

CHAPTER II

LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Textbook

a. Definition of the Textbook

A textbook is an instructional book containing comprehensive information about a specific subject and used as a standard work for students in educational settings. According to Rahmawati (2015: 106) textbook is a book that contains descriptions of materials on certain subjects or fields of research that are arranged systematically and have been selected based on specific objectives, learning orientation, and student development to be assimilated. In addition, Sakti & Hotimah (2023: 60) convey that textbook is a book used in schools that contains certain subject matter to be used as a learning resource for students. Subsequently, Sari (2020: 9) defines textbook as a book that is deliberately used to assist the learning process that is compiled based on scientific fields and regulations.

Woodward & Eliot as cited by Gultom et al. (2024: 507) state that the importance of a textbook in education cannot be denied. First, textbooks serve as the main source of information for students, presenting key concepts, facts, and theories that must be mastered in accordance with the applicable curriculum. Second, textbooks guide teachers in planning and implementing learning, ensuring that the material taught is aligned with the established competency standards. Third, textbooks can facilitate independent learning outside the classroom, allowing students to explore topics further and develop in-depth understanding

From the explanation above, it can be concluded that a textbook can be defined as a systematically organized instructional book designed as a learning resource to support the educational process, tailored to specific objectives, subjects, and student development. It means that a textbook is a purpose-built educational resource that presents subject matter in an

organized and methodical way, specifically crafted to facilitate teaching and learning. Its content is carefully structured and adapted to align with particular educational goals, course subjects, and the developmental stage of its intended learners, making it an essential tool in the formal education process. The systematic organization ensures that knowledge is presented in a logical sequence that supports effective learning and comprehension.

b. Function of the Textbook

The function of a textbook serves as a cornerstone in the learning process, providing structured content, guidance, and resources to support both teaching and student comprehension. According to Sitepu as cited by Anisah & Azizah (2016: 5) a textbook serves as a manual guide for students in learning and for teachers in teaching students for a particular field of research or subject. Nurhidayati (2018: 484) also states that a textbook as a provider of learning activities will be able to direct the achievement of the desired competencies. In addition, Nisja (2018: 163) says that with the presence of textbooks, students are guided to practice, apply, or experiment with the theories they have learned.

Textbooks serve various functions that support the learning process for both teachers and students. As one of the primary resources in education, their presence significantly contributes to achieving the designed learning objectives. Sakka (2015: 53) mentions five functions of the textbook, namely:

- 1) As a reference or source materials for students.

Textbooks provide structured and reliable information that students can use to understand topics and complete assignments.

- 2) As evaluation material.

Textbooks often include exercises, quizzes, or activities that help assess students' understanding and progress.

- 3) As an aid for educators in implementing the curriculum.

Textbooks align with the curriculum and serve as a guide for educators to plan lessons and deliver content effectively.

- 4) As one of the determinants of the teaching methods or techniques that educators will use.

The content and structure of textbooks influence the teaching strategies and approaches educators choose.

- 5) As a means to support career advancement and promotions.

Using high-quality textbooks and achieving positive learning outcomes can enhance an educator's professional reputation and opportunities for career growth.

Meanwhile, Yarsela et al. (2021: 279) divide the function of a textbook into two main parts, namely the function of textbooks for teachers and the function of textbooks for students as described below.

- 1) The function of the textbook for teachers
 - a) Saves educator's time in teaching.
 - b) Shifts the role of educators from being instructors to facilitators.
 - c) Enhances the learning process to become more effective and interactive.
 - d) Serves as a guide for educators to direct all their activities during the learning process, providing the essential competencies that should be taught to students.
 - e) Functions as an evaluation tool for assessing the achievement or mastery of learning outcomes.
- 2) The function of the textbook for students.
 - a) Allow students to learn without requiring the presence of a teacher or fellow students.
 - b) Enables students to research anytime and anywhere they choose.
 - c) Supports students in learning at their own pace.
 - d) Empowers students to follow a sequence of learning based on their own preferences.
 - e) Helps develop students' potential to become independent learners.

- f) Acts as a guide for students to direct all their activities during the learning process, providing the essential competencies they should learn and master.

From the explanation above, it can be concluded that the function of the textbook is multifaceted, serving as a crucial tool that benefits both educators and students in the learning process. For educators, textbooks save time, provide structured guidance aligned with the curriculum, and act as a resource for planning lessons, evaluating learning outcomes, and enhancing teaching effectiveness. For students, textbooks offer a reliable source of information, enable independent and flexible learning, and facilitate the development of essential competencies through structured activities and resources. Overall, textbooks not only support the achievement of learning objectives but also contribute to fostering interactive and efficient educational experiences while promoting both teacher and student growth.

c. Criteria of the Textbook

According to Akhmad et al. (2022: 128) the criteria of the textbook is divided into nine criteria as described below.

