

# Exploring higher order and lower order thinking skills in Indonesian junior high school ELT textbooks

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## ABSTRACT

English textbooks play a pivotal role in supporting English as a Foreign Language (EFL) learning, particularly for junior high school students. Critical thinking skills are essential for enhancing students' English language proficiency. This study investigates the representation and frequency of Higher-Order Thinking Skills (HOTS) and Lower-Order Thinking Skills (LOTS) in instructional questions within the Grade VII Indonesian ELT textbook (2017 revised edition) published by Kemendikbud, widely used in Indonesian public schools. Employing a qualitative content analysis approach, this study utilized the revised Bloom's Taxonomy to analyze the data, which were quantified into percentages and frequencies. Findings reveal a higher prevalence of LOTS compared to HOTS in the textbook's instructional questions. Consequently, teachers are encouraged to creatively adapt these questions to foster critical thinking. Additionally, future textbook authors should prioritize integrating more HOTS-based questions to enhance students' critical thinking skills in ELT contexts.

**Keywords:** *Critical thinking; Indonesian ELT textbooks; HOTS; LOTS*

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## 1. Introduction

Textbooks play a crucial role in the teaching and learning process by providing structured content, promoting assessment, and enhancing students' learning. It has become a main media in the teaching and learning process in Indonesia. Febriyani et al. (2020) stated that textbooks are used as a guideline for teachers in delivering materials to the learners. Textbook provides several features, such as texts, assignments, exercises, and activities to meet the students' needs (Abidasari et al., 2021). Therefore, teachers rely on textbooks as their main source material, since it is essential as a teaching instrument (Poedjiastutie et al., 2018).

In the EFL teaching and learning process, the textbook is also used as a guideline and source material. Teachers and students can use textbooks as a resource during the educational process, especially while learning a language (Febriyani et al., 2020). A variety of resources, guidelines, and exercises are included in an English textbook to help students improve their language skills (Damayanti, 2019). Textbooks offer both the teacher and students the benefit by using textbooks as teaching and learning media. It aids students in applying the curriculum and assists the teacher in selecting relevant resources for class activities. Textbooks offer guidelines for lesson planning and instruction in the teaching and learning process in accordance with the curriculum (Riadini & Cahyono, 2021). Anasy (2016) stated that the majority of EFL classrooms in Indonesia use textbooks as their main teaching and learning media. Therefore, teachers should be selective while selecting suitable textbooks to use as teaching resources. Nevertheless, as a part of continuous development, some elements in textbooks that influence and inspire students should be regularly observed and evaluated (Anasy, 2016).

As Indonesia has implemented a new curriculum called *Merdeka* Curriculum in February 2022, teachers and students are required to have High Order Thinking Skill (HOTS). In *Merdeka* Curriculum, learning activities are student-centered. This aims to make the students think critically and be able to compete in the 21st century. One of strategies to hone High Order Thinking Skills is by practicing questions that contain HOTS. According to Anasy (2016), many of the curriculum's high-order thinking exercises may still be difficult to complete when practicing the HOTS. Febriyani et al. (2020) stated that some remarks make the assumption that certain textbooks only include a few HOTS exercises. This finding aligns with a study by Giri (2021), which argues that Indonesia EFL textbook provided by the government is not enough to encourage students' HOTS. On the other hand, textbooks used in classroom activities should align with the current curriculum and be designed to enhance students' higher-order thinking skills. Learning goals may not be effectively achieved if the materials are not aligned with curriculum objectives, particularly those emphasising higher-order thinking skills. Parel and Sujarwati (2024) revealed that 92,8% of the reading questions focused on lower-order thinking skills, indicating a significant underrepresentation of tasks that promote higher-order thinking. As a result, students' critical thinking, problem solving, and analytical

abilities, which are essential for success in 21st-century education, may not be adequately developed.

