

## EVALUATING HOTS AND LOTS IN ‘ENGLISH FOR NUSANTARA’: A CONTENT ANALYSIS OF A GRADE VII ENGLISH TEXTBOOK

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Article Info	Abstract
<b>Article History</b> Received: November 2024 Revised: February 2025 Published: April 2025	<i>In the 21st century, fostering critical thinking and problem-solving skills is essential for students. This study analyzes the manifestation of Higher Order Thinking Skills (HOTS) and Lower Order Thinking Skills (LOTS) in the English textbook ‘English for Nusantara’ for Grade VII. HOTS involves higher-level cognitive processes such as analysis, evaluation, and creation, while LOTS focuses on recall and comprehension. Involving a qualitative research design with a content analysis approach, this study applied Revised Bloom’s Taxonomy, which categorize exercises into LOTS (remember, understand, and apply) and HOTS (analyze, evaluate, and create). A total of 116 exercises in the form of instructions and 67 exercises in the form of questions from listening, speaking, reading, and writing tasks were analyzed. To maintain consistency, inter-rater reliability was ensured, where the analysis was cross-verified through discussions with a validator. The findings show that LOTS dominates the exercises, with 81% of the exercises are in the form of instructions and 89% in the form of questions. This indicates a heavy emphasis on LOTS and suggests an opportunity for more HOTS integration. Based on these findings, the study recommends that teachers incorporate more HOTS-focused activities, and textbook authors should design future editions with a stronger emphasis on HOTS exercises to foster critical thinking skills. Such adjustments would better equip students to meet the demands of the 21st century.</i>
<b>Keywords</b> English textbook; Exercises; HOTS; LOTS; Revised Bloom’s Taxonomy;	
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### INTRODUCTION

In the context of English language learning, the development of Higher Order Thinking Skills (HOTS) and Lower Order Thinking Skills (LOTS) has become a key area of concern for teachers. The increasing demand for efficient communication worldwide necessitates that an English curriculum not only imparts fundamental knowledge but also develops students’ cognitive abilities. Given the importance of critical thinking as a basic competency in this 21st-century (Griffin & Care, 2015), textbooks, one of the teaching and learning process sources, should be designed to foster this skill. To understand the design and quality of textbooks in addressing and supporting students’ critical thinking, we need to conduct a content analysis. For the proportion of HOTS exercises, a study on teacher training for developing HOTS exercises suggests that a set of exercises is deemed effective if 75% of it conforms to HOTS criteria (Indrawati et al., 2022). Through a critical analysis of the textbooks, teachers can understand the alignment of key concepts and structure lessons of the textbooks with educational objectives in the hope of producing a more coherent and effective strategy of teaching. Additionally, students get several benefits such as learning how to identify problems, evaluating solutions, and providing decisions, all of which can be seen from exercises and questions in the textbooks (Al-Qahtani, 2019).

Several studies have been conducted to evaluate the exercises in the textbooks as an essential tool to promote critical thinking. These studies, particularly, focus on the distribution of HOTS and LOTS exercises in an English textbook published by the government and private publishers nationally and internationally. For instance, Atiullah et al. (2019) analyzed reading comprehension questions in the Indonesian government-published “Bahasa Inggris SMA/MA/SMK/MAK Kelas X” textbook and found that LOTS exercises dominated, accounted for 84.81% of the total. Conversely, Febrina et al. (2019) analyzed reading comprehension questions in a textbook entitled “Bahasa Inggris SMA/MA/SMK/MAK Grade XI” and found the HOTS took 66.8%. In the context of textbooks published by private publishers, a study by Janah (2020) on a textbook entitled “Bahasa Inggris When English Rings A Bell for SMP/MTs Kelas VII” demonstrated that LOTS exercises dominated at a range of 55.6%. A similar study by Shalihah et al. (2022) on the reading essay questions in the English SMK/MAK Edisi Revisi 2017 for grades X, XI, and XII, published by Bumi Aksara, further highlights the dominance of LOTS exercises: LOTS accounting for 91%, 93%, and 90% across the three books. In contrast, Sucipto & Cahyo (2019) analyzed reading tasks in the “Bright 2” textbook published by Erlangga, finding a slightly higher representation of HOTS over LOTS, which constitute 51% of the total. Furthermore, Febriyani et al. (2020) examined a textbook entitled “Bahasa Inggris SMA/MA/SMK/MAK Kelas XII” and revealed that LOST gained the highest frequency with 77.78%. So, LOTS is more dominant than HOTS in the exercises of the textbooks.

Some other studies have also analyzed the textbooks published by international publishers. For example, Ulum (2016) observed that the textbook “Q: Skills for Success 4 Reading and Writing” published by Oxford Publishing, indicated a complete dominance of LOTS at 100%. Another study by Al Raqqad & Ismail (2018), who examined reading questions in “Action Pack 12” reported a majority of LOTS, comprising 69.28% of the total. Qasrawi & BeniAbdelrahman (2020) in their analysis of “Unlock English Reading, Writing and Critical Thinking Skills” Textbooks (1st and 2nd editions) found that the percentage of LOTS is 60.4% in the 1st edition book and 53.4% in the 2nd edition book. The most dominant of LOTS exercises was also found by Ulum (2022), who evaluated “Focus on Reading 3”, where LOTS accounted for 100% of the total, similar to the finding of his analysis on the textbook “Q: Skills for Success 4 Reading and Writing”. The more recent study by Muhayimana et al. (2022) who analyzed the cognitive levels of Primary Leaving English Exam questions, revealed a remarkable predominance of LOTS (98.79%) over HOTS exam questions (1.21%). In contrast, a study by Xie (2024) found that HOTS was more prominently promoted in Chinese senior high school textbooks, with HOTS accounting for 51.6% in Grade 10 textbooks, 58.2% in Grade 11 textbooks, and 58.5% in Grade 12 textbooks, slightly over LOTS.