- 1) The textbook must be interesting and attractive toward the learners.
- 2) The textbook must be ready to motivate the learners.
- 3) The contents of the textbook must be illustrative.
- 4) The textbook should consider the linguistic aspect.
- 5) The textbook must stimulate the private activity of the learners.
- 6) The contents of the textbook must be clear in writing to avoid confusion.
- 7) The textbook must have clear point of view.
- 8) The textbook must be ready to balance and emphasize the learners' worth.
- 9) The textbook must be ready to reference the differences of the individual.

Meanwhile, according to the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 8 of 2016 concerning Books Used by Educational Units, as outlined in the Technical Guidelines for the Handbook of Books Used by Educational Units, it is explained that the criteria for textbooks in terms of content must meet five criteria as follows.

- 1) It must maintain the truth and accuracy of the material, the currency of data and concepts, and support the achievement of national educational goals.
- 2) It must use theoretically and empirically valid sources of material.
- 3) It must encourage the development of independence and innovation.
- 4) It must be able to motivate individuals to develop themselves.
- 5) It must promote unity and national cohesion by accommodating diversity, fostering mutual cooperation, and respecting various differences.

In conclusion, the criteria of the textbook are essential to ensure that the material is not only engaging and motivating for learners but also effective in promoting their development and understanding. Adhering to these criteria guarantees that the content is accurate, relevant, and conducive to achieving educational goals while respecting the diversity of learners. A well-designed textbook fosters critical thinking, independence, and innovation, empowering students to take ownership of their learning. Additionally, it supports the creation of a cohesive and inclusive learning environment that values cultural diversity, encouraging mutual respect and cooperation among students.

d. Types of the Textbook

According to Tarigan as cited by Hariyadi & Ramaniyar (2021: 216) the types of the textbook is divided in to two main parts, namely the types based on the writing method of the textbook and the types based on the number of authors of the textbook, as explained below.

1) Types of the textbook based on the method of writing

- a) A single textbook is a textbook that consists of only one book.

A single textbook refers to a standalone textbook, typically covering the entirety of a specific subject or course within a single volume. It is commonly used in situations where the content required for the course can be condensed into one comprehensive book.

- b) A multi-volume textbook is a textbook for a specific class or educational level.

A multi-volume textbook is a set of textbooks designed to cover a particular class or educational level. Each volume focuses on a specific part of the curriculum or subject area, and the series is often structured to cater to the progression of learning throughout the academic year.

- c) A series of textbook is a multi-volume that covers several educational levels, such as from elementary school, middle school, to high school.

A series of textbook refers to a collection of multi-volume textbooks that span several educational levels, such as from elementary school through high school. These textbooks are typically organized to provide a seamless learning experience as students advance through different stages of education, with each volume building upon the previous one.

2) Types of the textbook based on the number of authors

- a) A sole author is an author who prepares a specific textbook alone.

This textbook is a textbook written and prepared by a single individual. This type of textbook is typically characterized by a consistent writing style and vision, as one author is responsible for the entirety of the content and presentation of the material.

- b) A group of authors is a team of individuals who collaborate to prepare specific textbook.

This textbook refers to a team of writers who collaborate to create a textbook. This approach allows for a diverse range of expertise and perspectives to be incorporated, often resulting in a textbook that covers a broad range of topics and presents information from multiple viewpoints.

In addition, Islam & Billah (2019: 456) also distinguish between two types of textbooks based on their format, namely hardcopy and softcopy, as explained below.

- 1) Softcopy

A softcopy is the digital version of a textbook that exists electronically. It can be accessed on devices such as computers, tablets, or smartphones and is often shared through digital means, such as email attachments or cloud-based platforms. Unlike hardcopy textbooks, softcopies are intangible and stored in electronic formats.

- 2) Hardcopy

A hardcopy refers to the physical version of a textbook, typically printed on paper. It provides a tangible and permanent form of the textbook that can be directly used or read without the need for electronic devices. Hardcopy textbooks are commonly utilized for research, documentation, or offline reading.

2.1.2 Reading

a. Definition of Reading

Reading is the process of understanding and comprehending a written text. According to Habibullah (2012: 222) reading is the act of responding to printed symbols so that meaning is acquired. Hasibuan et al. (2023: 200) also state that reading is an activity of how to understand the text. In addition, Mutmainnah et al. (2021: 603) define reading as a process that involves interaction between students and the text to understand the meaning of written language. Subsequently, Prayuda (2023: 90) mentions

that reading is the meaningful interpretation of written or printed verbal symbols and a result of interaction between the perception of graphic symbols that represent language and the reader's language skills, cognitive skill, and knowledge of the world.

Ningsih et al. (2019: 196) emphasize that reading is one of the skills that must be possessed by students, therefore reading skills must be taught at the beginning of entering the educational level. Putri et al. (2021: 25) also state that reading is important for education, especially learning English as a foreign language. In addition, Nasution et al. (2018: 264) convey that reading is important for students both to develop their knowledge and to develop the way they think related to the development of moral, emotion, as well as verbal intelligence. Furthermore, Amalia (2022: 102) say that reading is important because if you can read, you can learn anything about everything and everything about anything. Reading, however, does not mean that the words are merely spoken in correct pronunciation, but it also emphasizes the comprehension of the whole meaning of the text thoroughly.

