

# Analyzing HOTS Labeled Questions in An EFL Fifth Grade Elementary School Textbook

Galang Adhithia Mahardhika<sup>1</sup>, Yanty Wirza<sup>2</sup>, Faksi Rana Al-Kahfi<sup>3</sup>, Ahmad Dindang Mababaya<sup>4</sup>

<sup>1</sup> Universitas Pendidikan Indonesia. e-mail: galangadh@upi.edu

<sup>2</sup> Universitas Pendidikan Indonesia. e-mail: yantyywirza@upi.edu

<sup>3</sup> Universitas Pendidikan Indonesia. e-mail: faksirana21@upi.edu

<sup>4</sup> Universitas Pendidikan Indonesia. e-mail: ahmad\_m@upi.edu

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ARTICLE INFO	ABSTRACT
<p><b>Keywords:</b> Bloom's Taxonomy, EFL Textbook, Higher Order Thinking Skill (HOTS), Lower Order Thinking Skills (LOTS)</p> <p><b>DOI:</b> <a href="http://dx.doi.org/10.21093/ijeltal.v10i1.1983">http://dx.doi.org/10.21093/ijeltal.v10i1.1983</a></p> <p><b>How to cite:</b> Mahardhika, G.A., Wirza, Y., Al-Kahfi, F. R., &amp; Mababaya, A.D. (2025). Analyzing HOTS Labeled Questions in An EFL Fifth Grade Elementary School Textbook. <i>Indonesian Journal of English Language Teaching and Applied Linguistics</i>, 10(1), 165-183</p>	<p>The textbook used for fifth grade elementary students in an elementary school in Kuningan, West Java claims to offer Higher Order Thinking Skill (HOTS) questions on the cover of the textbook and some questions have been labeled as HOTS questions. This research investigated the validity of this claim, analyzing the levels of cognitive domain of each question to determine whether the labeled questions are truly HOTS questions or Lower Order Thinking Skills (LOTS) questions. This study conducted qualitative research with document analysis of HOTS labeled questions in the textbook entitled "Modul Pembelajaran Bina Prestasi Bahasa Inggris Kelas 5 Untuk SD/MI" published by CV Larassukma which were analyzed using a revised Bloom's taxonomy framework. Additionally, an interview with a fifth grade English teacher was conducted to explore the teacher's perspective regarding the HOTS questions in the textbook. The results revealed that most labeled HOTS questions are in fact LOTS questions (90.9%), with a majority covering Remembering (C1), followed by Understanding (C2), and Applying (C3). Only two questions were qualified as HOTS, particularly Creating (C6) questions (9.1%). The teacher's perspective mirrored these findings, indicating the inconsistency between the textbook's claims with its actual content, also discussing the textbook's effectiveness and the teacher's approach for implementing HOTS in the classroom. This study provides valuable insights for teachers, curriculum designers, textbook creators, and publishers, emphasizing the need for accurate representation of HOTS in educational materials to enhance the quality of future education.</p>

## **1. Introduction**

Nowadays, global challenges are increasingly complex, especially in the educational sectors. Teachers have a crucial role in preparing students to face these challenges as an educator. People who live in the Fourth Industrial Revolution will not only compete against one another but also posed by advancing technology. One of the skills which can support people's lives in navigating that era is cognitive skills or often be recognized as higher order thinking skills (HOTS). According to Anderson and Krathwohl (2001), Higher-Order Thinking Skills (HOTS) encompass the three highest levels of cognitive ability—analyzing, evaluating, and creating—as well as three types of knowledge: conceptual, procedural, and metacognitive (Retnawati et al., 2018). These skills encourage students to enhance their ability to analyze, assess, and generate ideas to solve problems in both academic and social contexts. Therefore, teachers play a crucial role in enhancing their students' higher order thinking skills. To develop these essential skills, teaching for higher-order thinking involves recognizing and implementing these cognitive processes across various disciplines, such as science, social sciences, mathematics and language arts (Peterson, 1990). In terms of language learners, especially young English learners also are expected to have higher order thinking skills to attain those abilities of cognitive dimension.

Moreover, young learners should receive the attention they require from their teachers to thrive and concentrate on their studies. In other words, teaching young learners has significant challenges, and requires careful planning to engage them effectively in language learning activities (Gautam, 2015). However, the aims of teaching and learning can be achieved through well-structured instruction and appropriate learning materials. One such essential tool is the textbook, which plays an essential role in navigating both teachers and students in the classroom. As a structured resource, a textbook provides a consistent framework for lessons, guiding young learners through content in an organized and engaging manner. A textbook is a piece of written content developed specifically for use in the teaching and learning process to broaden students' knowledge and experience (Rahim et al., 2021).

Textbooks has an indispensable role in the process of language education, as highlighted by Dabbagh & Safai (2019). The inclusion of exercises and resources aimed at fostering Higher Order Thinking Skills (HOTS) is a crucial characteristic of an effective textbook. Wale & Bogale (2021) emphasize the intricate connection between textbooks and the realm of education. Moreover, textbooks serve as a guide in both teaching and learning contexts, functioning as either primary or supplementary references. Learners engage in activities that extend beyond merely listening to teacher explanations. They also require additional resources to delve deeper into subjects, enhancing their skills and critical thinking capabilities.