Those studies reflect that numerous books have been analyzed to see the percentages of HOTS and LOTS in the exercises of the textbooks. However, the findings on the percentages of HOTS and LOTS are not conclusive yet as different studies tend to show different distributions of HOTS and LOTS. Thus, more studies are important to conduct to find consistencies of the findings. Additionally, the previous studies have primarily concentrated on examining the critical thinking through reading exercises only, which cannot comprehensively reflect the quality of the whole textbook. Fostering the critical thinking by focusing on reading exercises only is not sufficient as students have limited engagement with higher order thinking. They tend to memorize the data and answer the questions based on the texts and therefore they practice lower order thinking skills (Jamil et al., 2024; Sari & Sakhiyya, 2020).

Analyzing how HOTS and LOTS are distributed across other language skills in the textbooks is necessary. Expanding the focus to evaluate how the textbooks integrate HOTS and LOTS exercises across all four language skills—listening, speaking, reading, and writing offers a broader, more comprehensive evaluation by considering all language domains (Surono et al.,

2023). Including the four language skills in the analysis can increase the prevalence of HOTS exercises and enhance students' cognitive development in alignment with the demand for 21st-century skills (Singh & Marappan, 2020). Additionally, by analyzing textbooks and evaluating all four language skills, this study offers a more holistic perspective on how HOTS and LOTS are distributed across the English skill exercises. The findings from this study will ensure that students are not only equipped with foundational knowledge but also the critical thinking skills necessary to thrive in a rapidly changing world (Prihatiningsih et al., 2021). Grade VII textbook is chosen in this study because students that age typically demonstrate intellectual, social, and emotional development (Prajapati et al., 2016) and are capable of thinking more critically and taking on more complex tasks (Daniels, 2022), making it an important developmental period for critical thinking. This study is hence undertaken to find answers to the following research questions:

1. How is the composition of HOTS and LOTS in listening exercises in the English textbook entitled "English for Nusantara" for grade VII?
2. How is the composition of HOTS and LOTS in speaking exercises in the English textbook entitled "English for Nusantara" for grade VII?
3. How is the composition of HOTS and LOTS in reading exercises in the English textbook entitled "English for Nusantara" for grade VII?
4. How is the composition of HOTS and LOTS in writing exercises in the English textbook entitled "English for Nusantara" for grade VII?

## RESEARCH METHOD

### Research Design

This study employed a content analysis design using a qualitative approach to uncover the composition of HOTS and LOTS in exercises in the English textbook entitled "English for Nusantara" for grade VII. The framework used to analyze listening, speaking, reading, and writing exercises was the same, i.e., the Revised Bloom's Taxonomy outlined by Anderson et al. (2001), with additional insights from Wilson (2016) regarding its application. This study focused only on the cognitive domain. However, not all six cognitive levels are represented in every English skill exercise. Listening and reading skills do not facilitate exercises at the *create* level as those skills are receptive skills. In contrast, speaking and writing promote exercises at that level as those skills are productive skills where students need to *create* something. Each cognitive domain of the Revised Bloom's Taxonomy was applied to categorize the exercise. One exercise belonged to one specific domain. Since subjectivity can influence the classification process, inter-rater reliability was ensured to maintain consistency and agreement between both the researcher and the validator in this study.

### Source of Data

The textbook used in this study was an English textbook from *Kurikulum Merdeka* entitled "English for Nusantara" for Grade VII, written by Damayanti et al. (2022). "English for Nusantara" was selected because it serves as the main *Kurikulum Merdeka* textbook written by Indonesian authors and published by The Ministry of Education. Additionally, the textbook's content is aligned with the learning outcomes outlined in the *Kurikulum Merdeka* framework, which ensures its relevance and representativeness compared to other textbooks in the same curriculum. English for Nusantara also incorporates *Profil Pelajar Pancasila*, which promotes critical thinking and creativity—skills that closely correspond to the HOTS levels in the Revised Bloom's Taxonomy. In addition, the textbook has also been widely used across schools in Indonesia (Dewantara, 2023). Grade VII was chosen because students at this age typically demonstrate intellectual, social, and emotional development (Prajapati et al., 2016), start to establish their identities (Prihatiningsih et al., 2021), think more critically, and engage in more complex tasks (Daniels, 2022). This study analyzed five chapters of the textbook. Each

chapter has learning objectives and three units. The exercises within each unit are arranged based on their complexity. Each exercise contains approximately 1-6 numbers.

### **Instruments**

This study adopted an analysis card of the Revised Bloom's Taxonomy as an instrument to collect the data. The instrument was validated by an expert in Teaching English as a Foreign Language (TEFL) and Instructional Materials (Material Evaluation and Development). Two tables are used to analyze the exercises: the first table is the analysis card consisting of keywords of each cognitive level, and the second table is the checklist table consisting of exercises in the textbook. The validator reviewed and approved the classification table, seeking additional clarification on the design, and the analysis was then carried out.

