CHAPTER III

RESEARCH METHOD

This section covered the research's methodology. It consisted of the research design, data source, data collection, data analysis, research instrument, and research validity.

A. Research Design

The researcher's plan for gathering and analyzing data is outlined in the research design. Research design, according to Ary et al. (2010: 426), is the researcher's strategy for going forward in order to properly understand a group or a phenomenon in its environment. To conduct the research in accordance with these concepts, the researcher needed design analysis. Educational research divided into two major types of research by Ary et al. (2010:22): quantitative research and qualitative research. Quantitative research utilized objective measurement and statistical analysis of numerical data to completely comprehend and clarify the phenomena. In comparison, qualitative research focused on understanding social processes through the perspectives of the study's human subjects.

To investigate and understand what individuals or groups see as a social or human problem, qualitative research is used (Creswell, 2003). It is used to identify the causes of social phenomena and how they occur. In the qualitative methodology, descriptive analysis was one of many types of data analysis. The researcher utilized a descriptive qualitative design to address the goal of this study, which is to evaluate an English textbook for students in the eleventh grade with a focus on reading questions. The researcher is additionally interested to determine if any of the

reading presented in the textbook "*Bahasa Inggris Kelas XI*" strongly aligned with the goal of 2013 curriculum, particularly HOTS based on the updated Bloom's taxonomy. In this study, the researcher used a qualitative descriptive research design, which is a research design that attempted to describe and interpret objects related to reality. The descriptive design is chosen because the data analysis will be provided descriptively. The goal of descriptive study is to gather information regarding current phenomena issues (Ary et al., 2010). The material being evaluated can include textbooks, newspapers, web pages, television shows, speeches, commercials, musical compositions, and a wide range of other types of media. As a result, the researcher evaluated text (the textbook material) rather than numerical data in this study. Documents can be a helpful source of data for qualitative research, in line with Creswell (2012). A few examples of the public and private records that qualitative researchers obtain about a study location or its participants include newspapers, meeting minutes, personal notebooks, and letters. These resources offered insightful data that researcher can use to comprehend key phenomena in qualitative studies.

B. Place and Time of the Study

Since this research is a document analysis, no exact location was required. This indicates that the research can be conducted at any time and from any location. The research was conducted in February until April of 2023. This study uses a textbook that includes higher-order thinking skills in the reading questions, then the researcher analyzed the reading questions using HOTS of updated Bloom's taxonomy. The English textbook entitled "*Bahasa Inggris Kelas XI*" published by the Indonesian Ministry of Education and Culture is used for eleventh grade students was chosen for this reason. This textbook contains many reading sections and reading questions. Another reason, using

this textbook to support the implementation of 2013 curriculum as part of the Ministry of Education and Culture.

C. Source of The Data

According to Creswell (2015), document analysis is a reliable source of text data for qualitative research. He explained that by using textbooks, essays, newspapers, novels, magazines, articles, pictures, songs, and public or private documents, this data analysis will be used to fully understand the key phenomena. In this study, the English textbook entitled "*Bahasa Inggris Kelas XI*" published by the Indonesian Ministry of Education and Culture for eleventh grade students served as the research's primary source of data. This textbook is used to gather the reading questions from the English textbook that support HOTS using the updated Bloom's taxonomy. According to Ary et al. (2010), the primary data are facts that researchers have gathered or directly obtained from the source. Primary data is frequently referred to as the initial data or new data with current properties. Ary et al. (2010) state that the secondary data refers to data that a researcher collected from sources that are already in existence or uses as earlier information. The cognitive dimension analysis guide is the secondary data source. The analysis guide serves as a guide to determine the cognitive domain level for each reading question. By understanding the six cognitive levels based on the updated Bloom's taxonomy. The cognitive domain analysis is adapted from Anderson et al. (2001), Igbaria (2013) and Gordani (2010). The two above-mentioned types of data must serve as the foundation for deciding how to gather the data.