Unfortunately, many textbooks do not adequately incorporate HOTS and instead primarily emphasize LOTS (Hasanah, 2017). Students have to become well-educated with HOTS embedded in their learning materials. Therefore, English textbook should maintain a balanced representation of both HOTS and LOTS. Integrating HOTS into textbooks may foster students' critical thinking skills, ultimately enabling teachers to guide them through the multiple levels of Bloom's Taxonomy (Kelly, 2014).

While several studies have examined the representation of HOTS in textbooks, there is limited research on its presence in elementary-level English textbooks, particularly in

Indonesia. Specifically, no studies have investigated the HOTS question content in the fifth-grade English textbook used in Kuningan, titled "Modul Pembelajaran Bina Prestasi Bahasa Inggris Kelas 5 Untuk SD/MI". On the cover of the textbook, it is claimed that the textbook used HOTS questions. Therefore, this research aims to prove the claim and find out the level of HOTS questions in the textbook, also the teacher's perspective regarding the HOTS questions in that textbook. The revised version of Bloom's taxonomy presents two aspects domains: the cognitive and the knowledge. However, this study specifically focuses on analyzing the cognitive domain and both multiple choices and short answer types of questions. Therefore, the research questions are elaborated as follows:

1. What are the levels of HOTS labeled questions in the fifth Grade Elementary School English Textbook entitled "Modul Pembelajaran Bina Prestasi Bahasa Inggris Kelas 5 Untuk SD/MI"?
2. What is the teacher's perspective regarding the HOTS questions in the textbook?

## **2. Literature Review**

### **2.1 Higher Order Thinking Skills (HOTS)**

The current Emancipated Curriculum (Kurikulum Merdeka) is an educational framework introduced in Indonesia to provide greater flexibility in learning, focusing on student-centered approaches and competency-based education. Some teachers prioritize Higher-Order Thinking Skills (HOTS) in EFL classrooms, particularly when teaching young learners. They focus on developing students' ability to apply knowledge, skills, and values in reasoning, reflection, problem-solving, decision-making, innovation, and creativity. These approaches foster cognitive development and align with Indonesia's integration into global education standards, meeting 21st-century skill demands such as critical and creative thinking, problem-solving, communication, teamwork, digital literacy, and technological proficiency (Sulaiman et al., 2017; Putriani & Hudaidah, 2021).

Bloom (1956) introduced a foundational taxonomy categorizing of cognitive process of higher-order thinking from low to higher levels which was later revised in 2001 to include six levels: Remember, Understand, Apply, Analyze, Evaluate, and Create. Higher-order thinking focuses on constructing and analyzing relationships, distinguishing it from recall and comprehension tasks at the lower levels of Bloom's taxonomy. Widely regarded as the foundation of higher-order thinking, Bloom's taxonomy classifies cognitive skills into six levels: remembering (C1), understanding (C2), applying (C3), analyzing (C4), evaluating (C5), and creating (C6). The first three (C1–C3) fall under lower-order thinking skills (LOTS), while the latter three (C4–C6) represent higher-order thinking skills (HOTS) (Wahyuni, 2018, p. 84). HOTS include critical, logical, reflective, metacognitive, and creative thinking (Singh & Shaari, 2019).

The development of higher-order thinking skills is built upon a strong foundation of lower-order thinking skills (LOTS), making them interdependent. In term of critical thinking, prior knowledge requires content of subject matter (Singh & Shaari, 2019). Students may apply higher-order thinking skills (HOTS) when they face unfamiliar problems, uncertainties, questions, or dilemmas, enabling them to analyze and respond effectively. Educators define higher-order thinking skills as advanced cognitive processes that occur when students acquire new knowledge, store it in memory, and then correlate, organize, or evaluate it to

achieve the goal. These skills represent the highest levels of Bloom's cognitive taxonomy (Abosalem, 2016). involve cognitive process that require students to actively engage their minds to uncover implicit meanings in information, recognize relationships between ideas, derive principle and rules, classify and analyze data, integrate and generate new ideas, and make evaluative judgements (Keshta & Seif, 2013). HOTS focus on developing students' abilities to critically analyze information, draw inferences for evaluation, and synthesize new concepts through creative thinking.

Anderson and Krathwohl (2001) revised and categorized the cognitive objectives of Bloom's taxonomy into six levels: Remembering (C1), Understanding (C2), Applying (C3), Analyzing (C4), Evaluating (C5), and Creating (C6). The progress from Lower-Order Thinking Skills (LOTS) to Higher-Order Thinking Skills (HOTS) serves as a framework for analyzing the presence of HOTS in textbook.

The six major categories were revised from nouns to verbs to better represent cognitive processes. Since the taxonomy reflects diverse thinking processes and emphasizes thinking as an active process, verbs were used instead of nouns. This revision was proposed by Anderson to refine Bloom's taxonomy.

The C1 phase: Remembering, involves the ability to recall information through recognition, listing, describing, retrieving, naming, and identifying. These tasks fall under the input process, which primarily engages students' receptive skills. At this stage, learners first encounter information through listening or reading, after which their brains process it by recalling and comprehending its meaning.

C2 phase: Understanding, involves processing and interpreting information by explaining ideas or concept. This phase presents activities such as summarizing, paraphrasing, classifying, and clarifying content to enhance comprehension.

C3 phase: Applying, related to the representation of using information in another well-known situation. This stage also includes using, carrying out, implementing, and executing the information in various situations and conditions appropriately. It enables students to transfer their understanding to practical applications.