### **Data Collection**

The researcher grouped the exercises based on each language skill and ensured inter-rater reliability to minimize potential biases in the analysis. Inter-rater reliability is a method of observation involving two or more individuals, helping to eliminate any possible bias resulting from a single person's scoring (Creswell, 2015). The researcher validated the result to a senior from the English Language Education department who already graduated from the program. If there were differences in the classification result, both the researcher and the validator engaged in a discussion. Hence, the final classification was determined based on mutual agreement between the researcher and the validator. For instance, in Chapter 2, Exercise 1, the researcher initially classified the exercise under C1, while the validator classified it under C2. In such cases, further discussion was conducted to identify a well-supported reason for determining the exercise to be appropriate to the cognitive domain. The results were also cross-verified to confirm consistency.

### **Data Analysis**

To analyze the data, the researcher classified the exercises into two categories: instructions and questions. Exercises in the form of instructions directly instruct students to perform an activity, e.g., "Mind map the text below", while exercises in the form of questions consist of questions to be answered by students, e.g., "Why does Ibu Ayu teach English online?". Both types of exercises were then classified according to the cognitive levels in the Revised Bloom's Taxonomy. The decision to treat instructions and questions equally in the analysis was made based on the understanding that both types can encompass a range of cognitive processes, depending on their complexity. While instructions and questions may vary in format, both can equally demand higher-order thinking skills, especially in the context of the *Kurikulum Merdeka*, which emphasizes the development of critical thinking and problem-solving abilities. These goals could affect how cognitive levels are represented in the exercises, as the curriculum focuses on progressively building students' cognitive skills, starting with foundational knowledge and gradually advancing to higher-order thinking as students progress through their education. The result was counted and displayed in the form of percentage rather than raw frequency, as this format increases comprehension (Sinayev et al., 2015), and was presented in the form of a table for clearer understanding.

## **RESEARCH FINDINGS AND DISCUSSION**

### **Research Findings**

Each chapter in the textbook has listening, speaking, reading, and writing exercises. From the five chapters analyzed, this study finds 20 listening instructions and 12 listening questions, 29 speaking instructions, 40 reading instructions and 47 reading questions, 27 writing instructions, and 8 writing questions. Those five chapters are analyzed based on the six cognitive levels of the Revised Bloom's Taxonomy. The finding shows that most exercises of

each English skill in this textbook belong to LOTS. The following table shows the total HOTS and LOTS in the exercise instructions.

Table 1  
HOTS and LOTS in all English skill exercises in the form of instructions

Cognitive level	Skills				Total	Percentage
	Listening	Speaking	Reading	Writing		
Create/C6	-	5	-	13	18	16%
Evaluate/C5	-	-	-	-	-	19%
Analyze/C4	-	1	3	-	4	3%
Apply/C3	-	18	1	12	31	27%
Understand/C2	13	3	22	2	40	34%
Remember/C1	7	2	14	-	23	20%
Total	20	29	40	27	116	100%

Table 1 illustrates the distribution of cognitive levels across 116 instructions in the textbook, revealing differences between the four language skills. Listening contains 20 instructions, with 7 at the *remember* level and 13 at the *understand* level. It shows a strong emphasis on LOTS, with both *remember* and *understand* levels dominating the listening exercises. Speaking, on the other hand, has 29 instructions, with a more diverse distribution: 2 belong to *remember*, 3 to *understand*, 18 to *apply*, 1 to *analyze*, and 5 to *create*. Reading provides the highest number of instructions, with 40 instructions. Of these, 14 are at the *remember* level, 22 at *understand*, 1 at *apply*, and 3 at *analyze*. Similar to listening, reading is heavily focused on LOTS, particularly at the *understand* level, with very few instructions targeting higher cognitive levels. Writing has 27 instructions, with a slight difference between HOTS and LOTS, as 13 belong to the *create* level, 12 to *apply*, and 2 to. It indicates that writing exercises encourage students to engage with higher-order thinking more frequently than the other skills. Overall, 81% of the instructions belong to LOTS, with 20% at the *remember* level, 34% at the *understand* level, and 27% at the *apply* level, and only 19% promote HOTS, which include 3% at the *analyze* level and 16% at the *create* level. Interestingly, no instructions are categorized at the *evaluate* level, suggesting that the textbook tends to prioritize foundational cognitive skills, especially in listening and reading, while writing and speaking include a higher proportion of activities that require more complex cognitive processes. The following chart shows the overall HOTS and LOTS of each English skill exercise in the form of instructions.

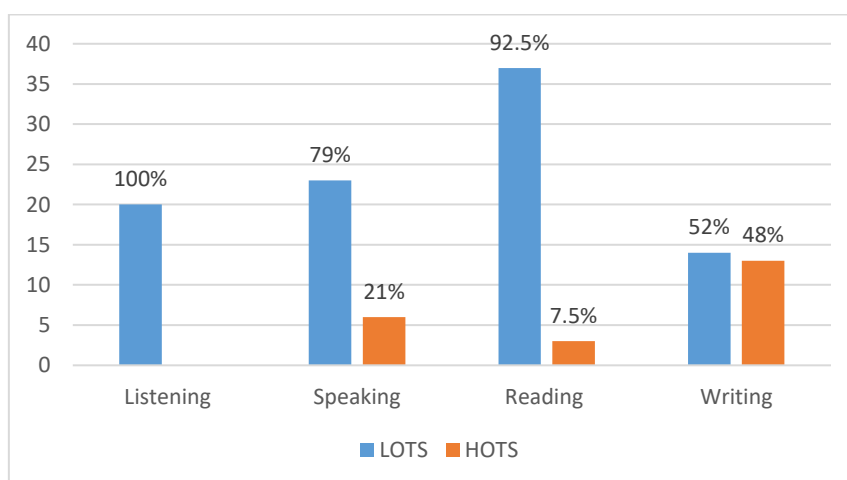


Figure 1. The distribution of HOTS and LOTS across the four English skill exercises in the form of instructions