In conclusion, reading can be defined as an active process of understanding and interpreting written symbols to acquire meaning. It involves the interaction between the reader's cognitive skills, language abilities, and knowledge of the world, as well as the perception of graphic symbols representing language. Reading is essential not only for educational development but also for the development of critical thinking, knowledge, and emotional intelligence. It goes beyond mere pronunciation, emphasizing the importance of comprehending the full meaning of the text. Ultimately, reading enables individuals to learn and expand their understanding of the world.

b. Function of Reading

Reading is the cognitive process of decoding written symbols to construct or derive meaning, enabling us to access information, expand knowledge, develop empathy through stories, and connect with human

experiences across time and space. Tedjo et al. (2022: 67) explain that there are four functions of reading as described below.

1) Access knowledge

Reading allows individuals to access and retrieve knowledge that has been recorded and documented, whether in books, articles, or other written materials. By engaging with texts, readers can expand their understanding of various topics, building on their existing knowledge base. This function emphasizes the role of reading as a tool for acquiring and storing information for future use or application.

2) Synthesize information

Synthesis involves combining information from multiple sources to form a new, cohesive understanding. Through reading, individuals can integrate various perspectives and ideas, drawing connections between different concepts to generate a more comprehensive or nuanced viewpoint. This process is crucial for critical thinking and problem-solving.

3) Evaluate arguments

Reading allows individuals to assess the strength of arguments presented in texts, considering the evidence, reasoning, and conclusions provided by the author. This function helps readers critically analyze different viewpoints, distinguishing between valid and flawed reasoning, and forming their own informed opinions on the issues discussed.

4) Learn new subjects

Reading serves as a gateway to exploring unfamiliar topics and learning new subjects. By engaging with diverse content, readers can expand their horizons, discover new areas of interest, and gain specialized knowledge in fields they were previously unaware of. This function highlights the importance of reading as a lifelong learning tool, enabling individuals to continuously acquire new skills and expertise.

Other than that, Wagstaff (2020: 2) mentions that reading enhances academic performance for many students. Hughes in Nurhayati & Najoran (2023: 808) convey that reading is to know about things in the world and work to build awareness about new things. In addition, Khairani et al. (2023: 3) say that reading can help to improve students' critical thinking skills. Last, Rusiana et al. (2023: 3762) emphasize that another function of reading is enriching vocabulary.

From the explanation above, it can be concluded that the function of reading is multifaceted, serving as a tool for accessing knowledge, synthesizing information, evaluating arguments, and learning new subjects. It empowers individuals to expand their understanding, think critically, and develop informed opinions. Additionally, reading fosters academic performance, enhances awareness of the world, improves critical thinking skills, and enriches vocabulary. Ultimately, reading plays a crucial role in lifelong learning and personal development, enabling individuals to continually acquire new insights and perspectives.

c. Types of Reading

Petel & Jain as cited by Ardiansyah & Jaya (2020: 4) describe that there are four types of reading as the common types faced by students, namely:

1) Extensive Reading

Extensive reading will help students to develop to active vocabulary and enrich learners' knowledge. Extensive reading is reading for pleasure. The readers do not care about specific or important information after reading. Most of them update.

2) Intensive Reading

Intensive reading is related to further progress in language learning under the teachers' guidance. Extending knowledge or vocabulary and idioms will be provided by intensive reading. The goal of this reading is to read shorter text. This reading is done to carry out get specific information.

3) Silent Reading

Silent reading is done to acquire a lot of information. Teacher has to make students read silently in reading. Silent reading makes students very active and accurate, concentrates the attention of students toward text or subject, and develops the skill of reading fast.

4) Aloud Reading

Aloud reading pushes students to talk and read any subject matter. The students should pronounce very well in English. Aloud reading enable students to develop the skill of reading very well by speaking or expressing ideas and pronunciation as well.

Based on the statement above, we can conclude that there are four types of reading, which are, intensive reading, extensive reading, silent reading, and aloud reading. Each type of reading serves a different purpose, meaning they are not all the same.

2.1.3 Exercise

a. Definition of Exercise

Exercise is a structured activity or set of tasks designed to reinforce learning, assess understanding, and provide practice on specific skills or knowledge. According to Surakhmad as cited by Asmawati (2009: 26) exercise is a learning method aimed at developing proficiency or skills in the subject being studied. In addition, Rohmawati & Rohaeti (2016: 3) say that exercise is a strategy implemented by teachers by giving students several questions to work on, followed by a joint discussion between the teacher and students to review and analyze the answers together. Furthermore, Muhsetyo et al. in Apriandi (2022: 166) mention that the purpose exercise is to solidify the understanding of concepts and be more skillful in applying them.

The importance of exercises lies in their ability to enhance understanding, reinforce learning, and develop critical thinking and problem-solving skills through active engagement. Purwantoro & Saryantono (2020: 137) emphasize that exercises are important for fostering communication between students and teachers, teachers and

students, as well as further relationships between teachers and students' parents, and students with their parents. Sari (2021: 138) also states that exercise should be presented in an engaging manner to prevent students from feeling bored when faced with various types of questions.

