

CHAPTER III

RESEARCH METHOD

3.1 Approach and Type of the Research

A research method is a systematic approach used to collect, analyze, and interpret data in order to answer specific questions, test hypotheses, or investigate phenomena within a particular field of research. According to Arikunto as quoted by Suprihartini et al. (2023: 36) research method is the primary approach used by researcher to achieve objectives and determine answers to the problems posed. In addition, Osuagwu (2020: 48) conveys that research methods, generally, include designing studies, collecting data, analyzing collected data, testing for relevant relationships/differences between/among variables, making sense out of research findings and reporting the findings to the relevant audience in the appropriate format.

Since this research was addressed to analyze the content of the textbook especially reading exercises in the textbook, the researcher used the qualitative research method that applied descriptive research as its framework. Jagat et al. (2024: 277) define qualitative method as an activity that produces discoveries, both discoveries in learning and other things, then the discoveries are described in writing or not using numbers. On the other hand, Atmowardoyo (2018: 198) states that descriptive research is a research method used to describe the existing phenomena as accurately as possible.

Furthermore, to identify the distribution of Higher Order Thinking Skills in the reading exercises of the textbook, the researcher used content analysis. Nasrullah (2022: 88) mentions that content analysis is a research method for the subjective interpretation of text data content through a systematic classification process, coding, and identifying themes or patterns. The qualitative method with a descriptive framework and content analysis was appropriate for this research as it focused on analyzing the distribution of Higher Order Thinking Skills (HOTS) in the reading exercises of the textbook "*English for Nusantara*". This approach enabled a systematic description of phenomena based on Bloom's Taxonomy and facilitated the identification of Higher Order Thinking Skills (HOTS) elements.

3.2 Variables of the Research

A research variable is a characteristic, number, or quantity that can be measured or counted in research. Sugiyono in Ummah (2024: 1902) states that research variable is defined as an attribute, trait, or value of a person, object, organization, or activity that has certain variations determined by the researcher and from which conclusions are drawn. Sudaryono in Loliyana et al. (2023: 67) also defines research variable as anything determined by the researcher to be studied in order to obtain information about it, which is then used to draw conclusions.

Generally, there were two types of research variables in this research, namely independent variable and dependent variable. Haqul in Nasution (2017: 2) explains that the dependent variable is the variable that is influenced by one or more other variables, while the independent variable is the variable that exerts an influence on other variables.

Based on the explanation above, independent variable of this research was Bloom's Taxonomy theory. Meanwhile, dependent variable of this research was reading exercises in the textbook.

3.3 Setting and Schedule of the Research

The location of the research was SMP Negeri 1 Gunungsitoli Barat located at Sihareo Siwahili village, Gunungsitoli Barat district, Gunungsitoli city as the user of the textbook "*English for Nusantara*" for the eighth grade. The researcher conducted the research on February 10th – March 10th 2025.

3.4 Source of Data

The resources data for the research was textbook "*English for Nusantara*" content particularly the reading exercises for the eighth grade of Junior High School. The textbook was composed by Ministry of Education and Culture of Indonesia in 2022.

Furthermore, the researcher analyzed the content of the textbook, particularly the reading exercises, which were limited to essay-type questions only. The reading exercises were analyzed based on Bloom's Taxonomy to examine the presence of Higher Order Thinking Skills (HOTS).

3.5 Instrument of the Research

A research instrument is a tool used to collect, measure, and analyze data for research. According to Mahohoma & Agbenyegah (2024: 41) research instrument is defined as a specific tool used to collect data, such as a questionnaire, survey, interview guide, or observation checklist. Thus, determining the instrument is very crucial in this research.

To collect the data of this research, the researcher needed to prepare instrument of the research namely a checklist table. The checklist table was used as the instrument to answer the research questions and fulfilled the research objectives. It was used to assess the availability of Higher Order Thinking Skills (HOTS) from the reading exercises.

This instrument was used as a tool to obtain data and answer the first and second research questions, namely, regarding the distribution of Higher Order Thinking Skills (HOTS) in the reading exercises of the textbook “*English for Nusantara*” and the most commonly used Higher Order Thinking Skills (HOTS) skills in the reading exercises of the textbook “*English for Nusantara*”. The detailed form of the checklist table is provided in the following table.

Table 3.1 Checklist Table of the Distribution of Higher Order Thinking Skills in the Reading Exercises

Chp	Page	No	Reading Exercises	Bloom’s Taxonomy Levels of Thinking					
				LOTS	MOTS		HOTS		
				C1	C2	C3	C4	C5	C6
1	1	1	...						
Total									
Percentage									

Adapted from Saputra in Astuti (2023: 52)

3.6 Data Collecting Technique

A data collection technique is a method or system used to gather information for research purposes. Data can be in the form of statistics, measurements, opinions, or other factual information. Sukmawati et al. (2023: 119) state that data collection is defined as research activities that aim to collect field data needed to answer research questions in qualitative research or to test hypotheses in quantitative research.