Some previous studies have been researched related to the implementation of HOTS in Indonesian English textbooks. Sucipto and Cahyo (2019) examined the reading exercises in the Indonesian ELT textbook entitled “Bright 2”. Then, Azizah and Bharati (2021) investigated reading exercises in Package B modules. A similar analysis of the HOTS was conducted by Febriyani et al. (2020), who focused on the textbook reading materials. The HOTS comprehension issues that were present in the ELT textbooks were also examined by Zainil et al. (2020). Meanwhile, in order to increase students’ positive attitudes and communication ability, Rindawati et al. (2014) examined writing skills in Indonesian ELT textbooks. In contrast, Kasim et al. (2017) focused on examining English skills activities with a few variations included in the grade X “When English Rings a Bell” ELT textbook. Additionally, Surono et al. (2023) examined instructional questions in ELT textbook “When English Rings a Bell” for Grade VIII. Most of them focused on reading comprehension in the textbook and students’ writing. Moreover, there are two studies focused on the exercises and instructional questions in English textbook grade VIII. Instructional books serve as a media to encourage critical thinking while communicating prevailing ideas and social attitudes (Mahbub et al., 2024). However, none of them focused on instructional questions in English textbook Grade VII. As in fact, grade VII needs adaptation from elementary school to junior high school without eliminating the implementation of High Order Thinking Skills by current curriculum. In order to improve students’ English language proficiency throughout the transitional period from elementary school to higher education, junior high school, also known as secondary school, requires textbooks or other reading materials (Kharisma et al., 2021). Hence, this study needs to fill in the gap. Therefore, it is also very important to investigate whether it contains High Order Thinking Skills materials or not, as current curriculum requires. Based on the description above, there are two research questions that will be discussed:

1. How frequently are HOTS and LOTS emphasized in the instructional questions?
2. How are HOTS and LOTS represented in the instructional questions of the Indonesian ELT textbook “When English Rings a Bell”?

## **2. Literature review**

### *2.1. High order thinking skills (HOTS)*

High Order Thinking Skills (HOTS) are high-level thinking processes which use critical thinking to solve problems. This thinking skill involves Analyzing (C4), Evaluating (C5), and Creating (C6) that are often framed within Bloom’s Taxonomy (Anderson & Krathwohl, 2001). Yeung (2015) stated that HOTS is using critical and creative thinking to assist a person in solving difficult situations or problems. HOTS leads to the ability to think creatively, logically, and metacognitively (Afrilyasanti et al., 2025). In line with this statement, Nurhayati and Fairuz (2023) declared that decision making

and problem solving must be supported by meaningful understanding and high levels of reasoning. Developing high-level thinking skills is needed to support this learning process (Febrina et al., 2019). Therefore, it is essential that teachers comprehend the concept of HOTS since a proper understanding will result in a proper practice and help the promotion of HOTS succeed in teaching and learning process (Tyas et al., 2020).

In the context of English as a Foreign Language (EFL), HOTS can be developed through tasks that require students to think critically about language use, interpret texts, express opinions, and construct arguments. For instance, asking students to compare characters in a story, justify their viewpoints, or create alternative endings promotes higher-order thinking. Teachers play a crucial role in this process by designing and selecting materials that go beyond rote memorization, encouraging students to question, reflect, and explore. EFL textbooks that include open-ended questions, project-based tasks, and problem-solving activities can significantly contribute to HOTS development. Therefore, aligning instructional materials, especially textbooks, with HOTS principles is key to fostering 21st-century skills among EFL learners. Moreover, incorporating HOTS activities in English textbooks facilitates the development of students' analytical and evaluative skills, aligning with the objectives of modern curricula (Saroinsong et al., 2023).

## *2.2. Lower order thinking skills (LOTS)*

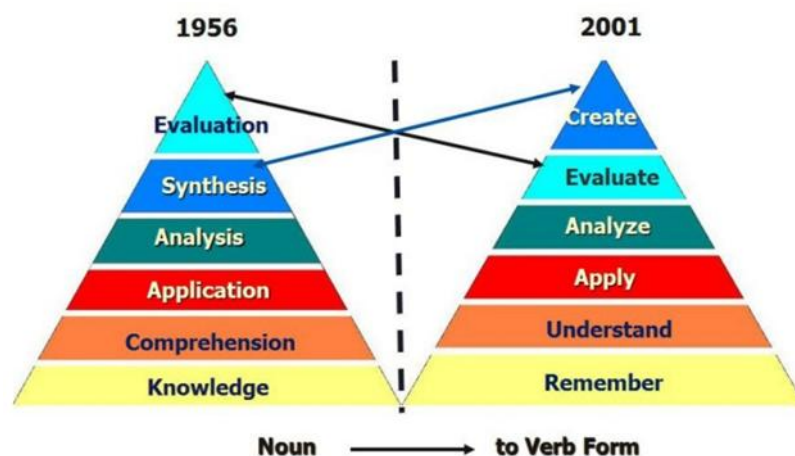
Lower Order Thinking Skills (LOTS) are foundational cognitive skills that involve basic recall, understanding, and application skills that commonly associated with the lower levels of Bloom's Taxonomy: Remembering (C1), Understanding (C2), and Applying (C3) (Anderson & Krathwohl, 2001). LOTS allows students to clearly evaluate one fact at a time, while HOTS requires students to comprehend the relationship between a fact or piece of information in the larger context of the situation (Theresia, 2021). In the same spirit, many experts in teaching and learning areas strongly advocate the inclusion of both HOTS and LOTS in EFL textbooks to enhance students' cognitive comprehension and language proficiency. This is based on notions that second language learners should build their own learning processes to depend greatly on LOTS and HOTS (Huberty & Davis, 1998).