Figure 1 presents the distribution of HOTS and LOTS across four language skills—listening, speaking, reading, and writing—in the form of instructions. For listening, 100% of the instructions are categorized under LOTS, which indicates that listening instructions in this textbook predominantly focus on basic cognitive skills and do not engage higher-level cognitive exercises. In speaking, the distribution is more varied, with 79% of the instructions belonging to LOTS and 21% to HOTS. While most of the speaking instructions still promote LOTS, there is a portion of instructions that engage students in HOTS exercises. For reading, the instructions are primarily focused on LOTS, with 92.5% of the exercises falling under this category. Only 7.5% of the instructions are designed to engage HOTS, with very few activities designed to challenge students' higher-order thinking abilities. In writing skill exercises, the distribution is more balanced, with 52% of the instructions focused on LOTS and 48% promoting HOTS. It suggests that writing instructions in this textbook provide a relatively even mix of basic cognitive tasks and more complex, higher-order thinking tasks, allowing students to engage in both lower- and higher-order thinking through writing. The following table shows the total manifestation table of HOTS and LOTS in all English skill exercises in the form of questions.

Table 2  
HOTS and LOTS in all English skill exercises in the form of questions

Cognitive level	Skills				Total	Percentage	
	Listening	Speaking	Reading	Writing			
Create/C6	-	-	-	-	-	-	
Evaluate/C5	1	-	4	-	5	8%	11%
Analyze/C4	-	-	2	-	2	3%	
Apply/C3	-	-	3	8	11	16%	
Understand/C2	11	-	38	-	49	73%	89%
Remember/C1	-	-	-	-	-	-	
Total	12	-	47	8	67	100%	

Table 2 shows a clear distribution of questions across the four language skills, with the listening section containing 12 questions. 11 questions are categorized under the *understand* level and 1 under the *evaluate* level, indicating that most of the listening questions focus on LOTS. Speaking questions are not found in the textbook for this study. In reading, 38 out of 47 questions belong to the *understand* level, followed by 3 at the *apply* level, 2 at the *analyze* level, and 4 at the *evaluate* level, further confirming the dominance of LOTS in this skill. Writing provides 8 questions, all at the *apply* level, which is still categorized as LOTS but slightly more complex compared to *understand* or *remember*. In total, 49 questions belong to the *understand* level (73%), 11 to *apply* (16%), 2 to *analyze* (3%), and 5 to *evaluate* (8%). This result shows that LOTS dominates the questions (89%), with HOTS providing only 11%. It highlights that most questions across all skills promote LOTS, with only a small portion engaging higher-order cognitive processes. The following chart shows the overall HOTS and LOTS of each English skill exercise in the form of questions.

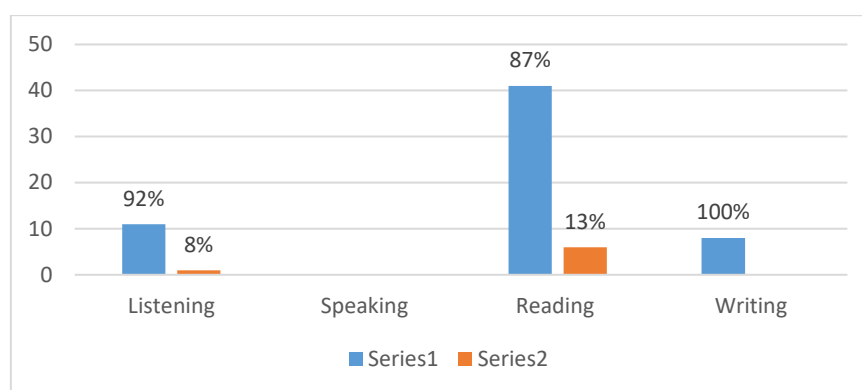


Figure 2. The distribution of HOTS and LOTS across the four English skill exercises in the form of questions

Figure 2 shows the distribution of HOTS and LOTS in exercises in the form of questions across the four language skills. In listening, 92% of the questions promote LOTS, while only 8% involve HOTS, indicating a heavy focus on lower-order thinking skills. Speaking questions were not found in this study. In reading, 87% of the questions are categorized under LOTS, but 13% involve HOTS, suggesting that although most reading questions focus on LOTS, there is still some attention to HOTS. Lastly, writing exercises completely focus on LOTS, with 100% of the questions falling under this category. Overall, the data reveals that LOTS dominate the question-based exercises for listening, reading, and writing skills. It highlights the textbook's emphasis on foundational cognitive skills and a limited distribution of HOTS in exercises in the form of questions.

### The composition of HOTS and LOTS in listening exercises in the English textbook entitled “English for Nusantara” for grade VII

Listening is the first English skill analyzed in this study. In this textbook, listening skill exercises consist of listening instructions and questions. The first finding focuses on listening exercises in the form of instructions. Then, the second finding explains the listening exercises in the form of questions.

