

CHAPTER III

RESEARCH METHOD

A. Research Design

The method used in this study is descriptive qualitative content analysis, which aims to provide insight into the analysis of HOTS/LOTS questions in English Worksheet. Content analysis is a research method used to examine, interpret, and categorize textual data according to a specific analytical framework. In this study, the framework is the Revised Bloom's Taxonomy developed by Anderson and Krathwohl (2001).

According to Cresswell (2001) qualitative research involves testing objective theories by examining relationships between variables, which are measured using instruments to produce numerical data that can be statistically analyzed. Quantitative research relies on concrete data expressed in numerical form, analyzed statistically to address the research problem and draw conclusions. This research is categorised as descriptive qualitative research because it analyses and describes the cognitive level represented in student worksheet using percentages to analyse the level of thinking demonstrated in the questions.

B. Data and Source of Data

The data of this study is English Worksheet unit 4 and 5 used in senior high school during the 2025/2026 academic year. Source of data in this study is Higher Order Thinking Skills (HOTS) and Lower Order Thinking Skills (LOTS) question activity in reading text on English Worksheet for Eleventh-Grade Students.

C. Technique of Collecting Data

In this research, researcher use techniques to collect the data by using a tool in the form of paper that contains all the questions, then check and tick the part that is in accordance with cognitive theory.

1. Checklist Table

A checklist is a list in which the respondent only checks the appropriate column with a check mark. The following analysis sheets used in this study is the quality analysis sheet of HOTS and LOTS questions categories from Anderson and Krathwohl's Revised Bloom Taxonomy (2001). The question quality analysis sheet takes the following format:

Table 3. 1 Dimensions of Thinking Processes Proposed by Anderson & Krathwohl (2001)

Level of Thinking	Category of Cognitive Dimension	Aspect	Operational Verb
LOTS (Lower Order Thinking Skill)	C1 (Remember)	1. Recognizing (Retrieve knowledge from long-term memory to compared to new knowledge) 2. Recalling (Retrieve relevant knowledge from long-term memory when needed)	Choose, Define, Find, How, Label, List, Match, Name, Omit, Recall, Relate, Select, How, Spell, Tell

Higher Order Thinking Skill (HOTS)	C2 (Understand)	1. Interpreting (Changing form one form of representation) 2. Exemplifying (Finding a specific example of illustration of a concept or principle) 3. Classifying (Determining that something belongs to a category) 4. Summarizing (Abstracting a general theme or major point) 5. Inferring (Drawing a logical conclusion from presented information) 6. Comparing (Detecting correspondences between two ideas, object) 7. Explaining (Constructing a cause-and-effect-model of system)	Classify, Compare Contrast Demonstrate Explain Extend Illustrate Infer Interpret Outline Relate Rephrase Show Summarize Translate
	C3 (Apply)	1. Executing (Applying a procedure to a familiar task) 2. Implementing (Applying a procedure to an unfamiliar task)	Apply, Build, Choose, Construct, Develop, Experiment with, Identify, Interview, make use of, Model, Organize, Plan, Select, Solve, Utilize
	C4 (Analyze)	1. Differentiating (Distinguishing the parts relevance or importance of a structure) 2. Organizing	Analyze, Assume, Categorize, Classify, Compare, Conclusion, Contrast,

		(Determining how elements fit or function within a structure) 3. Attributing (Determine angle point of view, opinion, value, or intent underlying presented material)	Discover, Dissect, Distinguish, Divide, Examine, Function, Inference, Inspect, List, Motive, Relationships, Simplify, Survey, Take part in, Test for, Theme
	C5 (Evaluate)	1. Checking (Detecting Inconsistencies or fallacies within a process or product) 2. Critiquing (Detecting Inconsistencies between a product and external criteria)	Agree, Appraise, Assess, Award, Choose, Compare, Conclude, Criteria, Criticize, Decide, Deduct, Defend, Determine, Disprove, Estimate, Evaluate, Explain, Importance, Influence, Interpret, Judge, Justify, Mark, Measure, Opinion, Perceive, Prioritize, Prove, Rate, Recommend, Rule on, Select, Support, Value
	C6 (Create)	1. Generating (Coming up with alternative hypotheses based on criteria) 2. Planning (Devising a procedure for accomplishing some task) 3. Producing (Inventing a product)	Adapt, Build, Change, Choose, Combine, Compile, Compose, Construct, Create, Delete, Design, Develop, Discuss,

			Elaborate, Estimate, Formulate, Happen, Imagine, Improve, Invent, make up, Maximize, Minimize, Modify, Original, Originate, Plan, Predict, Propose, Solution, Solve, Suppose, Test, Theory
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Table 3. 2 Question Quality Analysis Based on Bloom's Taxonomy Revised by Anderson & Krathwohl (2001)

Question No.	Indicator						Description
	LOTS (Lower Order Thinking Skill)			HOTS (Higher Order Thinking Skill)			
	C1	C2	C3	C4	C5	C6	
1							
2							
3							
Etc.							

Note: Fill in the indicator criteria for the question above by giving a sign (*) along with the information.

D. Technique of Data Analysis

Data analysis is the process of systematically searching and compiling data obtained from interviews, field notes, and documentation by organizing the data into categories, describing them in units, synthesizing, arranging into patterns, choosing which ones are important and which are studied, and making conclusions.

The data used in this study only consists of English worksheets for eleven grade senior high school students for the 2025/2026 academic year, which are:

1. Student's English Worksheets
2. Question activity in reading texts student's English worksheets.

Table 3. 3 Revised Bloom Taxonomy Keywords and Thinking Level

Category	Key Word	Thinking Level
Remember	Choose, Define, Find, How, Label, List, Match, Name, Omit, Recall, Relate, Select, Show, Spell, Tell	LOTS
Understand	Classify, Compare, Contrast, Demonstrate, Explain, Extend, Illustrate, Infer, Interpret, Outline, Relate, Rephrase, Show, Summarize, Translate	
Apply	Apply, Build, Choose, Construct, Develop, Experiment with, Identify, Interview, Make use of, Model, Organize, Plan, Select, Solve, Utilize	