties faced by students when learning vocabulary. The steps taken by researchers to obtain research data are as follows:

- a. The researcher asked permission to conduct observations at SMP Negeri 18 Malang.
- b. The researcher discussed with the English teacher about the schedule of observation activities and giving questionnaires to students.
- c. Researchers prepared a checklist related to observations.
- d. After the checklist is ready, the researcher will conduct observations first.
- e. The researcher entered the online class and began to observe the students using nonparticipant observation techniques.
- f. During the observation, the researcher recorded all student conditions related to the formulation of the problems discussed in this study.
- g. After the observation activities have been completed, the researcher draws conclusions about the results of the observations which will later become the contents of the questions in the questionnaire.
- h. The researcher made a questionnaire based on the results of previous observations and related to the formulation of the problem in this study.
- i. Questionnaires are given to all students without any time limit so that students are not in a hurry when filling out.

- j. After the results of the questionnaire have been filled in and sent, the researcher then collects the research data obtained from the questionnaire.
- k. Then the researcher collected the conclusions and took research data obtained from observations and questionnaires.

3.4 Data Analysis.

The data obtained in the study were then analyzed. Researchers apply procedures to analyze the data, as follows:

- a. Displaying data from observations and preparing questionnaire data from observations for analysis.
- b. Classify appropriate research data based on observations and questionnaires.
- c. The research data is sorted according to the research objectives.
- d. The research data that has been obtained is then re-matched according to the literature of this study.
- e. Explain the research data on the analysis of students' difficulties in learning vocabulary
- f. Conclusions are drawn descriptively based on the results of the study.

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