According to Sugiyono in Fairuz (2024: 423) the fundamental method rely on by qualitative researchers for gathering information is participation in the setting, direct observation, in-depth interviewing, and documentation review. In this research, the data collection technique used by the researcher was document review, which entailed several activities in analysis, such as:

a. Reading

In this stage, the researcher read the *English for Nusantara* textbook, specifically the reading exercises. The goal was to gain a comprehensive understanding of the material within the reading activities and identify elements that could be connected to the research focus.

b. Identification

The researcher identified each question in the reading exercises to determine the level of thinking required. Each question was categorized as either LOTS (Lower Order Thinking Skills), MOTS (Middle Order Thinking Skills), or HOTS (Higher Order Thinking Skills) based on the complexity of thought required.

c. Classification

In this stage, the researcher classified each identified question according to the cognitive levels in Bloom's Taxonomy. Each question was placed into the appropriate category such as C1, C2, C3, C4, C5, C6, using the checklist table in the research instrument to ensure systematic and structured classification.

d. Simplification

The researcher consolidated all Higher Order Thinking Skills (HOTS)-related data from the classified questions. The simplification process specifically focused on questions categorized as C4 (Analyzing), C5 (Evaluating), and C6 (Creating), as these three levels represent the Higher Order Thinking Skills in Bloom's Taxonomy. Questions falling under Lower Order Thinking Skills (C1–C3) were excluded, as they were not within the scope of this study.

e. Analysis

After classification and simplification, the researcher conducted a detailed analysis to assess how frequently Higher Order Thinking Skills (HOTS) were applied in the reading exercises. This analysis enabled the researcher to evaluate the distribution of higher-order thinking skills in the textbook and conclude whether it effectively trains students to develop Higher Order Thinking Skills (HOTS) according to Bloom's taxonomy.

3.7 Data Analysis Technique

Data analysis in research is the process of examining and organizing the data collected to find patterns, relationships, or answers to research questions. To enhance the researcher's comprehension of the subject under investigation and present it as findings for others, data analysis is used to methodically examine and arrange records of observations, interviews, and other sources.

Therefore, after obtaining the required data through research instrument and several activities of data collecting, the researcher analyzed the data based on Bloom's Taxonomy. In this research, the researcher used qualitative data analysis that follows the Miles and Huberman's model (1992) in Rijali (2018: 83). The model consists of four key steps, namely data collection, data reduction, data display, and conclusion drawing and verification.

a. Data Collection

This step involved gathering all relevant data needed for the research. In this research, the researcher collected data from the textbook "*English for Nusantara*" specifically focusing on the reading exercises. These exercises served as the primary data source and were used for analysis to determine the presence and distribution of Higher Order Thinking Skills (HOTS).

b. Data Reduction

The data reduction process involved systematically organizing and simplifying the raw data to make it manageable and focused. First, the researcher compiled all the reading exercises from the textbook and recorded them in a checklist table provided in the research instrument. Next, the researcher classified the reading exercises based on the cognitive levels in

Bloom's Taxonomy, namely C1 (Remembering), C2 (Understanding), C3 (Applying), C4 (Analyzing), C5 (Evaluating), and C6 (Creating). Since this research specifically investigates Higher Order Thinking Skills (HOTS), the researcher then reduced the data by excluding all questions categorized under C1 to C3, which represent Lower and Middle Order Thinking Skills. Only questions classified as C4, C5, and C6 were retained for further analysis, as they reflect the core dimensions of HOTS.

c. Data Display

In this step, the researcher created a visual or structured display of the relevant data to facilitate interpretation. Specifically, the researcher listed the questions that fall under Higher Order Thinking Skills (HOTS) and organizes them into the three cognitive levels: *Analyze*, *Evaluate*, and *Create*. The frequency of Higher Order Thinking Skills (HOTS) distribution was then calculated using a percentage formula proposed by Sudijono in Astuti (2023: 57):

$$P = \frac{f}{N} \times 100\%$$

P : The percentage of HOTS distribution.

f : The frequency of reading HOTS question.

N : The sum of items.

d. Conclusion Drawing

Finally, the researcher synthesized the findings to draw conclusions. Based on the displayed and analyzed data, the researcher determined the extent to which Higher Order Thinking Skills (HOTS) were distributed across the reading exercises in the textbook. This step involved verifying the conclusions against the research objectives and presenting them as answers to the research questions.