#### *The finding of listening exercises in the form of instructions*

The following table shows the frequency and percentage of the listening instructions in each chapter.

Table 3  
Frequencies and percentage analysis in listening instructions

Frequency and percentage analysis in listening instructions										
Skill	Level	Cognitive Level	Chapter					Total	Percentage	
			1	2	3	4	5			
Listening	HOTS	Create/C6	-	-	-	-	-	-	-	0%
		Evaluate/C5	-	-	-	-	-	-	-	
		Analyze/C4	-	-	-	-	-	-	-	
	LOTS	Apply/C3	-	-	-	-	-	-	-	100%
		Understand/C2	4	1	2	4	3	13	65%	
		Remember/C1	3	1	1	-	1	7	35%	
Total								20	100%	

Table 3 shows that all listening instructions (20 instructions) are at the *remember* and *understand* level. Chapter 1 has 3 instructions at the *remember* level and 4 at the *understand* level. Chapter 2 has 1 instruction at the *remember* and *understand* level. Chapter 3 includes 1 instruction belonging to *remember* and 2 to *understand*. Chapter 4 has no instruction belonging



to *remember* but 4 to *understand* level. The last chapter, Chapter 5, has 1 instruction belonging to *remember* and 3 to *understand*. Listening instructions in the textbook cover only two levels, i.e., *remember* and *understand*. In total, listening instructions in the textbook consist of 13 instructions at the *remember* level and 7 instructions at the *understand* level.

Surprisingly, based on the calculation, *understand* dominates the instructions since 65% or more than half the number of instructions in the five chapters belong to it. *Apply* is not focused in the textbook. In total, listening instructions in the LOTS category in this textbook reach 100%, which shows a clear focus on foundational cognitive skills, with no instructions found to be at the higher-order thinking skills in the listening section. An example of the listening instruction in the textbook is as follows.

- b. Listen again to **Audio 4.4**. Write the number to match the times and the pictures.



Worksheet 4.5

Figure 3. Example of a listening instruction

(Source: Damayanti, I. L., Febrianti, Y., Nurlaelawati, I., Suharto, P. P., Fellani, A. J., & Rahmadhani, R. (2022). English for Nusantara. Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia)

Figure 3 can be found in Chapter 4 (My School Activities) p.190. In this exercise, students have to match two pieces of information after they listen to the audio. This exercise belongs to the *understand* level. Students should understand the information in the audio to be able to do this kind of exercise.

#### *The finding of listening exercises in the form of questions*

The table distribution of listening questions in the textbook is as follows.

Table 4  
Frequencies and percentage analysis in listening questions

Frequencies and percentage analysis in listening questions										
Skill	Level	Cognitive Level	Chapter					Total	Percentage	
			1	2	3	4	5			
Listening	HOTS	Create/C6	-	-	-	-	-	-	-	
		Evaluate/C5	-	-	1	-	-	1	8%	8%
		Analyze/C4	-	-	-	-	-	-	-	
	LOTS	Apply/C3	-	-	-	-	-	-	-	
		Understand/C2	-	-	2	4	5	11	92%	92%
		Remember/C1	-	-	-	-	-	-	-	
Total								12	100%	

Table 4 reveals that there are 12 listening questions in the textbook. The questions are found only in Chapter 3, Chapter 4, and Chapter 5. Chapter 3 has 2 questions categorized at the *understand* and 1 at the *evaluate* level. Chapter 4 has 4 questions that belong to the *understand* level. Last, Chapter 5 has 5 questions at the *understand* level. All listening questions in this study are found at the *understand* and *evaluate* level only.

For the overall total HOTS and LOTS, 11 (92%) of questions in listening skills in the textbook belong to LOTS, while 1 (8%) belong to HOTS. Thus, similar to the listening



instructions, LOTS also dominates the listening questions, further emphasizing the lack of higher-order cognitive thinking questions in the listening section of the textbook. Students are given a picture of an online chat between two people and questions to be answered. In this exercise, students need to explain the answer based on the audio. This question is categorized in the *understand* level because students need to understand the information from the audio to be able to explain the answer.

### The composition of HOTS and LOTS in speaking exercises in the English textbook entitled “English for Nusantara” for grade VII

Speaking exercises, the second English skill analyzed in this study, is promoted only through instructions. Five chapters of the textbook have speaking exercises. Below is the table of frequencies and percentage analysis on speaking skill instructions. It shows that the LOTS is still the dominant.

Table 5  
Frequencies and percentage analysis in speaking instructions

Skill	Level	Cognitive Level	Chapter					Total	Percentage	
			1	2	3	4	5			
Speaking	HOTS	Create/C6	-	2	1	-	2	5	17%	21%
		Evaluate/C5	-	-	-	-	-	-	-	
		Analyze/C4	-	-	-	-	1	1	4%	
	LOTS	Apply/C3	5	6	2	3	2	18	62%	79%
		Understand/C2	-	-	2	-	1	3	10%	
		Remember/C1	1	-	-	-	1	2	7%	
Total							29	100%		

Table 5 shows that instructions in speaking exercises (29 instructions) are varied in terms of cognitive levels. Chapter 1 has 1 instruction belonging to *remember* and 5 to *apply*. Chapter 2 has 6 instructions at the *apply* level. *Create* also appears in this chapter since 2 instructions belong to it. Chapter 3 is more varied. 2 instructions are at the *understand* and *apply* level, and 1 at the *create* level. Chapter 4 promotes 3 instructions at the *apply* level. Chapter 5, as the last chapter, has a greater variety of cognitive levels. 1 instruction belongs to *remember*, *understand*, and *analyze*, and 2 to *apply* and *create*.