In the EFL context, LOTS can be cultivated through tasks such as identifying main ideas, matching vocabulary with definitions, completing sentence structures, and answering factual questions. These activities are essential in helping students build the linguistic confidence and comprehension needed before engaging in more analytical or creative tasks. Teachers play a key role in ensuring that LOTS are not used in isolation but rather as a foundation for deeper learning. EFL textbooks should ideally present a progression from LOTS to HOTS, allowing students to first understand content at a basic level before applying it critically. When thoughtfully integrated, LOTS can scaffold students' learning and prepare them to engage with more challenging materials, thus supporting a balanced and effective cognitive development in the EFL classroom. As

highlighted by Widiastuti and Mbato (2025), incorporating LOTS questions in reading comprehension enables students to focus on key details and text structures, thereby laying the groundwork for developing higher-order thinking skills.

### 2.3. Revised Bloom's taxonomy

Based on Bloom's revised taxonomy, cognitive domain is divided into six categories (Anderson & Krathwohl, 2001). Three of them are included as lower levels of thinking and the other three categories are included as high levels of thinking. Low Order Thinking Skills (LOTS) level consists of three cognitive levels, which are Remembering (C1), Understanding (C2), and Applying (C3). The higher level is called High Order Thinking Skills (HOTS) that consists of three cognitive levels, which are Analyzing (C4), Evaluating (C5), and Creating (C6). In the context of English Language Teaching (ELT), especially at the junior high school level, this taxonomy serves as a guideline for designing learning activities and assessment tasks that develop students' cognitive abilities in a progressive and systematic manner. This approach ensures that educational objectives are structured to enhance students' cognitive development effectively. The application of Bloom's Taxonomy in the Merdeka Curriculum's English textbooks facilitates a structured progression of cognitive skills, aligning assessment tasks with desired learning outcomes (Sadora et al., 2021). The six categories of cognitive process are shown in Figure 1.



**Figure 1.** Revised Bloom's Taxonomy (Anderson & Krathwohl, 2001, p. 268)

The revised Bloom's Taxonomy outlines six cognitive process dimensions, which provide a structured framework for understanding and fostering progressively complex levels of thinking in educational settings. These dimensions—labeled C1, C2, C3, C4, C5, and C6—represent a continuum of cognitive skills, from foundational to advanced, designed to guide educators in developing learning objectives and assessing student

understanding. Each dimension is systematically described below to illustrate its role in promoting intellectual growth and critical thinking:

#### *2.3.1. Remembering (C1) - Lower order thinking skills*

This thinking skill involves retrieving, recognizing, or recalling relevant knowledge from long-term memory. In an ELT textbook, this level is typically reflected in tasks such as identifying vocabulary meanings, listing grammatical rules, or recalling simple facts from a reading passage. For instance, students might be required to list parts of speech, identify adjectives in a sentence, or match pictures with words. This kind of question is very helpful for language beginners. However, overemphasis on this domain might limit students' opportunities to engage in deeper thinking or develop communicative competence, which are essential goals of the curriculum.

#### *2.3.2. Understanding (C2) – Lower order thinking skills*

This level assesses learners' ability to explain, classify, or interpret information. It reflects comprehension beyond rote memorization. In Indonesian ELT textbooks, typical activities might include summarizing a dialogue, describing a character's actions, or answering literal questions from a reading text. These tasks support students in developing language understanding, but when they dominate instructional content, they may hinder learners from moving toward more critical, independent thinking.

#### *2.3.3. Applying (C3) – Middle order thinking skills*

Applying requires students to use learned information in new but familiar situations. In the ELT context, this includes applying grammar rules in writing, using vocabulary in different contexts, or completing sentence structures. For Grade VII learners, tasks like filling in dialogues, writing responses based on a model, or composing short paragraphs based on personal experiences are common. These types of questions can promote practical language use and provide a bridge from LOTS to HOTS, fostering more independent and contextualized language learning.