C4 phase: Analyzing, related with breaking the information into parts to deepen students' understanding and examine relationships within the information they have received. This phase includes skills such as comparing, organizing, deconstructing, interrogating and finding.

C5 phase: Evaluating, also involves assessing validity of decision or action by critically examining information. This phase also includes checking, hypothesizing, critiquing, experimenting and judging every information they received from any sources.

In the C6 phase: Creating, students are expected to generate new ideas, products, or perspectives by designing, constructing, planning, producing, and inventing. While C1 to C3 fall under Lower-Order Thinking Skills (LOTS), C4 to C6 are classified as Higher-Order Thinking Skills (HOTS). In short, the main goal of HOTS is that the students can collect the information, categorize it and generate new ideas to be implemented in any other situations they have, beyond the classroom or any other occasions. Here is the coding scheme based on revised Bloom's taxonomy to simplify the cognitive domain and the sub-categories.

**Table 1.** Coding scheme adopted on revised Bloom's taxonomy framework  
(Anderson & Krathwohl, 2021)

Cognitive Domain		Sub-Categories
LOTS	Remembering (C1)	<ul style="list-style-type: none"> <li>● Recognizing</li> <li>● Recalling</li> </ul>
	Understanding (C2)	<ul style="list-style-type: none"> <li>● Interpreting</li> <li>● Exemplifying</li> <li>● Classifying</li> <li>● Summarizing</li> <li>● Inferring</li> <li>● Comparing</li> <li>● Explaining</li> </ul>
	Applying (C3)	<ul style="list-style-type: none"> <li>● Executing</li> <li>● Implementing</li> </ul>
HOTS	Analyzing (C4)	<ul style="list-style-type: none"> <li>● Differentiating</li> <li>● Organizing</li> <li>● Attributing</li> </ul>
	Evaluating (C5)	<ul style="list-style-type: none"> <li>● Checking</li> <li>● Critiquing</li> </ul>
	Creating (C6)	<ul style="list-style-type: none"> <li>● Generating</li> <li>● Planning</li> <li>● Producing</li> </ul>

## 2.2 HOTS Questions

HOTS questions are designed as situation-based assessments that reflect real-life challenges, making them inherently context-based. Contextual problems refer to ongoing global issues related to the environment, communication, language, and the application of science and technology across multiple aspects of life. This approach emphasizes how students develop the skills to relate, interpret, apply, and integrate scientific knowledge in classroom learning to solve real-life problems (Widana, 2017).

Given their emphasis on real-world application, HOTS questions can take various forms to assess students' cognitive abilities effectively. Widana (2017) explains that HOTS questions can take various forms, including multiple-choice, complex multiple-choice (true/false or yes/no), short answers, and descriptive responses. Generally, multiple-choice HOTS questions use real-life stimuli. They consist of a question stem and answer options, including the correct answer (key) and distractors—plausible but incorrect choices designed to mislead those with insufficient subject mastery.

Generally, multiple-choice HOTS questions are based on real-life situations. They consist of a question stem and a set of answer choices (options). Answer choices include the correct answer (key) and distractors—incorrect but plausible options that may mislead those with limited subject mastery. Beyond multiple-choice questions, HOTS assessments also incorporate short-answer and fill-in-the-blank formats. These require test takers to complete responses using words, phrases, numbers, or symbols. Effective short-answer questions should: (1) have no more than one or two missing parts to avoid confusion, and (2) require

concise responses in the form of specific words, phrases, numbers, symbols, locations, or time references.

### 2.3 Textbook Evaluation

Textbooks are among the most widely used teaching and learning materials in educational institutions. Hutchinson and Torres (1994) emphasize that textbooks play an essential role in guiding both students and teachers, providing structured content that supports the learning process. In language learning, textbooks serve as a primary source of language input, influencing the content of lessons, the balance of skills taught, and the types of language practice students engage in (Richards, 2001). This explains why textbooks remain a fundamental resource for students at all levels of language learning.

Beyond serving as instructional guides, textbooks also shape what is planned, taught, and learned in the classroom (Airasian & Russel, 2008). Since teachers rely heavily on textbooks, these materials are often designed to include various elements such as pictures, graphs, text, maps, and exercises to support learning (Redd et al., 1998). While textbooks provide a structured framework, they also serve as a multifaceted learning resource, helping to reinforce student engagement and comprehension. However, their extensive use also raises concerns about teacher dependency, as many educators lack the time to create their own materials, relying almost exclusively on textbooks for instructional planning (Arlansyah et al., 2023).

It is essential to recognize that there is no ideal textbook which can be perfectly suited for all teachers and learners in every teaching situation. While many educators are required to integrate textbooks into their teaching, some choose to modify or even replace them with alternative methods, some choose to modify or even replace them with alternative methods. Before using textbooks, teachers should undergo training to effectively modify and customize them. For students, the textbook serves as a vital resource that guides and helps them organize their learning. Moreover, it is also helpful to engage students actively in the process of adapting textbooks.

Given the debate surrounding textbook effectiveness, various studies have analyzed their content, particularly the inclusion of HOTS questions. The following research highlights key findings in this area. The first study examines Higher-Order Thinking Skill (HOTS) questions in the reading exercises of the *Pathway to English* textbook for tenth-grade senior high school students (Sihombing and Pitrawati, 2023). This study utilized a quantitative descriptive design, collecting data from the textbook using a checklist table. Reading questions were classified based on the Revised Bloom's Taxonomy. The results showed that HOTS questions were fewer than LOTS questions. However, their proportion was higher in this Emancipated Curriculum textbook compared to those following the 2013 Curriculum.