In conclusion, exercise can be defined as a structured learning activity designed to enhance proficiency, solidify understanding, and develop specific skills or knowledge in a subject. It serves as a vital strategy for reinforcing learning, promoting active engagement, and encouraging critical thinking and problem-solving abilities. As emphasized by various scholars, exercises not only improve conceptual understanding and skill application but also foster meaningful communication and relationships among students, teachers, and parents. When presented in an engaging and varied manner, exercises can maintain student interest, making the learning process more effective and enjoyable.

b. Function of Exercise

The function of exercises in a textbook is to reinforce learning, assess understanding, and develop skills by providing opportunities for practice and application of concepts. Faiz et al. (2022: 493) emphasize that function of exercises is to serve as a tool for measuring students' proficiency in mastering the material that has been taught. In addition, Sudijino in Muluki et al. (2020: 87) states that there are two functions of exercise as described below.

1) As a tool to measure student performance

In this context, exercises function as a means to assess the abilities acquired by students during the learning process.

2) As a tool to measure the success of teaching programs

In this context, exercises serve to evaluate the extent to which the implemented teaching program has achieved its objectives.

Furthermore, according to Ebel as cited by Suharman (2018: 97) function of exercise is divided into three functions as described below.

1) To measure students' success in learning

Exercises are used to assess how well students have understood the material. They provide a way to evaluate whether students have achieved the learning objectives and mastered the content being taught.

2) To assist teachers and instructors in generating accurate and meaningful grades

By using exercises, teachers can gather reliable data on student performance, which helps in assigning grades that reflect the students' true abilities and progress, ensuring fairness and clarity.

3) To motivate and guide students in their learning

Exercises serve as tools to encourage students to engage with the learning process. They provide opportunities for practice and feedback, helping students stay focused and motivated while also guiding them towards improving their skills and knowledge.

Based on the explanation above, it can be concluded that the function of exercises in a textbook is multifaceted, serving not only as a means to reinforce learning but also as a critical tool for measuring students' proficiency and evaluating the effectiveness of teaching programs. Exercises enable the assessment of students' understanding and mastery of the material, providing valuable insights into their academic progress. Furthermore, they assist teachers in generating meaningful grades that reflect students' true abilities and help in guiding students' learning by offering practice opportunities and constructive feedback. Ultimately, exercises play a crucial role in motivating students and supporting their continuous development throughout the learning process.

c. Types of Exercise

This textbook presents a diverse array of exercises designed to foster a deeper understanding and engagement with the content. Each activity is purposefully structured to support the development of key concepts and to stimulate critical thinking. These exercises serve to encourage active participation and provide opportunities for the application of theoretical

knowledge in practical contexts. Through a variety of approaches, the exercises aim to challenge learners, facilitate skill acquisition, and promote comprehensive mastery of the material.

According to Fatimah & Alfath (2019: 42) types of exercise in a textbook is divided into two types as explained below.

- 1) Multiple Test Exercise

This type of exercise typically presents a set of questions with predetermined answer options, where learners are required to choose the correct response. It is designed to assess knowledge retention, comprehension, and the ability to identify correct information from a list of alternatives. Multiple test exercises are often used for evaluating factual understanding and testing a learner's ability to recall or recognize information accurately.

- 2) Essay Exercise

Essay exercises require learners to respond to open-ended questions with detailed written explanations. These exercises assess critical thinking, the ability to articulate ideas clearly, and the depth of understanding of a given topic. They encourage learners to engage in analysis, synthesis, and the formulation of coherent arguments, offering a more comprehensive evaluation of their knowledge and thought processes.

On the other hand, Febyronita & Giyanto (2016: 17) divide exercise into two main types, namely subjective exercise and objective exercise as described below.

- 1) Subjective Exercise

Subjective exercises require students to provide their own responses, often involving critical thinking or personal opinion.

- a) Essay Exercise

Involves writing a detailed, structured response to a question or topic, allowing for in-depth exploration and personal insight.

b) Descriptive Exercise

Requires students to describe something in detail, focusing on aspects such as appearance, features, or processes.

2) Objective Exercise

Objective exercises assess students' knowledge with clear, correct answers that can be objectively evaluated.

a) Multiple Choice Exercise

Provides several answer choices, with only one correct answer, testing recognition and recall of information.

b) Matching Exercise

Involves pairing related items, such as terms with their definitions, to assess understanding of relationships between concepts.

c) True or False Exercise

Presents statements where students must determine if the information is correct or incorrect.

d) Short Answer Exercise

Requires brief, concise responses to specific questions, testing knowledge and comprehension.

2.1.4 Bloom's Taxonomy

a. Bloom's Taxonomy 1956

Bloom's Taxonomy is a framework for categorizing educational goals into hierarchical levels. This term was compiled and introduced by Benjamin Samuel Bloom, an educational psychologist who conducted research and development on thinking skills in the learning process. Muji (2020: 3) explains that history of Bloom's Taxonomy began in the early 1950s, when at the American Psychological Association Conference, Bloom and his colleagues pointed out that in evaluating learning outcomes, the majority of the questions presented in schools primarily asked students to recall memorized information. According to Bloom, memorization is actually the lowest level of thinking behaviors. There are many other

higher levels that must be achieved in order for the learning process to produce students who are competent in their fields.