#### *2.3.4. Analyzing (C4) – Higher order thinking skills (Critical thinking)*

Analyzing entails breaking down information into components and understanding relationships between them. In EFL instructional questions, students might be asked to compare character traits, identify the main idea and supporting details, or recognize the cause and effect in a story. In ELT textbook, questions at this level help students move beyond understanding to critically engage with texts.

#### *2.3.5. Evaluating (C5) – Higher order thinking skills (Critical thinking)*

Evaluation involves making informed judgements or decisions based on criteria. This includes tasks that prompt students to give opinions, defend choices, or assess the effectiveness of language use. For example, they might be asked to evaluate the

appropriateness of an apology in a dialogue or decide which expression is most polite in a given context. In the ELT classroom, this kind of task encourages students to think critically and justify their ideas in English.

### 2.3.6. *Creating (C6) – Higher order thinking skills (Creative thinking)*

Creating represents the highest level of cognitive processing, requiring students to synthesize ideas and produce original work. In ELT materials, this may involve writing an original short story, composing a dialogue, or designing a class project. These activities encourage students to use English not just as a subject but as a tool for communication and expression. In the context of the textbook analysis, this level is especially important for assessing how well the textbook fosters creativity and productive language use. Furthermore, each cognitive has action verbs and example tasks, as presented in Table 1 below.

**Table 1**

Action verbs and example tasks of each cognitive based on Revised Bloom's Taxonomy.

| Cognitive level    | Action Verbs | Example Tasks     |
|--------------------|--------------|-------------------|
| Remembering (C1)   | Name         | List              |
|                    | Find         | Timeline          |
|                    | Write        | Facts             |
|                    | Tell         | Recitation        |
|                    | List         | Quiz              |
|                    | State        | Flashcard         |
|                    | Recite       | Bullet points     |
| Understanding (C2) | Describe     | Summary           |
|                    | Summarize    | Explanation       |
|                    | Discuss      | Mind map          |
|                    | Outline      | Presentation      |
|                    | Predict      | Timeline          |
|                    | Interpret    | Scrapbook         |
|                    | Explain      | Examples          |
| Applying (C3)      | Demonstrate  | Illustration      |
|                    | Solve        | Project           |
|                    | Use          | Roleplay          |
|                    | Apply        | Map               |
|                    | Illustrate   | Diorama           |
|                    | Construct    | Leaflet           |
|                    | Examine      | Newspaper Article |
| Analyzing (C4)     | Categorize   | Diary             |
|                    | Analyze      | Collection        |
|                    | Classify     | Illustration      |
|                    | Compare      | Questionnaire     |
|                    | Contrast     | Flow-chart        |
|                    | Separate     | Model             |
|                    | Relate       | Diagram           |
| Evaluating (C5)    | Judge        | Survey            |
|                    | Critique     | Graph             |

|               |            |               |
|---------------|------------|---------------|
| Creating (C6) | Justify    | Report        |
|               | Debate     | List criteria |
|               | Recommend  | Debate        |
|               | Prioritize | Essay         |
|               | Experiment | Written case  |
|               | Design     | Story         |
|               | Create     | Poem          |
|               | Plan       | Play          |
|               | Construct  | Song          |
|               | Invent     | Animation     |
|               | Devise     | Invention     |
|               | Make       | Website       |

(Anderson & Krathwohl, 2001, pp. 66-68)

In EFL instruction, it is essential that instructional questions are designed to not only develop students' cognitive abilities but also support the four primary language skills: listening, speaking, reading, and writing. These skills can be addressed through various cognitive levels, ranging from basic recall to advanced critical thinking (Anderson & Krathwohl, 2001). Incorporating questions across different thinking levels allows students to gradually move from understanding, and remembering information to analyzing, evaluating, and creating their own ideas in English.

In listening activities, lower-order questions such as "What animal did the speaker mention?" (C1: Remembering) check students' ability to recall information from audio materials. As students advance, higher-order questions like "How are the two speakers' opinions different?" (C4: Analyzing) requires learners to compare and identify the two ideas presented in an audio clip. Reading activities similarly cover a range of cognitive skills. Basic comprehension can be assessed through questions such as "What is the main idea of the paragraph?" (C2: Understanding), while more complex questions such as "Why did the character choose to do that?" (C4: Analyzing) help students engage in critical reading and reasoning.