Moreover, a relevant study examines the levels of thinking skills utilized in the reading sections of EFL textbooks in Indonesia (Ariawan et al., 2023). The Ministry of Education and Culture officially published the Grade X senior high school textbook. Content analysis was conducted to examine the level and frequency of thinking skills in its tasks and reading questions. Data were presented quantitatively in a table, coded according to Bloom's framework of LOTS and HOTS. The findings revealed that the textbook primarily emphasized knowledge and comprehension, making LOTS-based tasks and questions more dominant than HOTS.

Last but not least, Hertiki (2019) evaluates the English textbook *My Pals are Here!* used at a National Plus School in Surabaya (SNA) to determine its alignment with English teaching objectives and TEYL principles. The researcher, using an Evaluation Checklist and a teacher interview, found that the textbook supports SNA's goal of developing young learners' communicative skills. It adheres to TEYL principles and excels in language content, topic selection, grammar, and teacher's book.

Therefore, the present study aims to investigate the HOTS question in the textbook that is used for fifth grade elementary students of an elementary school in Kuningan. The textbook title is "Modul Pembelajaran Bina Prestasi Bahasa Inggris Kelas 5 Untuk SD/MI". On the cover of the textbook, it is claimed that the textbook used HOTS questions. This study investigates the validity of this claim, analyzing the levels of cognitive domain of each question to determine whether the labeled questions are truly HOTS questions or Lower Order Thinking Skills (LOTS) questions, also the teacher's perspective regarding the HOTS questions in that textbook.

### **3. Research Methodology**

#### **3.1 Research Design**

This research utilized a qualitative case study design, which is well applicable for in-depth investigation of a particular phenomenon in its actual setting. Creswell (2007) stated that case studies allow researchers to understand a given issue in depth by gathering rich data from various sources, including interviews and document analysis. In this research, a case study design was employed since it would enable an intensive analysis of the HOTS-labelled questions from a particular English textbook while it would also invite the teacher's view regarding their use. Unlike other qualitative approaches, such as ethnography or phenomenology that aim at cultural patterns or lived experiences, a case study is suitable when the objective is to examine a bounded system, i.e. the chosen textbook and its application in the classroom. Using document analysis, the research rigorously investigates the number and cognitive level of HOTS questions in the textbook, while teacher interviews provide contextual information about how these questions are viewed and utilized in teaching.

#### **3.2 Participants**

The participants of this study were a fifth grade elementary school textbook and an elementary English teacher. The English textbook entitled "Modul Pembelajaran Bina Prestasi Bahasa Inggris Kelas 5 Untuk SD/MI". It's a textbook that is used in an elementary school in Kuningan, West Java Province published by CV Larassukma. The emphasis of this study was on the labeled HOTS questions that were presented in the textbook, particularly on both multiple choice and short questions items. The questions from the textbooks were then chosen, listed, and analyzed.

The fifth grade English teacher has 2 years of teaching English experience. The teacher is the only teachers who teach English in the school. The teacher has been using the textbook in the teaching process under the Emancipated Curriculum. Therefore, the teacher's perspective is important to be analyzed to know how HOTS questions in the textbook are implemented with the students in the classroom.

### **3.3 Instruments**

The methods of collecting the data in this research were document analysis and interview. This study used document or content analysis. Document analysis is an indirect method for examining forms of human communication, including written content such as textbooks, essays, newspapers, novels, and magazines, as well as other media like songs and political speeches (Fraenkel et al., 2018). The cover of the textbook claimed that it provides HOTS Question. Moreover, in the textbook, the author differentiates the HOTS questions by putting the label 'HOTS' after the questions. There were 22 total questions that were labeled as HOTS questions from the textbook, consisting of both multiple choice and short questions items. The purpose was to analyze the levels of all multiple choice and short or complementary questions that were labeled as HOTS to find out whether the claim is true or not, and categorize the test questions based on the cognitive levels in the revised Bloom's taxonomy.

This study also conducted an interview. Interviews are a fundamental method for gathering qualitative data, allowing researchers to collect individuals' opinions, beliefs, and feelings about situations in their own words (Ary, 2010). The interview questions were not totally prepared and also known as an unstructured interview. It is the interview which facilitates freedom for the interviewer to plan the question and organize the content with much flexibility rather than being stuck in some sequences of questions (Gubrium and Holstein, 2002). However, the questions are mainly related to the teachers' opinion regarding the HOTS questions in the textbook. The researcher used respondents' first language, Bahasa Indonesia, in the interview to avoid misunderstanding and to get information clearly. The interview was conducted with Teacher A on 19<sup>th</sup> of October 2023 at school after the teaching activity. The purpose was to find out the teacher's perspective regarding the HOTS questions in the textbook.

### **3.4 Data Analysis**

The data analysis is conducted when all data has been collected. This study followed Creswell's (2012) analysis procedure. First, the researchers reviewed the test questions for an initial understanding. Then, the data were coded (see Table 1) and classified based on the revised Bloom's Taxonomy. Finally, a numerical analysis was conducted to determine the percentage of lower- and higher-order thinking skills in the test questions. Moreover, the interview data were gathered in order and sorted the interview data to the specific points with elaboration. They were later displayed to portray the findings as the basis of making interpretation for the discussion section and to further draw a conclusion.