Effendi (2017: 73) mentions that Bloom then created a classification based on the sequence of thinking skills in a process that progressively increases in complexity. Krathwol (2010: 212) states that the original Taxonomy provided carefully developed definitions for each of the six major categories in the cognitive domain. The categories were knowledge, comprehension, application, analysis, synthesis, and evaluation. Utami et al. (2022: 193) convey that Bloom considered the taxonomy as a hierarchy; mastering the simpler level was a prerequisite for mastering the next more complex level. It can also be defined as a framework for classifying different objectives and skills educators plan for students.

Seifert (2010: 266) provides an overview of the six levels of thinking based on Bloom's Taxonomy as illustrated in the table below.

Table 2.1 Six Levels of Thinking Based on Bloom's Taxonomy 1956

Level	Description
Knowledge	Recall of information, whether it is simple or complex in nature.
Comprehension	Grasping the meaning of information, by interpreting or translating it from one form to another.
Application	Using information in new, concrete situations.
Analysis	Breaking information into its components to understand its structure.
Synthesis	Putting parts of information together into a coherent whole.
Evaluation	Judging the value of information for a particular purpose.

Seifert (2010: 266)

b. Revised Bloom's Taxonomy 2001

Revised Bloom's Taxonomy provides a modern framework for classifying educational goals, focusing on cognitive processes and knowledge dimensions to enhance teaching, learning, and assessment practices. Setianingsih & Suningsih (2018: 3) explain that the history of the revision of Bloom's Taxonomy dates back to 1994, when one of Bloom's students, Lorin Anderson Krathwohl, along with cognitive psychology experts, revised Bloom's Taxonomy to align with contemporary advancements. The results of this revision were only published in 2001.

Gunawan dan Palupi as cited by Mulatsih (2021: 3) mention that the scope of the revision of Bloom's Taxonomy consists of six thinking skills, arranged from lower to higher levels, namely: remembering, understanding, applying, analyzing, evaluating, creating. In addition, Nafiati (2021: 155) emphasizes that there are two fundamental changes in the revised Bloom's Taxonomy, namely:

- 1) The revised Bloom's taxonomy focuses on changes in application across three areas: curriculum development, instructional teaching, and assessment. In the original Bloom's taxonomy, the framework was primarily designed to facilitate the creation of assessments for national-level higher education.
- 2) The revised Bloom's taxonomy emphasizes changes in terminology, highlighting subcategories that make assessments more specific, simplify curriculum development, and streamline instructional design. Additionally, the revision redefines "knowledge" as a measurable dimension to be achieved. It also shifts operational keywords from nouns to verbs, ranging from the lowest to the highest levels.

Anderson et al. (2001: 31), in their book titled *"A Taxonomy for Learning, Teaching, and Assessing,"* provide an overview of the six levels of thinking according to Bloom's Revised Taxonomy, as illustrated in the following table.

Table 2.2 Six Levels of Thinking used on Bloom's Taxonomy Revised 2001

Level	Description
Remember	Retrieve relevant knowledge from long-term memory.
Understand	Construct meaning from instructional messages, including oral, written, and graphic communication.
Apply	Carry out or use a procedure in a given situation.
Analyze	Break material into constituent parts and determine how parts relate to one another and to an overall structure or purpose.
Evaluate	Make judgements based on criteria and standards.
Create	Put elements together to form a coherent or functional whole, reorganize elements into a new pattern or structure.

Anderson et al. (2001: 31)

c. The Difference between Bloom's Taxonomy 1956 and Revised Bloom's Taxonomy 2001

The Bloom's taxonomy underwent a revision to address certain issues in the original framework. The key difference between the revised and original versions lies in its structure. the revised taxonomy rearranges the hierarchy, switching the positions of evaluation and synthesis. The updated version comprises six categories: remember, understand, apply, analyze, evaluate, and create. In terms of cognitive complexity, each successive category represents a higher level of complexity than the preceding one.

Sainyakit (2023: 240) provides an overview of the difference between Bloom's Taxonomy 1956 and Revised Bloom's Taxonomy 2001 as illustrated in the following table.

Table 2.3 Bloom's Taxonomy 1956 vs. Revised Bloom's Taxonomy 2001

Bloom's Taxonomy 1956	Revised Bloom's Taxonomy 2001
Knowledge - recall of information, whether it is simple or complex in nature.	Remember - retrieve relevant knowledge from long-term memory.
Comprehension - grasping the meaning of information, by interpreting or translating it from one form to another.	Understand - construct meaning from instructional messages, including oral, written, and graphic communication.
Application - Using information in new, concrete situations.	Apply - carry out or use a procedure in a given situation.
Analysis - Breaking information into its components to understand its structure.	Analyze - break material into constituent parts and determine how parts relate to one another and to an overall structure or purpose.
Synthesis - Putting parts of information together into a coherent whole.	Evaluate - make judgements based on criteria and standards.
Evaluation - Judging the value of information for a particular purpose.	Create - put elements together to form a coherent or functional whole, reorganize elements into a new pattern or structure.