D. Data Collection

The researcher's method for gathering data in this study is documentation. The researcher used documentation as a method of data collection because it is a written-based

method, similar to a textbook. According to Ary et al. (2010) in order to fully understand the phenomenon being studied, Written sources or other artifacts may be examined by qualitative researchers. In addition to non-written records like photos, audiotapes, videotapes, and computer files, it is possible to analyze written or text-based artifacts like books, journals, meeting minutes, logs, announcements, policy statements, newspapers, transcripts, birth certificates, marriage records, budgets, letters, and e-mail messages. Gathering information is the process of data collection. The researcher observed the data gathering stages through the textbook to figure out reading questions in the English textbook for the eleventh grade of senior high school. Then, the reading questions were collected and made into a list. According to Anderson et al. (2001) the researcher then organized every reading question using the checklist table. Following that, the researcher integrated all of the cognitive level from the updated Bloom's taxonomy in the checklist table to determine the cognitive domain level, specifically in HOTS.

Table 3. 1 Checklist Table of Cognitive Domain in Reading Questions

Chapter	No.	Reading Questions	Cognitive Dimension of Updated Bloom's Taxonomy					
			LOTS (Lower Order Thinking Skills)			HOTS (Higher Order Thinking Skills)		
			C1	C2	C3	C4	C5	C6

E. Research Instrument

The tool or facility the researcher used to gather data is referred to as the research instrument. In which the data were crucial in helping the researcher in answering the research questions. According to Arikunto (2010), a research instrument is chosen as a supporting tool to collect data in order to facilitate the researcher. The researcher used an instrument in this study. The researcher was the primary instrument used in this study (Creswell, 2009). In this study, the main instrument for data collection was the researcher herself. It can be concluded that the researcher was the primary instrument.

F. Data Analysis

After obtaining the data from the textbook for this research's document. The following steps were used by the researcher for analyzing the data using an analysis procedure based on Miles & Huberman (1994, p. 10). The systematic collection of data is referred to as a data analysis methodology, which helps in the drawing of findings by researchers. The correct data analysis technique will make it easy to form conclusions. According to Miles and Huberman (1994, p. 10), data analysis involves three continuous activities: reducing data, display data, and drawing conclusion. The three points listed below will be examined in greater depth:

1. Reducing Data

The data is reduced by the researcher after it has been gathered and examined. Reducing data is the process of choosing, collaborating, and simplifying data in a document. The data is first sorted by the researcher’s evaluation of its relevance to the research question. The stage is to compare and examine how higher order thinking skills are distributed among reading questions. At this stage, a table form with lists of

questions from each chapter's reading questions and the updated Bloom's taxonomy's cognitive skill checklist is used.

2. *Displaying Data*

The following stage is to display data, which is a means of organizing data in order to make connections and make the data easier to interpret. The data were presented in a narrative format in this stage. Along with that, there was an explanation of how reading questions were distributed among the categories of higher order thinking skills that have been identified.

3. Drawing conclusion

Drawing conclusion is a final stage process performed by researchers in data analysis that involves drawing conclusions based on data collection and analysis. The number of reading questions in this step is determined by the percentage of each higher order thinking skills, such as analyze (C4), evaluate (C5), and create (C6). The result of the distribution table of higher order thinking skills identified in reading questions then would be explained in narrative format, along with the dominant cognitive domain of the higher thinking skills.

G. Triangulation

Data in a qualitative study can be considered great if it is valid. To determine the accuracy of the data. According to Creswell (2009) categorized the data's validity. Triangulation is one of them. Triangulation is the process of using evidence from several sources of information to create a clear and concise justification for a particular theme. Furthermore, according to Creswell (2009), four kinds of triangulation that are data triangulation, expert triangulation, investigator triangulation, and theory triangulation. The researcher used investigator triangulation to determine the validity of the data from

these types of triangulations. It is more appropriate to use it to look into the analysis that require more researchers to evaluate its quality. In order to acquire comparisons regarding research results, the researcher triangulated by inviting various investigators or distinct specialists to provide an assessment of the research process, specifically validating the results of the data analysis. As a result, the researcher invited a HOTS questions specialist, who participated at several of HOTS-related conferences and training sessions as the first validator, Bambang Yulianto, M.Pd. Then, the researcher also invited the second validator that is Yogi Rohana, M. Hum. as an English lecturer who is who often handles reading classes at the State Islamic Institute of Kediri to check the accuracy of data referring from the textbook's reading questions. The researcher and the investigators observed questions of the textbook. The researcher then compared the findings, had a joint discussion, and presented the findings to produce a complete result. As a result, to verify the validity of the data analysis findings, the researcher employs investigator triangulation. The data analysis is valid if the investigator's data are accurate. However, if the investigator's data is incorrect, the analysis of the data is invalid.