

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

In this study, the researcher used qualitative descriptive research. Creswell (2012: 16) explain that descriptive qualitative is the phenomenon of objects or social settings in the form of narrative writing formed with words or images that are combined from data (facts) that have been collected not containing numbers and excerpts from data (facts) disclosed in the field to support the report.

In this study, the researcher used a qualitative descriptive design to analyze and classify grammatical errors in written English in the second-grade students of SMK Negeri 1 Hulu Gurung. The process in this study involved setting questions that emerged, selecting participants and collecting the necessary data to answer the questions, and then the researcher would conduct the data analysis process before reporting the result in the thesis exam. The research refer to steps in conducting survey research as suggested by Creswell (2012: 403). This study focuses on the analysis of grammatical errors, what is done in the written text analysis of the research instrument is student writing in the form of qualitative data to find out the errors contained in the writing.

B. Population and Sample

Identifying the people and places planned to study might be concerned as the first step in the process of collecting qualitative data. This stage involves determining and selecting the individuals or communities which suit the needs of the research. Further explanation is provided below.

1. Population

A generalization area consisting of objects or subjects that have different qualities and characteristics determined by researcher who then conduct a study and conclusions can be drawn. This research was

conducted on the second-grade students of SMK Negeri 1 Hulu Gurung, Kapuas Hulu. The population of this study consists of two classes of Multimedia study program for the second-grade class in the school.

2. Sample

The sample is part of the population whose information is studied or studied by researchers and then the information is used as the conclusion of a study. Sugiyono (2018: 131) describe the samples in research as a group of subjects or participants with a number of characteristics that come from the group of population. This research involved the second-grade students of the multimedia study programs as the samples. From the multimedia study program, the researcher decided to involve the Multimedia 2B class consisting of 15 students as the main samples of the research as recommended by the English teacher. Despite the teacher's suggestion, the researcher also considered to use the students of Multimedia 2B due to their high frequency of grammatical mistakes after taking the writing test given when conducting the data collection, which makes this reason supported with the data collected.

In this study, the researcher used purposive sampling in selecting the samples. In the third apprenticeship program conducted by the university, where the research took part in, the place of the program happened to be in the school. In that time, the English teacher suggested to conduct this research to her second-year students as she also found a consistent number of grammatical errors made in her class. When this research was conducted, the researcher involved 15 second-grade students to do a writing test and 5 selected test takers to be interviewed.

C. Technique of Data Collection

In this study, the researcher used measurement and direct communication techniques to collect data. There were two data that are required to answer the research questions. The first is the types of grammatical errors made by the

students. This data was collected by using measurement technique. Ary *et al.* (2014: 113) illustrated measurement as a process through which observations are translated into numerical data by using tests. Another technique that was used to collect the data is direct communication where the researcher conducted an interview to the students to find out the causes of grammatical errors made by them in their English writing (recount text).

The whole plan used qualitative approach as also suggested by Creswell (2012: 403). Other than that, Arikunto (2013: 199) explains interview as an activity carried out by asking questions freely but still guided according to the interview guidelines. In this research, the researcher carried out the interview to collect information by asking several questions to respondents. This interview also was given after the students done the test of English writing. The initial plan was that the researcher visited the school after gaining the permission to conduct the research and collected the data by these techniques.

D. Tool of Data Collection

In this study, the researcher used two techniques, namely measurement and direct communication. For that reason, the researcher used a writing test for recount text and an interview as tools for data collection.

1. Writing Test

Writing test mostly plays a role in evaluating student learning outcomes based on knowledge about writing this written test. Ary *et al.* (2014: 215) defines a test as a set of standard stimuli presented to individuals in order to elicit responses on the basis of which a numerical score can be assigned, although the score can also be used to measure either cognitive or non-cognitive traits of the participant. In this research, an exercise on Recount Text for high school students was adopted into the test and it was taken from Buku Siswa Bahasa Inggris Kelas 11 Revisi 2017 by Bashir (2017). To sum up, the data from the test was used to answer the first research question that would describe the types of

grammatical errors made by the students in English writing, as well the most frequent errors to occur.