Sainyakit (2023: 240)

d. Process Verb Keywords of Bloom's Taxonomy

Bloom's Taxonomy provides a structured approach to understanding and enhancing learning objectives, with process verbs serving as essential tools to define and assess cognitive tasks. These verbs guide educators in designing targeted activities that promote critical thinking and deeper understanding across various levels of cognition. By leveraging these linguistic cues, both teaching and learning can become more focused, purposeful, and aligned with desired educational outcomes.

Ariyana et al. (2018: 10) mention the verb keywords used in Bloom's Taxonomy as described in the following table.

Table 2.4 Verb Keywords of Bloom's Taxonomy

Remember	Declaring Describing Enumerating Explaining Giving an index Giving codes Identifying Labeling Listing Memorizing Mentioning	Observing Quoting Reading Repeating Reproducing Selecting Showing Sorting Tracing Writing
Understand	Adding Arguing Associating Categorizing Clarifying Comparing Contrasting Detailing Discussing Estimating Explaining	Illustrating Inferring Joining Predicting Reporting Revealing Strengthening Summarizing Telling Thinking
Apply	Applying Assigning Building Conducting Demonstrating Designing Determining Developing Employing Enforcing	Executing Handling Manipulating Modifying Operating Performing Processing Reporting Utilizing
Analyze	Analyzing Arranging Auditing Calculating Clarifying Classifying Combining Demonstrating Distinguishing Examining Focusing Grouping	Interpreting Operating Organizing Realizing Reporting Selecting Solving Sorting Summarizing Testing
Evaluate	Assessing Balancing Comparing Concluding Considering Criticizing Critiquing Deciding	Defending Evaluating Interpreting Judging Rationalizing Reviewing Verifying

Create	Categorizing Collecting Combining Comparing Creating Designing Developing Finalizing	Generating Innovating Organizing Producing Prototyping Reimagining Summarizing
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Ariyana et al. (2018: 10)

2.1.5 Higher Order Thinking Skills

a. Understanding Higher Order Thinking Skills

Higher Order Thinking Skills (HOTS) is an essential concept in education that focuses on developing students' abilities to think critically, analytically, creatively, and evaluatively. Khasanah & Hidayah (2022: 58) state that Higher Order Thinking Skills (HOTS) is the ability to solve problems that involve critical and creative thinking. In addition, Gradini et al. (2022: 320) emphasize that Higher Order Thinking Skills (HOTS) is thinking skills in the cognitive domains of analysis, evaluate, and create from Bloom's Taxonomy. Furthermore, Tanujaya & Mumu (2020: 1) define Higher Order Thinking Skills (HOTS) as the widespread use of thinking skills when students discover new challenges. Last, Yunita & Dewi (2020: 37) say that Higher Order Thinking Skills (HOTS) is the wider use of the mind to find new challenges.

Higher Order Thinking Skills (HOTS) are advanced cognitive processes that include analyzing, evaluating, creating, and problem-solving, which go beyond basic recall and comprehension to help students develop deeper understanding and critical thinking abilities. Singh & Marappan (2020: 740) convey that the use of Higher Order Thinking Skills (HOTS) is to help students to be independent, problem-solver, and decision-makers in the future. Subsequently, Kareem (2022: 96) delivers that Higher Order Thinking Skills (HOTS) is important as they foster critical thinking skills of students to achieve high level of thinking critically.

In conclusion, Higher Order Thinking Skills (HOTS) is defined as the advanced cognitive abilities that enable individuals to engage in critical, analytical, creative, and evaluative thinking. It encompasses skills

such as analyzing, evaluating, and creating, which are key components of Bloom's Taxonomy. Higher Order Thinking Skills (HOTS) encourages students to go beyond basic recall and comprehension, fostering problem-solving capabilities and independent thinking. It is essential for students to navigate complex challenges, make informed decisions, and develop a deeper understanding of the world around them. Ultimately, Higher Order Thinking Skills (HOTS) is crucial for preparing students to become critical thinkers, effective problem-solvers, and decision-makers in their future endeavors.

b. Classification of Higher Order Thinking Skills (HOTS) in Bloom's Taxonomy

In Bloom's Taxonomy, Higher Order Thinking Skills (HOTS) are typically associated with the upper levels of the cognitive domain, which involve complex thinking processes such as analysis, evaluation, and creation. Pisriwati et al. (2024: 11) Higher Order Thinking Skills (HOTS) includes analysis, evaluation, and creation based on Bloom's Taxonomy. Furthermore, Nurjanah et al. (2022: 312) explain that based on Bloom's Taxonomy, the level of thinking consists of three levels as described below.

1) Lower Order Thinking Skill (LOTS)

a) Remember

Remember is the most basic cognitive level where learners recall or recognize facts, terms, basic concepts, and answers without necessarily understanding what they mean. This includes activities like memorizing definitions, listing items, reciting information, or stating basic facts.