Speaking activities provide opportunities for students to practice language through both structured and open-ended questions. Lower-order speaking questions might include "Recite your daily routine using 'I get up at...'" (C1: Remembering). To promote higher-order speaking skills, students can participate in debates or role plays, such as "What would you say if your friend forgot your birthday? Create a dialogue" (C6: Creating), which encourages them to apply language in real-life. In writing activities, basic tasks may ask students to "List five things you like about school" (C1: Remembering). At higher cognitive levels, prompts such as "Write a short opinion essay about the benefits of reading books" (C5: Evaluating) challenge students to construct well-reasoned and coherent arguments.



#### **2.4. The importance of HOTS in ELT textbooks**

It is clear that applying HOTS in the teaching and learning process is crucial as the Indonesian updated curriculum or called Merdeka Curriculum is aware of the importance of HOTS used in the English teaching and learning process. Textbooks often serve as the main source of information that teachers utilise when assigning assignments (Febriyani et al., 2020). One of the important elements that must be present in the teaching and learning process is the availability of textbooks, as they serve as a guide for teachers and students at all educational levels to be able to actively engage in class activities (Margana & Widyantoro, 2017). Therefore, integrating HOTS into educational materials is essential as it will assist students in strengthening their critical thinking skills (Erdiana & Panjaitan, 2023). For instance, encouraging small-group discussion enables students to participate as much as possible, focus their attention, and apply higher-order thinking skills (Ivone & Jacobs, 2022). This can be achieved by designing tasks that encourage students to analyze texts, express opinions, compare ideas, and solve communication problems. For instance, instead of merely filling in blanks, students can be asked to create short dialogues based on real-life situations, summarize a reading passage in their own words, or give reasons for agreeing or disagreeing with a character's action in a story. Such tasks not only support language development but also engage students in higher-order thinking processes aligned with the curriculum, which emphasizes critical, creative, communicative, and collaborative skills. As noted by Sihombing and Fitrawati (2023), incorporating higher-order thinking questions in reading exercises can enhance students' analytical and evaluative skills, aligning with the objectives of the Merdeka Curriculum.

However, many English textbooks used in teaching and learning process solely emphasize LOTS and do not adequately represent HOTS. Alghamdi (2022) stated that in order to teach children to employ critical thinking skills, questions with a clear Yes or No response should be avoided. Instead, we should ask the learner, "How do you know..., What tells you..., and Why...?". These questions give learners the opportunity to demonstrate their understanding of the subject matter rather than merely providing a one-word response that can be found in a dialogue or book. Instead of only encouraging basic memorisation and reporting, these kinds of enquiries can help develop higher order thinking skills such as analysis and interpretation.

### **3. Method**

Descriptive qualitative research is chosen as the appropriate research design, as it focuses on the content analysis of documents in the form of texts or words. Descriptive qualitative research focuses on analyzing information from words or sentences rather than numbers (Blaxter et al, 2006). This research analyzed instructional questions in 'When English Rings a Bell' book grade VII by Kemendikbud. This book is chosen as it is used by almost all public schools in Indonesia. It is published by the Ministry of Education and Culture of the Republic of Indonesia, the latest revised in 2017. It consists of 8 chapters with 183 pages in total. The instrument to collect the data will be using an observation

sheet, which the data will be based on revised Bloom's Taxonomy (Anderson & Krathwohl, 2001) to see how HOTS and LOTS are represented in the instructional questions.

This study employs a qualitative content analysis approach following the model of Miles et al. (2014), with a focus on the coding method as suggested by (Schilling, 2006; St. Pierre & Jackson, 2014). The data consist of all instructional questions extracted from the Grade VII Indonesian ELT textbook *When English Rings a Bell*, published by the Ministry of Education and Culture (Kemendikbud). In the data collection phase, all instructional questions were identified and compiled systematically. Each question was then analyzed and assigned a code based on the cognitive process dimensions outlined in the Revised Bloom's Taxonomy, ranging from Remembering (C1) to Creating (C6). This classification was guided by identifying the basic action verbs used in each question to determine the level of thinking skill involved.

After coding, the data were grouped into two main categories: Low Order Thinking Skills (LOTS), which include C1 to C3, and High Order Thinking Skills (HOTS), which include C4 to C6. The number of questions in each category was then counted and presented in tables to show the frequency and percentage distribution of HOTS and LOTS in the textbook. This step aimed to reveal the extent to which the textbook promotes higher-order thinking. Finally, patterns and tendencies were analyzed to draw conclusions about how well the instructional questions align with the goals of developing students' critical and analytical thinking skills in line with 21st-century learning standards.