## **4. Results and Discussion**

### **4.1. The levels of HOTS labeled questions in the fifth Grade Elementary School English Textbook**

Document analysis using the revised version of Bloom's taxonomy framework (Anderson & Krathwohl, 2001) revealed that most questions labeled as HOTS in the textbook were actually LOTS-type (90.9%), while only 9.1% were true HOTS questions. Table 2 presents the percentage distribution of LOTS and HOTS questions.



**Table 2.** Distribution of the HOTS labeled questions in the book based on the revised Bloom's taxonomy framework

Cognitive Domain	Number Question	of	Percentage	Total
Lower Order Thinking Skills (LOTS)				
Remembering	13/22		59.1%	20/22 (90.9%)
Understanding	2/22		9.1%	
Applying	5/22		22.7%	
Higher Order Thinking Skills (HOTS)				
Analyzing	0/22		0%	2/22 (9.1%)
Evaluating	0/22		0%	
Creating	2/22		9.1%	

As shown in Table 2, 90.9% (20 out of 22) of the HOTS-labeled questions were actually LOTS-type questions. They consisted of 13 items (59.1%) of remembering, two items (9.1%) of understanding, and five items (22.7%) of applying. Moreover, HOTS-type questions accounted for only 9.1%, consisting of two items categorized under "creating." However, the textbook did not include any questions assessing "analyzing" or "evaluating." This suggests a significant gap in fostering higher-order cognitive skills such as critical thinking and judgment.

#### 4.1.1. Lower-Order Thinking Skills (LOTS) in the HOTS Labeled Questions

Based on the findings, the textbook failed to provide the HOTS questions as it claimed. In fact, LOTS questions had the largest percentage among all HOTS labeled questions. Most questions labeled as HOTS were actually classified under remembering, understanding, and applying. These required students to recognize or recall, interpret or infer, and execute or implement information. Such cognitive processes serve as foundational steps before reaching higher-order thinking (Virranmäki et al., 2020) and are considered the simplest levels of thinking.

##### 1. Remembering (C1)

The first category is remembering (C1). The total of 13 remembering question items are found from all the HOTS labeled questions in the textbook, which show the largest percentage (59.1%) among the other categories. Remembering involves two sub-categories, which are recalling and recognizing. Here are a few examples of recall questions taken from the textbook.

##### Excerpt 1


2.



- Father : It looks delicious.  
What is it?  
Mother : It is salted fish.  
Father : How does is taste?  
Mother : It tastes .... (HOTS)  
a. sweet  
b. salty  
c. spicy  
d. sour

The HOTS labeled question that is showed in Excerpt 1 is a type of question, remembering. This is a recall question about taste, which recalling is a part sub-category of remembering (C1) based on the Bloom's taxonomy in revised version (Anderson & Krathwohl, 2001). This question requires students to respond to the dialogue by selecting the most appropriate answer from the given options. In the end of the dialogue, it showed a HOTS labeled question. However, this type of question does not encourage deep thinking about the information, as students can easily identify the answer from the provided conversation. The students can simply choose the answer C (salty) since they need to respond to the father's question (How does it taste?) in the dialogue. Moreover, there is a hint from the picture and the previous statement (it is salted fish). In this instance, students rely on their retained knowledge, specifically that salted fish has a salty taste or salty. Another example of a remembering question is presented in Excerpt 2.

Excerpt 2

4.  A - C - J - K - T - E = .... (HOTS)
- a. UMBRELLA
  - b. BELT
  - c. TIE
  - d. JACKET

This HOTS labeled question presented in excerpt 2 is also categorized as a remembering question, aligning with the recognizing sub-category (C1) (Anderson & Krathwohl, 2001). The task is focused on rearranging the jumbled word into a word 'Jacket'. Moreover, there is a jacket picture beside the question which makes the question easier for the students to answer. In this instance, students utilize their retained knowledge about clothing, particularly jacket.

Although these two questions are labeled as HOTS, they primarily engage students in basic cognitive processes, specifically remembering, classifying them as LOTS. According to Anderson and Krathwohl (2001), remembering consists of two subcategories: recalling, as seen in Excerpt 1, and recognizing, as demonstrated in Excerpt 2, where students can easily identify the answer based on patterns and accompanying images.

2. Understanding (C2)

The second category of LOTS is understanding. This category of the thinking process takes 9.1% among others. Only two items are identified that align with the understanding (C2) phase of Bloom's Taxonomy. Understanding involves a deeper level of processing than recalling and recognizing, encompassing activities such as interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining (Anderson & Krathwohl, 2001). In this case, no more than two items are of this type of question. This is the excerpt of understanding questions in the textbook as an example.

Excerpt 3

3. Translate into Indonesian laguage! (HOTS)
- a. Delicious noodle.
  - b. Spicy fried rice.
- Answer : \_\_\_\_\_

The HOTS labeled question presented in Excerpt 3 is classified as an understanding question, particularly interpreting category. Students are required to do translation. Translation is a form of interpreting (De Groot, 1997). It requires understanding the meaning of words or phrases in one language (English) and converting them into another language (Indonesian) while maintaining their true essence. The translator must understand not only the literal meaning but also any connotations or cultural references that the words carry. In this case, the students must translate two foods into Indonesian language. The other question that is categorized in interpreting sub-categories also asked the students to translate from English to Indonesian. Therefore, two of the questions are categorized as understanding (C2) and they are not HOTS type of questions as the writer claimed.