2) Middle Order Thinking Skills (MOTS)

a) Understand

Understand involves comprehending the meaning of informational materials and being able to explain ideas or concepts in one's own words. At this level, learners can

interpret, summarize, infer, paraphrase, classify, explain, or restate ideas to demonstrate their grasp of the material.

b) Apply

Apply refers to the ability to use learned material in new and concrete situations. This includes applying rules, methods, concepts, principles, laws, and theories to solve problems in new contexts or situations different from when the information was learned.

3) Higher Order Thinking Skills (HOTS)

a) Analyze

Analyze involves breaking information into its component parts and detecting how the parts relate to one another and to an overall structure or purpose. This includes identifying motives, separating material into component parts, and recognizing patterns and hidden meanings.

b) Evaluate

Evaluate encompasses making judgments about the value of ideas, materials, or products based on specific criteria and standards. This involves activities like judging, critiquing, comparing, contrasting, and assessing the reasonableness of ideas.

c) Create

Create represents the highest level of thinking where learners put elements together to form a coherent whole or produce an original product. This includes activities like designing, constructing, planning, producing, inventing, or devising new solutions or ideas.

Moreover, Rahmawati et al. (2024: 1054) provided an overview of the classification of Lower Order Thinking Skills (LOTS), Middle Order Thinking Skills (MOTS), and Higher Order Thinking Skills (HOTS) as illustrated in the following table.

Table 2.5 LOTS, MOTS, and HOTS

HOTS	Create (C6) Evaluate (C5) Analyze (C4)	Creating ideas. Make decisions.
MOTS	Apply (C3) Understand (C2)	Using information on different domains. Explain ideas/concept.
LOTS	Remember (C1)	Remember.

Rahmawati et al. (2024: 1054)

2.1.6 Reading Exercises with Higher Order Thinking Skills (HOTS)

Higher Order Thinking Skills (HOTS) in Bloom's Taxonomy encompass advanced cognitive abilities such as analyzing, evaluating, and creating. In the context of reading exercises, HOTS-based questions do not merely assess students' literal understanding of a text but also encourage them to interpret meanings, draw conclusions, connect information with prior knowledge or real-world experiences, and critically evaluate the content. This approach aims to foster critical and creative thinking skills, enabling students to engage with reading exercises more deeply and apply their insights in various contexts. Manurung & Sari (2020: 392) present several examples of reading exercises from each category in Bloom's Taxonomy, as shown in the following table.

Table 2.6 Examples of Reading Exercises from Each Category in Bloom's Taxonomy

Level	Keywords	Example of Question
Remember	Define, describe, identify, label, list, match, name, outline, recall, recognize, reproduce, select, state	1. Where did ...? 2. What did ...? 3. Who/whom/whose was/were ...? 4. When did ...? 5. How many ...? 6. Who was/were the main ...? 7. How did ... happen? 8. Which one ...?
Understand	Comprehending, converting, defending, distinguishing, estimating, explain, extend, generalize, give examples, interpret, paraphrase, predict, rewrite, summarize, translate	1. What does it mean ...? 2. Which statement support ...? 3. What is the main idea of ...? 4. How would you summarize ...? 5. How would you paraphrase the meaning ...?
Apply	Apply, change, compute, construct, demonstrate, discover, manipulate, modify, operate, predict, prepare, produce, relate, show, solve, use	1. What is the real example of that phenomenon? 2. What would happen to you if ...? 3. How would you solve the problem? 4. What others way would you plan to ...?
Analyze	Analyze, break down, compare, contrast, diagram, deconstruct,	1. What things would you have used ...?

Level	Keywords	Example of Question
	differentiate, discriminate, distinguish, identify, illustrate, outline, separate, relate, select	2. What things are similar/different ...? 3. What things couldn't have happened in real-life? 4. What caused/happen ... to act the way he/she did? 5. Which of these statements is facts and which one is opinions?
Evaluate	Appraise, compare, conclude, contrast, criticize, critique, defend, describe, discriminate, evaluate, explain, interpret, justify, relate, summarize	1. Select the best ... Why is it the best? 2. What do you think will happen to ...? 3. What judgement would you make about ...? 4. Which character would you like to meet? Why? 5. Was ... good or bad? Why? 6. Do you interest to the story? Why? What was the most important moment in the story? Why? 7. Give your opinion to the ...?
Create	Categorize, combine, compile, compose, create, devise, design, explain, generate, modify, organize, plan, rearrange, reconstruct, relate, reorganize, revise, rewrite, summarize, tell, write	1. How would you improve ...? 2. How would you change the plot ...? 3. What do all these pictures have in common? 4. Explain how you use your imagination to draw a picture of ...? 5. Rearrange a different ending of ...?