In total, speaking instructions in the textbook consist of 2 (7%) instructions at the *remember* level, 3 (10%) instructions at the *understand* level, 18 (62%) instructions at the *apply* level, 1 (4%) instruction at the *analyze* level, and 5 (17%) instructions at the *create* level. For the overall HOTS and LOTS, LOTS dominates the instructions since it reaches 79% of the total instructions in the textbook, while HOTS reaches 21%. It demonstrates that while there is some focus on HOTS, LOTS still heavily outweighs HOTS in the speaking section of the textbook. The following is an example of the speaking instruction in the textbook.

The learning exercise requires students to practice the dialog with their classmates. Before students practice the dialog, they will listen to the audio that will help them pronounce the words, manage the intonation, etc. This kind of exercise belongs to the *apply* level because it leads students to carry out a specific procedure to accomplish the exercise, which is practicing the conversation. After listening to the audio, students are given a new situation where they should apply their understanding of pronouncing words by practicing the dialog.

### The composition of HOTS and LOTS in reading exercises in the English textbook entitled “English for Nusantara” for grade VII

The third English skill exercise analyzed in this study is reading exercises. Reading exercises in the textbook also have two kinds of exercises (instructions and questions).

Compared to the other skills, reading is the skill with the most exercises both in the form of instructions and questions. The finding shows that HOTS has a low frequency in the reading exercises.

*The finding of reading exercises in the form of instructions*

The total distribution of the cognitive domain of reading instructions in the textbook is as follows.

Table 6  
Frequencies and percentage analysis in reading instructions

Skill	Level	Cognitive Level	Chapter					Total	Percentage	
			1	2	3	4	5			
Reading	HOTS	Create/C6	-	-	-	-	-	-	-	7.5%
		Evaluate/C5	-	-	-	-	-	-	-	
		Analyze/C4	1	1	-	1	-	3	7.5%	
	LOTS	Apply/C3	-	1	-	-	-	1	2.5%	92.5 %
		Understand/C2	4	5	6	5	2	22	55%	
		Remember/C1	-	4	3	5	2	14	35%	
Total							40	100%		

Table 6 shows that reading instructions (40 instructions) in the textbook are at the *remember* until *analyze* level. Chapter 1 has 4 instructions at the *understand* level and 1 at the *analyze* level. In Chapter 2 are 4 instructions belonging to *remember*, 5 to *understand*, and 1 to *apply* and *analyze*. Chapter 3 shows that the *remember* level provides 3 instructions, and the *understand* level provides 6 instructions. Chapter 4 gains the highest frequency on the *remember* level with 5 instructions. Chapter 4 also has 5 instructions at the *understand* level and 1 instruction at the *analyze* level. Chapter 5 promotes 2 instructions at both the *remember* and *understand* levels.

In total, the textbook provides 14 (35%) reading instructions at the *remember* level, 22 (55%) at the *understand* level, 1 (2.5%) at the *apply* level, and 3 (7.5) at the *analyze* level. It shows that the *understand* level is the most dominant level in the reading instructions. In terms of HOTS and LOTS, HOTS comprises 7.5% of the total instructions, while LOTS accounts for 92.5%, which demonstrates that LOTS is the overwhelmingly dominant cognitive level in reading instructions. In the exercise, the textbook provides the students with a text. After that, the students need to determine the regular activities and facts from the text. To accomplish this exercise, not only do the students need to read the text, but they also need to analyze it to be able to distinguish between the two categories.

*The finding of reading exercises in the form of questions*

The table manifestation of HOTS and LOTS in reading questions in the textbook is as follows.

Table 7  
Frequencies and percentage analysis in reading questions

Skill	Level	Cognitive Level	Chapter					Total	Percentage
			1	2	3	4	5		
Reading	HOTS	Create/C6	-	-	-	-	-	-	-
		Evaluate/C5	1	-	-	3	-	4	9%
		Analyze/C4	-	-	-	2	-	2	4%
	LOTS	Apply/C3	-	3	-	-	-	3	6%
		Understand/C2	15	5	4	14	-	38	81%
		Remember/C1	-	-	-	-	-	-	-
Total								47	100%

Table 7 reveals that 47 reading questions are found in the textbook, most of which belong to the *understand* level. Questions at the *understand* level in Chapter 1 have the highest frequency, with 15 questions. There is also 1 question at the *evaluate* level. Chapter 2 promotes questions at the *understand* (5 questions) and *apply* level (3 questions). Chapter 3 has 4 questions belonging to the *understand* level. In Chapter 4, the *understand* level promotes 14 questions, the *analyze* level promotes 2 questions, and the *evaluate* level promotes 3 questions.

In total, there are 38 (81%) questions at the *understand* level, 3 (6%) at the *apply* level, 2 (4%) at the *analyze* level, and 4(9%) at the *evaluate* level. Based on the calculation, the HOTS category comprises 13% of the total questions, while the LOTS category dominates at 87%, which clearly shows that, similar to the distribution of instructions, LOTS dominates the reading questions, with HOTS provides a small portion of the total.

### The composition of HOTS and LOTS in writing exercises in the English textbook entitled “English for Nusantara” for grade VII

Writing is the last English skill analyzed in this study. Writing exercises in the textbook are in the form of instructions and questions. As one of the productive skills, writing exercises focus more on students’ practice and production. The finding shows that LOTS is still the dominant.