### 3. Applying (C3)

The third category of LOTS is applying (C3). This category of thinking process took 9.1% with only 5 question items out of 22 total questions. Executing and implementing are the subcategories of applying in revised Bloom's taxonomy (Anderson & Krathwohl, 2001). Both sub-categories are found from the HOTS labeled questions. These are two examples of applying questions excerpted from the textbook.

#### Excerpt 4



6. The book cost Rp 2.000,00.  
Dinda gives Rp 5.000,00.  
Her change is .... (HOTS)
- one thousand rupiahs
  - one thousand rupiahs
  - three thousand rupiahs
  - four thousand rupiahs

The HOTS labeled question presented in Excerpt 4 is an applying question, which is categorized as an executing sub-category. This question engages students in the executing aspect of applying by requiring them to carry out a basic arithmetic operation, which is subtraction to find the change from a transaction of the book that Dinda bought. This reflects the use of learned skills (subtraction) in a practical scenario, typical of mathematical execution in everyday life. Another sub-category of applying is also found in the textbook. Implementing sub-category is presented in Excerpt 5.

#### Excerpt 5

Look at the table below.

(Perhatikan tabel berikut!)

Canteen A	Canteen B
	
Es cendol : Rp 5.000,00	Ice tea : Rp 3.000,00

5. Which food is cheaper?. (HOTS)
- It is ....

The HOTS labeled question presented in Excerpt 5 is an applying question, which is categorized as an implementing sub-category. In the context of Bloom's Taxonomy, this question involves using learned knowledge or information in new but familiar situations. In this question, students are presented with two drink items, each with a price tag, and are asked to determine which one is cheaper between *Es cendol* and Iced tea. Students must apply their understanding of numerical values to compare the prices. This goes beyond simply knowing what the numbers mean (C1) or understanding the concept of 'cheaper' (C2). They must implement this understanding to analyze and compare real-world data, which is the prices. The task simulates a real-life scenario where one often has to make decisions based on price comparison in everyday life.

Furthermore, these questions aren't classified as HOTS type of questions. The HOTS labeled in the question is inaccurate since these questions are categorized as applying, which is one of the cognitive domains of LOTS. Therefore, the writer's claim of these HOTS labeled questions are denied based on the analysis.

#### **4.1.2. Higher-Order Thinking Skills (HOTS) in the HOTS Labeled Questions**

The majority of the HOTS labeled questions in the textbook are in fact LOTS type of questions as previously explained. There are only two question items out of 22 total questions (9.1%) that are classified as HOTS type of questions and in line with the coding scheme based on revised Bloom's taxonomy framework (see table 1). Moreover, these two questions only cover one cognitive domain, which is creating (C6). Unfortunately, no test item is classified as analyzing (C4) and evaluating (C5) questions.

The complete absence of C4 (analyzing) and C5 (evaluating) questions is indicative of a weakness in the inclusion of critical thinking in the textbook. This is not a new trend in instructional materials since most textbooks are more concerned with recalling knowledge and comprehension-type questions (LOTS) than with challenging higher-order cognitive skills (Widana, 2017). Specifically, HOTS application in textbooks tends to give precedence to C6 (creating) since it is viewed as a more exciting or project-oriented skill, while C4 (analyzing) and C5 (evaluating) ask students to deconstruct information, support arguments, or criticize material—skills that are usually neglected in typical textbook exercises (Retnawati et al., 2018). Also, framing appropriate C4 and C5 questions could demand context-rich situations and open-ended answers that some authors would not employ because of limitations in space or grading feasibility. These account for the unevenness of the levels' distribution of HOTS in the textbook, which reveals a lack on the part of the textbook to elicit a complete range of higher-order thinking skills.

##### **1. Creating (C6)**

The one and only category of HOTS that is found from the textbook is creating (C6). This category of thinking process takes 9.1% among others. Only two items are identified that align with the creating (C6) phase of Bloom's Taxonomy (Anderson & Krathwohl, 2001). Creating consists of several sub-categories, such as generating, planning and producing. However, two of the questions are only categorized as one sub-category. Both of them include generating type of question with the same instruction. Here is one of them presented in Excerpt 6.

Excerpt 6

5. Make a sentences using "eat" and "bread"!(HOTS)

Answer : \_\_\_\_\_

The HOTS labeled question presented in Excerpt 6 is classified as creating question, particularly generating category. This question asked students to generate a new sentence using specific words, which are 'eat' and 'bread'. Generating, in the context of Bloom's Taxonomy, involves coming up with new ideas, patterns, or ways of viewing things (Anderson & Krathwohl, 2001). In this case, students must creatively think of a way to construct a sentence that logically and grammatically uses both words. This exercise goes beyond simply recalling information or applying known rules. It involves creatively combining them into a coherent, contextually appropriate sentence. Students must generate a sentence that is grammatically correct and makes logical sense, showcasing their ability to creatively use language. Therefore, Excerpt 6 is categorized as generating in the creating cognitive domain. The other question has the same instruction that requires students to produce an original sentence using given words but with a different word, which is 'wear'.