Effective reading exercises are those that integrate questions categorized under Higher Order Thinking Skills (HOTS) in Bloom's Taxonomy. Such exercises go beyond assessing basic comprehension and encourage students to analyze, evaluate, and create based on the text. By incorporating HOTS-based questions, students are challenged to interpret implicit meanings, make logical inferences, compare different perspectives, and apply their understanding to new contexts. This approach not only enhances critical thinking and problem-solving skills but also fosters deeper engagement with the reading material, ultimately improving overall literacy and cognitive development.

2.2 Conceptual Framework

The conceptual framework of this research begins with the idea when Indonesia implements the Merdeka Curriculum and many English textbooks have been distributed. In addition, based on existing data and facts, there are still many

students in Indonesia who are unable to fully comprehend reading materials, including textbooks. Therefore, the researcher is interested in conducting this research. The researcher analyzes whether the English textbooks meet the Higher Order Thinking Skills standards based on Bloom's Taxonomy in the reading exercises found in the textbooks.

The researcher analyzes the textbook "*English for Nusantara*" used by eighth-grade students at SMP Negeri 1 Gunungsitoli Barat. Furthermore, in conducting the research, the researcher uses descriptive content analysis as the research method. After the researcher obtains the research data, the researcher presents the findings descriptively. The conceptual framework of this research is presented in the following concept.

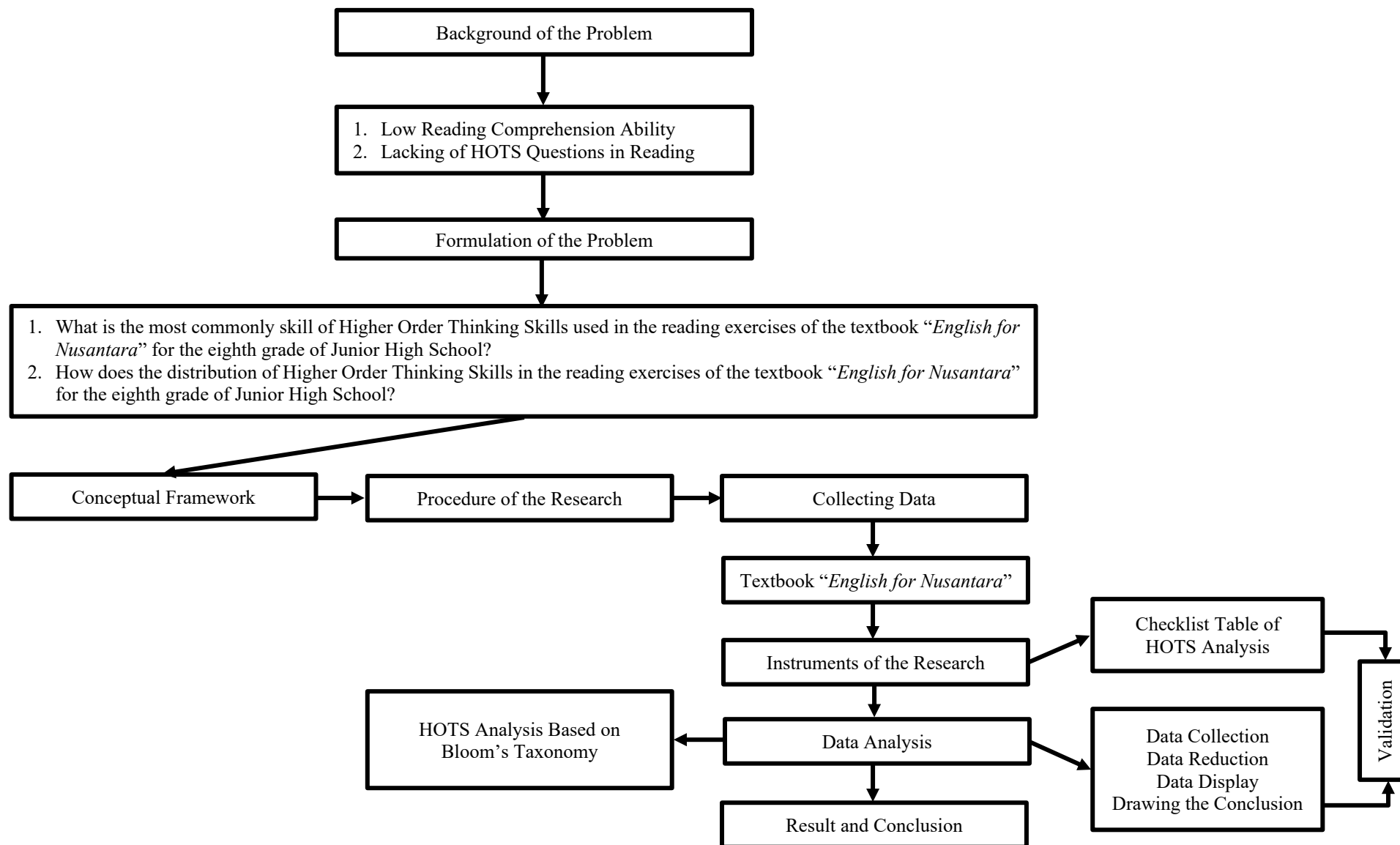


Figure 2.1 The Conceptual Framework of the Research