2. Interview

Interview is an activity where it is carried out orally or face to face between the interviewer and the respondent. The purpose of an interview activity is to obtain information that the interviewer requires to obtain a sufficient amount of information on the issues being studied (Ary *et al.*, 2014). The data from the interview was used to answer the second questions that would describe the causes of the grammatical errors made by the students in English writing. The researcher adopted several questions constructed by History (2015) on his bachelor's degree research. This interview was also based on a theory proposed by Richards (1997) that focuses on the main causes of grammatical errors made by students in English writing, namely interlingual and intralingual errors. It is important to note that all questions do not reflect only one cause of grammatical errors, instead the cause would be known based on the answers given by the students. Hence, the questions would find out the causes in general and the students' answers later would define what causes of grammatical errors they would have when doing the written test given before this interview. The following table shows the causes of grammatical errors as suggested by Richards (1997: 3-18):

No.	Causes of Grammatical Errors in English Writing
1.	Ignorance of rule restrictions
2.	First Language Interference
3.	False concepts hypothesized
4.	Overgeneralization
5.	Incomplete application of rules

3. Content Validity for Main Tool (Test)

Before the data collection was conducted in this research, a content validity was done to assess the validity of the tools being used later on. Ary *et al.* (2014: 245) illustrates a content validity is resulted mainly of a logical examination or analysis by content experts that the instrument adequately represents the content and objective making up the domain. This validity test involved an expert who has an expertise on grammatical errors made in English writing. Other than that, the instructions of the test in Appendix I were also assessed for clarity.

After deciding on the tools to collect relevant data, the researcher conducted the content validity before the main stage of data collection was begun. In this case, the researcher requests the English teacher at the school that teaches Multimedia 2B class, to validate the readiness of English writing test used in this research (see Appendix I). The aspects being assessed in the validity test were the instruction of the test related to how long it takes to finish the test, the topic of recount text, and what relevant points should the students include in the writing content. After being reviewed by the validator (i.e., the teacher), all aspects of the writing test are clear and the tool can be used to collect the data in the research.

E. Procedure of Data Analysis

In this study, researcher used qualitative data analysis techniques. Qualitative research aims to provide better knowledge through direct experience of factual reports or according to facts (Creswell, 2012). The data analysis procedure was divided into two stages since the researcher used two different tools of data collection.

1. Analyzing Data from the Writing Test

After giving the writing test to the students, the researcher used a qualitative approach to analyze the data, namely content analysis. According to Ary *et al.* (2014: 488), content analysis is a qualitative data analysis procedure applied to written or visual materials for the purpose of

identifying specified characteristics of the material and it is widely used in educational studies, whose one of the uses is to analyze types of errors in students' writing. However, the whole data analysis process followed the procedure used in a study conducted by McDowell (2020) because this research has the same purpose, which was to analyze grammatical errors in English writing. The steps consist of four distinct stages and they are as follow:

1) Proofreading

At this stage, the researcher identified and provided the possible correct grammar to the errors made by the students in the writing test. This procedure utilized Grammarly (an AI-powered writing assistant that reviews spelling, grammar, punctuation, clarity, engagement and delivery mistakes). This may not be common in error analysis but there are studies that support it (see Ismawati, 2021; Soegiyarto *et al.*, 2022; Vidhiasi & Haryani, 2020). The researcher diagnosed the errors according to the theory proposed by James (2013). After the proofreading is done, the researcher also double-checked the result with the English teacher at the school, where this research was conducted. This is to avoid the bias of the analysis result.

2) Coding

After grammatical errors of all writing done by the students have been identified in context and marked up, the sentences containing errors would be copy-pasted over to an Excel spreadsheet for coding. In the worksheet later, four columns were created with headings of sentence code, sentence with errors, error types, grammatical error, and reconstruction (correct sentence) as in order.

3) Quantification

After all sentences with errors are encoded, the researcher quantified the frequency of errors according to the types of errors made by the students in their writing. In this case, the researcher used the formulas from the Excel to quantify the frequency.

4) Sorting

Finally, the researcher sorted the error frequency from the highest to the lowest. This helps us to see the most frequently made error patterns from the students' writing more easily.

2. Analyzing Data from Interview

After interviewing the students, the researcher used a qualitative approach to analyze the data, namely thematic analysis. This was done to find out the causes of grammatical errors by the students in their English writing. However, the whole data analysis process followed the procedure as suggested by Creswell (2012). The steps consist of three distinct stages and they are as follow:

1) Preparing the data for analysis

The researcher collected the recording and coded the name of the file according to the details of the samples, such as initials. Then, the transcriptions were made, where the researcher converted the audio recording into text data.

2) Coding the data

After the data has been transcribed, the coding process would begin. The researcher made sense out of text data throughout, categorize them into segments and label them with codes. Then, the researcher examined the codes to make sure that there was no code that overlaps one another. After this, the codes were categorized into broad themes.

3) Building the themes from the codes

After the coding process is done, the researcher categorized them into themes including the process of writing, and the causes of grammatical errors made by the students in English writing, which are based on the theory proposed by Richards (1997) and based on indicators in a research by History (2015). The following table shows the causes:

No.	Causes of Grammatical Errors in English Writing
1.	Awareness of grammatical error
2.	Pre-writing stage
3.	Proofreading
4.	Strategy to avoid grammatical errors
5.	Interlingual error
6.	Intralingual error