In summary, out of the 22 questions labeled as HOTS, only two items genuinely fall into the HOTS category, specifically under the Creating (C6) domain of Bloom's Taxonomy. These two questions encourage students to generate original sentences using specific words, a task that aligns with the creative and innovative aspects of the C6 level. In contrast, the remaining 20 questions, contrary to their labeling, are categorized as LOTS. The findings highlight a significant inconsistency in the textbook's content with its claim of providing HOTS labeled questions. Therefore, it is clear that the textbook does not adequately meet its claim of providing HOTS questions.

This disconnect between the labeling of the textbook and its real cognitive level of questions becomes a source of concern regarding its efficacy in the development of students' HOTS. Since textbooks are essential for classroom instruction, it is necessary to examine teachers' views on and experience of these shortcomings in practice. Learning from teachers helps one know whether they fill these gaps and how they manage to teach HOTS in spite of the weaknesses of the textbook.

#### **4.2. The teacher's perspective regarding the HOTS questions in the textbook**

In addressing the second research question, this study analyzed the teacher insights who has first-hand experience in using the textbook in the classroom. This exploration is crucial in understanding not only the textbook's practical application in the classroom but also its alignment with the educational objectives of fostering HOTS among fifth-grade students. The teacher had several perspectives regarding the HOTS questions in the textbook, as evidenced by the interview result. The explanations are presented as follows.

##### **1. Inconsistency in HOTS Labeling**

The inconsistency in labeling HOTS questions can lead to a mismatch between teaching objectives and student learning experiences. Anderson and Krathwohl (2001) emphasize the importance of accurately identifying cognitive processes in educational materials to ensure they align with intended learning outcomes. The teacher emphasizes the mislabeling of HOTS questions in the textbook to highlight a gap between the textbook's claim and its

actual content. It is in line with the analysis result, the majority of the labeled HOTS questions are in fact LOTS type of question (90.9%) with the largest percentage. The teacher elaborated:

*"In my opinion, most of the questions labeled as HOTS in the textbook don't truly meet the criteria of higher-order thinking. They often lack depth, especially there's no long reading materials questions. The questions tend to focus more on memorization and understanding rather than promoting critical thinking, analyzing, evaluating, or creating."* (Teacher A)

The teacher points out that most questions labeled as HOTS focus on memorization and basic understanding rather than on actual higher-order thinking skills (HOTS) such as analysis, evaluation, or creation. This observation aligns with our earlier analysis, which found that only two of the 22 labeled HOTS questions truly encourage higher-order thinking.

Such a misalignment has significant implications for educational objectives. The aim of including HOTS in curricula is to develop critical and creative thinking skills in students. When textbooks fail to meet this standard, despite their labeling, they fall short of contributing to these broader educational goals

## 2. Effectiveness and Utilization of the Textbook

The teacher perceives the textbook's utility in providing additional exercises to students in fifth Grade Elementary School across Kuningan Regency. The textbook is recognized as a necessary supplement to the government provided materials. The effectiveness of the textbook in supplementing material is supported by the concept of material development, which emphasizes that educational materials should complement and reinforce classroom learning (Tomlinson, 2011). The teacher explained:

*"In our current curriculum, it's actually not advised to use external textbook for core learning purposes. They are intended only for practice. This particular textbook is widely used in all elementary schools across Kuningan Regency. I personally use it to provide students with additional exercises after we cover the main material in class, or as a basis for homework assignments. This textbook is also considered affordable."* (Teacher A)

Despite acknowledging certain weaknesses, the textbook is seen as a valuable resource for providing supplementary exercises. This is particularly significant in the context of Kuningan Regency, where the textbook is widely used across elementary schools. The teacher's use of the textbook for additional exercises and homework assignments highlights its utility in reinforcing the main material covered in class.

The necessity of this textbook arises from the limitations of government provided materials. These materials often lack comprehensive questions and exercises, leading to a gap in the curriculum that the textbook helps fill. Moreover, the teacher notes that the textbook is effective in engaging fifth-grade students in learning English. Students are responsive and understand better when they do exercises from this book, indicating that the textbook successfully captures student interest and aids in comprehension.

The textbook's affordability and its popularity among students highlight its accessibility. This is crucial in ensuring that educational resources are not just academically sound but also reachable to the wider student population.

### 3. Teacher's Approach to HOTS Implementation

In response to the lack of HOTS questions in the textbook, the teacher employs improvisation in class to encourage deeper thinking and application. For instance, in teaching about fruits, the teacher guides students to analyze, evaluate, and create possible menus, activities that are more aligned with higher-order thinking skills. The teacher highlighted:

*"To address the shortcomings of the provided HOTS questions, I often improvise in class. For example, in the fruit part, I explain the roles and the description of food. They have to analyze what food is that and they have to evaluate and create the possible menu that can be created from the fruit. It's to encourage deeper thinking and application."* (Teacher A)

The teacher's improvisational approach aligns with Vygotsky & Cole (1978) which stated that learning occurs most effectively when students are guided through tasks slightly beyond their current ability, which can involve higher-order thinking skills (HOTS) such as analysis and creation. By introducing activities where students analyze, evaluate, and create (such as creating menus from fruits), the teacher actively compensates for the textbook's shortcomings. These activities require students to engage in deeper thinking and application, which are closer to the true essence of HOTS.

