

CHAPTER III

RESEARCH METHODS

3.1 Approach and Type of the Research

To carry out this research, the researcher employed a qualitative research approach. According to Harefa et al. (2022), qualitative research is a type of study that examines natural conditions with the aim of understanding and interpreting them. The approach used in this study is qualitative. Qualitative research seeks to understand the phenomena experienced by research subjects in a holistic manner, using descriptions in words and language within a specific natural context, and employing various scientific methods. Creswell (as cited in Murdiyanto, 2020) defines qualitative research as a process of investigating social phenomena and human issues. Additionally, qualitative research is described as a strategy to explore meanings, understandings, concepts, characteristics, symptoms, symbols, and descriptions of a phenomenon in a focused, multimethod, natural, and holistic manner, prioritizing quality, using several methods, and presented narratively in scientific research (Sidiq & Choiri, 2019).

Therefore, the qualitative approach research process begins with the development of basic assumptions. Then it is associated with the rules of thought used in the research. The data collected in the survey is then interpreted. Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem (Sarmila et al., 2023). Furthermore, qualitative research methods are research methods based on philosophy, which are used to research scientific conditions (experiments) where the researcher is the instrument, data collection techniques, and qualitative analysis emphasize meaning (Saputra & Riady 2024).

Thus, it can be concluded that qualitative research not only provides deep insight into phenomena, but also emphasizes the use of researchers as the main tool, as well as data collection and analysis techniques that are oriented towards understanding meaning.

3.2 Variables of the Research

Research variables are characteristics that can be observed, measured, or manipulated in a research. In a research context, these variables are used to understand or explain the relationships between various elements. Puspitasari, 2020 states that research variables are all forms of objects that become the focus of research and are observed during research to collect information about these objects from which conclusions can be drawn. Handayani et al., 2022 state research variable is attributes or behavior or values of people, object, or various activities determined by the researcher, in order to get information about the research and to draw the conclusion. There are two variables in the research namely independent variable and dependent variable. Purnamasari & Sari, 2024 state independent variables are variables that influence or are the cause of changes or the emergence of dependent variable. Meanwhile the dependent variable is a variable that is influenced by or is the result of the existence of an independent variable. There are two variables in the research namely independent variable and dependent variable. The dependent variable of this study is the students' vocabulary development while the independent variable of this study is Duolingo

3.3 Setting and Schedule of the Research

This research was conducted at SMKN 1 Bawolato. This research was conducted from July 2024 to August 2024, starting from submitting a research title in October 2023. In July 2024 researcher was conducted research by collecting data in the form of observation and interviews, followed by working on the results of field surveys.

3.4 Source of Data

There are two types of data used in this research, namely primary data and secondary data. Ibrahim in Haryoko, 2020: 122 states that all information, facts and facts that are related to research and have a very clear connection, even direct relationships are considered primary data, because this data is the main factor in determining the success or failure of a research. This process is referred to as primary data. This means that research cannot be said to be successful if it does not obtain this data. Meanwhile, secondary data is information, reality and facts related to research but not directly related to research, as well as supporting documentation related to primary data. This secondary data is more superficial and cannot capture

the depth of information, facts and realities that have been studied or investigated thoroughly, and as supporting data, the information is not very conclusive (not very proven), but can describe some of the research findings.

To obtain data that was used as research objects, researcher use several types of sources. Researcher use several previous research theories as initial data that can explain the phenomenon of using Duolingo in providing vocabulary learning to students. To analyze the use of the Duolingo application among students, especially tenth grade at SMKN 1 BAWOLATO as informants or respondents who are the main source of information in this research because the success of the research is based on the responses they provide. Researcher will carry out direct observations using observation sheets to obtain data about the role of the Duolingo application in providing vocabulary mastery to students and interview teachers based on interview guidelines. So in this research the primary data that researcher must obtain is data from observations of teachers and students in class and also interviews with teachers as informants which are then published in the form of interview transcripts, as well as data. From observations of teacher checklists.

3.5 Instrument of the Research

The research instrument was a written guideline for interviews, observations, and questions that were prepared to obtain information (Ovan & Saputra, 2020). According to Sukmawati et al., 2023 Research instruments are tools that use various types of information in research to be collected, processed quantitatively or qualitatively and then arranged systematically. The research instrument is a tool used in research to collect and obtain data so that the research carried out can be carried out easily. Based the explanation above, research instruments used by researcher in this study are observation and interview.

In this study, researcher used the participant observation. In participant observation, the researcher actually participate in the situation or setting they are observing. Interviews are a qualitative research method that collects data by asking questions. It includes three main types: structured, unstructured, and semi-structured interviews. In this study, researcher used structured interview guidelines.

3.6 Data Collecting Technique

Technique is the procedure how to get data. In this research the technique used by the researcher in the process of collecting data conducted includes observation and interview.

1 Observation

Observation is essentially an activity using the five senses, can be sight, smell, hearing, to obtain the information needed to answer a research problem. The results of observations are in the form of activities, events, objects, certain conditions or atmosphere, and one's emotional feelings. Observations are made to obtain a real picture of an event or events to answer research questions.

Kumar, 2022 argues that Observation is described as a method to observe and describe the behavior of a subject and it involves the basic technique of simply watching the phenomena until some hunch or insight is gained. Observation of people's behavior or work processes of a product resulting from research and development. In making observations, researchers see, listen, then take measurements with the instruments they carry.

2 Interview

Dursun, 2023 argues that interview is the process in which the researcher is asked various questions to the person participating in the interview and is trying to obtain information from the interviewer about a certain subject. Interview are used to collect data from subject about opinion, belief, and feelings about the situation in their own words. There are three kinds of interview model: structured interview, unstructured interview, and semi structured interview.

In this research, the researcher used the unstructured interview because the through the unstructured interview the researcher can explain the main question for long time and then the subject can talk in some depth about the information which the researcher needed. In conducting the interview, the researcher must pay attention to the attitude, appearance, and

body language of the interviewee when answering the researcher's questions. In collecting the data, the researcher use audio recorder, camera recorder, interview guidelines, and writing the result of the interview activity. There are three types of interview in qualitative research, namely:

- a. Unstructured interview
- b. Structured interview
- c. Semi-structured interview

3.6 Data Analysis Technique

In analyzing qualitative data, there are three stages of activity, namely: Data reduction, data presentation and drawing conclusions (Mezmir,2020). Based on opinion then the data analysis will be carried out following the steps as follows:

- a. Data Reduction
- b. Data Display
- c. Drawing Conclusion (Verification).

The conclusion in qualitative research that is expected is new discoveries that never existed before. The discovery of data in the form of a description or image of an object that was previously still dim so after research becomes clear. Display data stated above if it has been supported by solid data it can be made a credible conclusion. After the data is obtained in the above way, the researcher analyzes it by inductive thinking. Inductive thinking, namely: "Departing from the facts specific, concrete events, then from the facts or general conclusions are drawn from these particular events.