#### **4. Findings and discussion**

This study aims to examine how HOTS and LOTS are represented and how frequently HOTS and LOTS are emphasized in instructional questions in the VII grade Indonesian ELT textbooks. The data interpreted and discussed based on revised Bloom's Taxonomy by Anderson and Krathwohl (2001).

##### *4.1. The frequency of HOTS and LOTS in instructional questions in the ELT textbook*

All of the cognitive domains of Bloom's Taxonomy have been represented in instructional questions in the selected ELT textbook. These cognitive domains are spread in all of the chapters in the book, even though the existence of cognitive domains or thinking skills used in the instructional questions is not equally appeared. In some chapters, the instructional questions only represented some thinking skills. In other words, some chapters are missing one or some cognitive domains. The frequency and the distribution of HOTS and LOTS in instructional questions in the selected textbook showed in Table 2.

**Table 2**

The frequency and percentages of HOTS and LOTS in the ELT textbook.

| Chapter    | Thinking Skills |    |     |    |     |     | Total of Instructional Questions |
|------------|-----------------|----|-----|----|-----|-----|----------------------------------|
|            | C1              | C2 | C3  | C4 | C5  | C6  |                                  |
| I          | 12              | 3  | 5   | 0  | 0   | 4   | 24                               |
| II         | 19              | 7  | 11  | 3  | 8   | 17  | 65                               |
| III        | 49              | 10 | 10  | 3  | 13  | 15  | 100                              |
| IV         | 67              | 6  | 22  | 8  | 40  | 22  | 165                              |
| V          | 67              | 7  | 18  | 4  | 11  | 1   | 108                              |
| VI         | 57              | 14 | 9   | 4  | 10  | 4   | 98                               |
| VII        | 5               | 5  | 1   | 1  | 3   | 0   | 15                               |
| VIII       | 50              | 7  | 20  | 8  | 13  | 7   | 105                              |
| Total      | 326             | 59 | 96  | 31 | 98  | 70  | 680                              |
| Percentage | 48%             | 9% | 14% | 5% | 14% | 10% | 100%                             |

There are 680 instructional questions found in the textbook. Most of them are included as LOTS (71%), and the rest of them are included as HOTS (29%). The frequency of LOTS in instructional questions is more than HOTS. In this particular learning context, the distribution of cognitive skills or thinking skills in the textbook, as per Bloom's Taxonomy, reveals interesting insights. The majority of the focus at 48% is on Remembering (C1), which indicates a significant emphasis on basic recall and memory of information. While Understanding (C2) follows at 9%, which suggests that while comprehension is important, it takes a backseat to memory-based learning. Applying (C3) skills are encouraged at 14%, which reflects the integration of knowledge into practical scenarios. Surprisingly, Analyzing (C4) skills hold a smaller share at 5%, which indicates that the breakdown of information might be somewhat limited. Evaluating (C5) comes in strong at 14%, emphasizing critical thinking and judgement. Lastly, creating (C6) skills are encouraged at 10%, fostering creativity and the generation of new ideas or products. This distribution underscores the specific educational priorities within this context, balancing memory and understanding with higher-order thinking and creative problem-solving.

Based on the results, LOTS is used more than HOTS in the instructional questions in the secondary school ELT textbook by *Kemendikbud*. The instructional questions may have strong emphasis on Remembering (C1) and, to some extent, evaluating (C5) and Applying (C3) knowledge. On the other hand, understanding (C1), Analyzing (C4), and Creating (C6) have relatively lower percentages. This result indicates that the instructional questions in the textbook may not require deep comprehension, critical analysis, or extensive creativity. It contradicts with the current curriculum or *Merdeka Curriculum* which focuses on implementing HOTS and aims to make students have HOTS skills. Besides that, it is also contrary to the statement of Wu and Pei (2018) that the more use of HOTS-based questions is excellent, especially when it comes to encouraging critical thinking as a vital 21st-century skill.