This approach reflects the teacher's commitment to ensuring that students are not merely passive recipients of information but active participants in the learning process. By encouraging students to think critically and creatively, the teacher effectively bridges the gap left by the textbook. The teacher's role is crucial in enhancing student learning and promoting higher-order thinking skills (HOTS), despite the limitations of available resources. This adaptability and commitment to educational goals underscore the pivotal role of teachers in shaping effective learning experiences.

In summary, the insights from the teacher provide a clear understanding of how the textbook is used in real classroom settings. While it serves as a valuable supplementary resource and effectively engages students, there is a clear mismatch between its HOTS labeling and the actual cognitive level of the questions. The teacher's active strategies to fill this void emphasize the critical role educators play in making sure that students are not just involved in the learning process but are also pushed to develop higher-level thinking abilities. This situation underlines the necessity for educational resources to accurately incorporate HOTS, ensuring that they meet modern educational goals and standards.

## 5. Discussion

The analysis of HOTS labeled questions in a fifth Grade Elementary School English Textbook reveals a significant skew towards Lower Order Thinking Skills (LOTS), with 90.9% of questions falling into this category, and only a minor fraction (9.1%) qualifying as Higher Order Thinking Skills (HOTS). This imbalance raises critical considerations in the domains of literacy, HOTS, and English Language Teaching (ELT), as well as how these findings relate to other studies.

The dominance of LOTS in the textbook suggests potential limitations in fostering comprehensive literacy. In ELT, literacy extends beyond basic reading and writing to encompass critical thinking, analysis, and synthesis (Wale & Bogale, 2021). The lack of HOTS-focused questions could impede students' ability to engage deeply with texts, critically evaluate information, and express complex ideas. Effective literacy development necessitates a balance between recall and recognition (as emphasized in LOTS) and higher-level skills like evaluating and creating (HOTS). This imbalance may also limit students' readiness for advanced academic tasks, standardized assessments, and real-world language application, where critical thinking and problem-solving are increasingly essential.

In English Language Teaching (ELT), the integration of HOTS is essential for language proficiency, particularly in the context of global communication and the digital age. The findings indicate a gap in ELT practices within the studied context, potentially limiting students' language development in comparison to standards proposed in literature (Richards, 2001). ELT needs to ensure that students are not only competent in basic language skills but also proficient in using language for critical thinking and creative expression.

The prevalence of LOTS over HOTS mirrors findings in similar educational contexts, where textbooks often emphasize recall and understanding over analysis and creation (Keshta & Seif, 2013). This common pattern points to a broader trend in educational materials where the depth and complexity of cognitive engagement are often secondary to basic knowledge acquisition.

Given these limitations, the role of teachers becomes even more crucial in bridging textbook gaps. As demonstrated in this study, teachers often compensate for textbook limitations by incorporating HOTS through improvisational teaching methods. There are many learning activities that the teachers can try to trigger students' HOTS in the classroom to cover the lack of HOTS content provided in the textbook. One of them is creating activities where students analyze, evaluate, and create (such as creating menus from fruits like Teacher A did in the classroom). This aligns with Vygotsky's (1978) educational theories, which emphasize the importance of teachers in guiding students beyond their current cognitive abilities.

The findings emphasize the need for curriculum designs that balance LOTS and HOTS. Moreover, Tomlinson (2011) argues for materials that provide a range of cognitive skills, thereby promoting comprehensive development. Future curriculum development should prioritize this balance to cultivate both foundational knowledge and higher-order cognitive skills.

Furthermore, curriculum developers are challenged to create educational materials that not only cover foundational knowledge but also promote critical thinking, creativity, and problem-solving skills. This requires a shift from traditional methods to more innovative approaches that engage students in higher levels of cognitive processes. These skills are crucial in the 21st century, where digital literacy and global communication are parts of education and professional life.

The study provides valuable insights for educational policy, particularly regarding standardized testing and curriculum standards. To achieve this, educational policymakers could integrate empirical research on HOTS implementation into textbook revisions and promote professional development programs that equip teachers with strategies to foster HOTS within existing curriculum frameworks.



## 6. Conclusion

This study underlines the necessity for educational resources to accurately incorporate HOTS, ensuring that they meet modern educational goals and standards. The aim of this research was to verify whether the HOTS (Higher Order Thinking Skills) questions in a fifth-grade elementary English textbook from Kuningan, West Java, actually meet their claimed level. Additionally, it sought to understand a teacher's view on these questions. This study employed document analysis to systematically examine the textbook's HOTS-labeled questions, categorizing them based on Bloom's revised taxonomy. In addition, a teacher interview provided qualitative insights into the practical implementation and perceived effectiveness of these questions in classroom instruction. The study found that despite claims of offering HOTS, most of the examined questions were actually LOTS (Lower Order Thinking Skills). Specifically, a large portion of the questions were focused on basic remembering and understanding, with only a few reaching the level of creative thinking as defined in the updated Bloom's taxonomy. From the teacher's perspective, there is a clear gap between what the textbook claims to provide and what it actually offers in terms of cognitive challenges. The teacher's efforts to fill this gap through in-class improvisation highlight the crucial role educators play in enhancing student learning.

It's advisable for the creators and publishers of the textbook to re-examine their content, making sure that the HOTS questions they include are true to their name and meet educational standards. Educators could benefit from targeted professional development, including training workshops on designing and identifying HOTS-aligned questions and strategies for integrating critical thinking into daily instruction. Educational authorities might consider a more balanced mix of basic and advanced cognitive skill development in the curriculum to ensure a well-rounded cognitive growth in students.

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