#### *The finding of writing exercises in the form of instructions*

The following is the table of frequency and percentage analysis on writing instructions in the textbook.

Table 8  
Frequencies and percentage analysis in writing instructions

Frequency and percentage analysis in writing instructions									
Skill	Level	Cognitive Level	Chapter					Total	Percentage
			1	2	3	4	5		
Writing	HOTS	Create/C6	3	3	-	4	3	13	48%
		Evaluate/C5	-	-	-	-	-	-	-
		Analyze/C4	-	-	-	-	-	-	-
	LOTS	Apply/C3	2	5	4	-	1	12	45%
		Understand/C2	-	-	1	-	1	2	7%
		Remember/C1	-	-	-	-	-	-	-
Total							27	100%	

Table 8 shows that the textbook has 27 writing instructions. The instructions in chapters 1 and 2 primarily fall under the *apply* and *create* levels. Chapter 1 has 2 writing instructions belonging to *apply* and 3 to *create*, while Chapter 2 has 5 writing instructions at the *apply* level and 3 at the *create* level. Chapter 3 is the first chapter where the questions are categorized in the *understand* level, with 1 instruction. Chapter 3 also contains instructions at the *apply* level, with 4 instructions. Instructions in Chapter 4 consist of only 4 instructions at the *create* level. Chapter 5 is more varied since 1 instruction is categorized in the *understand* and *apply* level, and 3 instructions are in the *create* level.

In total, *create* has the highest frequency and becomes the only HOTS category found in the writing instructions, with 13 (48%) instructions, followed by *apply* with 12 (45%) instructions, and *understand* with 2 (7%) instructions. The distribution of HOTS and LOTS is relatively close, with HOTS accounting for 48% and LOTS at 52%, indicating a slight dominance of LOTS over HOTS in the writing instructions. The following are examples of the writing instructions.

*The finding of writing exercises in the form of questions*

The following table reveals the composition of HOTS and LOTS of writing questions.

Table 9  
Frequencies and percentage analysis in writing questions

Skill	Level	Cognitive Level	Chapter					Total	Percentage
			1	2	3	4	5		
Writing	HOTS	Create/C6	-	-	-	-	-	-	0%
		Evaluate/C5	-	-	-	-	-	-	
		Analyze/C4	-	-	-	-	-	-	
	LOTS	Apply/C3	-	-	8	-	-	8	100%
		Understand/C2	-	-	-	-	-	-	100%
		Remember/C1	-	-	-	-	-	-	
Total							8	100%	

Table 9 clearly shows that writing questions (8 questions) in the textbook are found only in Chapter 3. It differs from the other skills, where exercises in the form of questions are found in multiple chapters. Moreover, all the questions in Chapter 3 are at the *apply* level only, contributing 100% to the total number of writing questions. Thus, there are 8 questions in total, all of which are categorized in LOTS.

Since all the questions are at the *apply* level, the percentage of questions at that level is 100%. It shows that all of the writing questions in the textbook are classified under LOTS. As a result, LOTS thoroughly dominate the writing questions in the textbook. An example of the writing question is as follows.

**Discussion**

There are five chapters analyzed in this study. It turns out that exercises in the English textbook entitled “English for Nusantara” for grade VII are in the form of instructions and questions. Both are analyzed in terms of HOTS and LOTS. From all the chapters, each cognitive level of the Revised Bloom’s Taxonomy is revealed. Both HOTS and LOTS are presented in the textbooks. There are 116 instructions, 94 of which belong to LOTS, and 22 belong to HOTS. For the exercises in the form of questions, 60 out of 67 questions are categorized in LOTS and 7 in HOTS.

*HOTS and LOTS in listening exercises*

The first research question in this study focuses on the manifestation of HOTS and LOTS in listening exercises. As the finding above shows, listening exercises, both in the form of instructions and questions, are dominated by LOTS, with 100% LOTS in listening instructions and 92% LOTS in listening questions. The findings on listening instructions and questions are similar in that neither promotes create-level exercises, as receptive skills do not emphasize on students creating a product. Among the three LOTS levels, *understand* gains the highest frequency. This finding aligns with studies done by Qasrawi and BeniAbdelrahman (2020) and Xie (2024), which also revealed that the *understand* or comprehension level appears most frequently. Types of listening exercises analyzed in the textbook mostly require students to listen to audio and do exercises such as completing the blanks, matching, etc. For the *remember* level, operational words of listening exercises found in this study include fill in, put a tick, etc. In this type of exercise, students need to recall facts or knowledge from their memory. At the *understand* level, students’ understanding of the materials is tested. Instructions in listening exercises at the *understand* level often ask students to match between two pieces of information, representing one form of representation to another, such as from an audio into a mind map, etc. Although those kinds of exercises are categorized in LOTS, they still have

advantages for students. For example, matching exercises allow students to depend on the provided audio without translating it into a verbal representation of a sound (Feller, 2018). Thus, this activity will save time in the teaching and learning process.

Listening instructions and listening questions in the textbook are dominated by the *understand* level. Although *remember* is promoted in listening instructions, it still has a smaller distribution compared to *understand*. This finding is in contrast to the study done by Janah (2020), Atiullah et al. (2019), and Febriyani et al. (2020), which found that *remember* obtains the highest frequency. HOTS has a null distribution in listening instructions and questions, which is in line with the study by Ulum (2022), who also found no questions categorized in HOTS category.