The implementation of HOTS in textbooks is a crucial step towards building a globalized and competitive educational environment. As our world grows more linked, it is critical that kids learn abilities more than rote memory. Contextualizing HOTS implementation in textbooks equips students to confront global issues by improving their critical thinking, problem-solving, and analytical skills. HOTS in textbooks promote critical thinking and promotes a greater comprehension of subjects. This is in line with Ariyana et al. (2018) statement that one of the learning goals students can analyze, evaluate and create solutions. Students are challenged to analyze, evaluate, and synthesize materials rather than merely memorize it. This not only improves their cognitive ability, but also prepares them to negotiate a complicated and dynamic global terrain.

#### 4.2. The representation of HOTS in instructional questions in the ELT textbook

The instructional questions in the selected ELT textbook rarely represent HOTS. There are 680 instructional questions found in the textbook, but only 199 of them which implement HOTS. It means that the selected textbook only contains 29% of HOTS from the overall instructional questions. Furthermore, the distribution of HOTS level is uneven. For instance, in the last chapter, there are no instructional questions which use the Creating (C6) cognitive domain. The amount of each cognitive domain represented in the textbook is also uneven. Evaluating (C5) is the HOTS cognitive domain that is mostly represented in the instruction. However, all of the HOTS cognitive domain still appeared in the instructions, as it showed in Table 3.

**Table 3**

The representation of HOTS in the ELT textbook.

| Code of Instructional Questions | Instructional Questions  | Page | Skill    | HOTS | Basic Verb |
|---------------------------------|--|------|----------|------|------------|
| 45.                             | "We promise, we will use only English. We will not use Bahasa Indonesia."                                      | 26   | Speaking | C6   | Creating   |
| 66.                             | "We will present, not read, our facts to each other, orally."  | 30   | Speaking | C6   | Creating   |
| 212                             | "We will go around our school to identify the rooms and other facilities there, and the number of each thing." | 65   | Speaking | C4   | Analyzing  |
| 315.                            | "We will plan what to say about each thing in our notebooks, like the examples."                               | 88   | Writing  | C6   | Creating   |

|      |  |     |          |    |            |
|------|--|-----|----------|----|------------|
| 316. | “We will report all our findings orally to the class.”                                     | 88  | Speaking | C5 | Evaluating |
| 409. | “If we have any problems, we will go to our teacher for help.”                             | 110 | Speaking | C5 | Evaluating |
| 455. | “We will work in groups to reflect on our learning. We will discuss what we have learned.” | 123 | Speaking | C5 | Evaluating |
| 456. | “We will work in groups. We will complete the conversations below.”                        | 124 | Writing  | C6 | Creating   |

The selected textbook in this used all the level thinking skills of HOTS, which are Analyzing (C4), Evaluating (C5), and Creating (C6). HOTS mostly appeared in chapter IV “This is My World”. Evaluating (C5) is the thinking skills that are commonly used in this chapter to hone students’ thinking ability. There are 40 instructional questions that implement Evaluating (C5) in this chapter and most of them are reporting the students’ assignment to class, asking for help from the teacher if they do not understand about the materials given, and reflecting on the learning that they have learned. Creating (C6) also frequently appeared in chapter IV in 22 instructional questions. Most of them are the assignments for the students to present, make sentences, and make a plan.

However, this present study was in line with the results of Erdiana and Panjaitan (2023) who found that the distribution of HOTS was lower than that of LOTS questions in the textbook. This study analyzed HOTS in reading comprehension exercises in the textbook *Bahasa Inggris SMA/MA/SMK/MAK for Grade 12*. The result of this study implied that this textbook needed to provide an adequate number of high-level thinking questions to improve students’ HOTS. There were 54 out of 67 questions (80.6%) which implemented LOTS in the reading questions. While there were only 13 questions (19.4%) which implemented HOTS.

The implementation of HOTS in textbooks equips students to solve real-world problems. In a global context, challenges are complicated and often require innovative solutions. HOTS fosters creativity and adaptation by encouraging students to apply their knowledge to tackle complicated issues. Educators may imitate real-world obstacles by including practical scenarios and case studies into textbooks, ensuring that students are not only academically skilled but also prepared to solve the complex concerns they may face globally.

#### 4.3. The representation of LOTS in instructional questions in the ELT textbook

The chosen ELT textbook mostly represented the cognitive domains or thinking skills which were categorized as LOTS in the instructional questions. It contains 71%

LOTS which the most used cognitive is Remembering (C1). The existence of Remembering thinking skill is dominated in every chapter of the textbook, as it is shown in Table 4.

**Table 4**

The representation of LOTS in the ELT textbook.

| Code of Instructional Questions | Instructional Questions   | Page | Skill     | LOTS | Basic Verb    |
|---------------------------------|---|------|-----------|------|---------------|
| 3.                              | "We will listen carefully to our teacher and read the greetings."   | 4    | Listening | C1   | Remembering   |
| 5.                              | "We will play the roles of the speakers in the pictures."   | 4    | Speaking  | C3   | Applying      |
| 18.                             | "We will hear our teacher state a situation."   | 14   | Listening | C2   | Understanding |
| 34.                             | "We will say the sentences loudly, clearly, and correctly."   | 23   | Speaking  | C1   | Remembering   |
| 39.                             | "In group, we will play the roles of the speakers."   | 25   | Speaking  | C3   | Applying      |
| 53.                             | "We will say the words loudly, clearly, and correctly."   | 27   | Speaking  | C1   | Remembering   |
| 333                             | "We will discuss what to say about the other situations. Each one of us will write the sentences in our notebooks." | 91   | Writing   | C2   | Understanding |
| 343                             | "We will copy the song in our notebooks."   | 95   | Writing   | C1   | Remembering   |

LOTS is the cognitive skill or thinking skill that is mostly used in the English textbook. Remembering (C1) is commonly used in the instructional questions, which is giving the instructions for the students to memorize a pronunciation, a sentence, and a conversation. In chapter IV and V, they are mostly used in the instructional questions with 67 frequencies. While Applying (C3) comes after it with mostly used also in chapter IV and V. Roleplay is the instructions that mostly appeared to drill this thinking skill. The students were told to play the role based on the conversation given in the textbook.

Another similar finding was also found in research that was conducted by Surono, et.al. (2022). They analyzed HOTS and LOTS of instructional questions in *When English*

*Rings a Bell* for Grade VII. The results of this study showed that cognitive thinking skills Remembering (C1) and Applying (C3) of LOTS are most dominant represented in chapters I, VI, and VII. Meanwhile, in chapters V and XII, the implementation of HOTS and LOTS is nearly in balance, dominating the verb Remembering (C1) for LOTS and the verbs Evaluating (C4) and Creating (C6) for HOTS. Overall, the distribution of LOTS in the textbook appeared in 66 instructional questions (58%) and HOTS in 47 instructional questions (42%).

Moreover, it is important to analyze how well HOTS is implemented in the current Indonesian ELT textbook especially in instructional questions. Therefore, this study analyzed the latest version of *When English Rings a Bell* (revision 2017) in the grade VII ELT textbook which had never been discussed by the previous study. Students in grade VII have just graduated from elementary school and they have to improve their high-level thinking in high school. The learning materials in grade VII or junior high school are way more challenging than the learning materials in grade VI or elementary. The materials in grade VI focus on basic vocabulary, simple sentences, and daily expressions. Meanwhile, the materials in grade VII are more analytical. In addition, there are several other differences, including: the texts in grade VII are more complex; the activities are more interactive with group discussions, projects, and debates; and students are exposed to real-world issues such as articles and social issues.

## **5. Conclusion**

This study examined the integration of Higher-Order Thinking Skills (HOTS) and Lower-Order Thinking Skills (LOTS) in instructional questions within the Grade VII ELT textbook *When English Rings a Bell* (2017 revised edition) by Kemendikbud. Data were analyzed using the revised Bloom's Taxonomy, which categorizes cognitive skills into six levels: three LOTS domains (remembering, understanding, applying) and three HOTS domains (analyzing, evaluating, creating). Findings indicate that instructional questions in the textbook predominantly emphasize LOTS, constituting 481 out of 680 questions (71%), with Remembering (C1) being the most frequent cognitive domain. In contrast, HOTS questions, particularly those involving analyzing (C4), are underrepresented, comprising only 199 questions (29%).

Based on these findings, several recommendations are proposed for future textbook authors, English teachers, and curriculum developers. To align with the Merdeka Curriculum's emphasis on critical and reflective thinking, textbook authors should increase the inclusion of HOTS-based questions, particularly those fostering analyzing, evaluating, and creating skills. English teachers are encouraged to supplement textbook content with activities that promote HOTS to enhance students' cognitive engagement. Additionally, curriculum developers and policymakers should provide targeted guidance and professional development to support the integration of HOTS in ELT materials, fostering 21st-century skills in Indonesian EFL classrooms. Future research could explore

HOTS representation in other ELT textbooks or investigate the impact of HOTS-oriented questions on students' language proficiency and critical thinking development.

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