#### *HOTS and LOTS in speaking exercises*

The second research question in this study intends to find HOTS and LOTS distribution in speaking exercises. The finding shows that speaking exercises are only in the form of instructions and are dominated by LOTS with 79%. Of those instructions, the *apply* level appears most frequently, at 62%. Exercises at the *apply* level found in speaking exercises in the textbook ask students to practice speaking English through a dialog, a monolog, etc. The *create* level also appears many times with 17%. It is no wonder that *apply* and *create* are emphasized since they are productive skills. Exercises at the *create* level mostly ask students to produce something but in a very new situation. Those kinds of exercises might be emphasized because doing presentations leads students to try to make what they speak as understandable as possible. In addition, students can be considered successful English learners if they can speak it (Tahir, 2015). Because of that, the textbook's authors put much practice into speaking exercises because they want the students to improve their English. An example of the exercise at the *create* level is asking students to draw their school, label each room, and present their favorite room and how to get there. This kind of exercise belongs to the *create* level because students create a product.

The cognitive level with the fewest distribution in speaking exercises is *analyze*. This finding is similar to Febriyani et al. (2020), who also found that the *analyze* level obtains the lowest frequency. Speaking skills mainly focus on production instead of analysis. An example of the *analyze* level in speaking exercises is instructing students to analyze a map before they describe it. So, levels in the HOTS category found in speaking exercises are *analyze* and *create*. Although HOTS is promoted in the textbook, it is still under LOTS.

#### *HOTS and LOTS in reading exercises*

The third research question analyzes the proportion of HOTS and LOTS in reading exercises. The table of findings above shows that reading exercises are found in the form of instructions and questions, both of which are dominated by LOTS, with 92.5% LOTS in reading instructions and 87% LOTS in reading questions. Similar to listening, reading instructions and questions do not promote exercises at the *create* level. The textbook also provides reading exercises at the HOTS level although the proportion is still under the LOTS ones. Based on the findings, *understand* is the most dominant level, which is in line with studies done by Qasrawi and BeniAbdelrahman (2020) and Xie (2024). Reading exercises in the textbook mainly instruct students to comprehend the text to be able to do the exercise or explain the answer to the question. Matching between two pieces of information is an example of the exercise.

Instructions in reading exercises are also promoted by the *remember* level, where students need to recall information they get from texts. Multiple choice is one of the examples of reading exercises. In reading questions, the answers can be seen explicitly from the text, so the students can copy them directly. It might happen because the textbook's authors put more emphasis on productive skills (speaking and writing) since those skills make students more active. In addition, exercises like multiple choices are easy to grade (Khashabi et al., 2018),

which can save time. Therefore, as soon as the students can comprehend the text, they can go to the next section in the textbook. *Apply* is also found in both reading instructions and questions. The findings on the HOTS category are different since reading instructions provide exercises at the *analyze* level only while reading questions provide exercises at the *analyze* and *evaluate* level. *Create* level has a null distribution because the authors provide create-level exercises in productive skills.

#### *HOTS and LOTS in writing exercises*

The fourth research question deals with the manifestation of HOTS and LOTS in writing exercises. Writing exercises are also found in the form of instructions and questions. Based on the findings, writing exercises emphasize LOTS rather than HOTS, with 52% LOTS in writing instructions and 100% LOTS in writing questions. However, the most outstanding finding reveals that the *create* level obtains the highest distribution in writing instructions. The fact that it is the only HOTS level and the highest level on the Revised Bloom's Taxonomy contributing to the exercises shows that the authors emphasize the HOTS exercises on productive skills. Examples of the exercises at this level mostly come from planning and brainstorming, outlining and drafting, and writing and editing. Hence, although LOTS is more dominant than HOTS, HOTS in this finding can still be considered to have a substantial contribution since there is only a slight difference between the percentages. Below the *create* level is the *apply* level, which is also a level where students are expected to be more active by carrying out a procedure, etc. The cognitive level below the *apply* level is the *understand* level. While writing instructions contribute to various cognitive levels, writing questions contribute to questions at the *apply* level only. The example from the textbook is asking students to write down the procedure for recycling tissue paper. It is categorized at the *apply* level because students apply their understanding of procedure text.

The overall distribution of cognitive levels in the Revised Bloom's Taxonomy across all English skill exercises shows that LOTS dominates the exercises in both instructions and questions, which is consistent with most previous studies. However, this study highlights aspects not emphasized in earlier studies, such the composition of each English skill exercise, two kinds of exercises in the textbook (instructions and questions), and the dominance of the *create* level in writing exercises. First, this study analyzed all the English skill exercises, while most previous studies focused more on one or two English skills, especially reading. It might happen because reading questions were easier to find than other skills (Febrina et al., 2019). Second, this study found the exercises both in the form of instructions or questions, which is different from most previous studies that analyzed one kind of exercise. It might happen because they intended to focus on one specific English skill. Third, this study found the dominance of the *create* level in writing exercises because the *create* level in productive skills is a must. While HOTS should be prioritized, LOTS is also necessary as both are interconnected (Tikhonova & Kudinova, 2015). LOTS is a foundational skill for the development of HOTS (Kamarulzaman et al., 2017), and according to Bloom's Taxonomy, students must first master lower cognitive levels before progressing to higher ones (Barut & Wijaya, 2021).

To address the lack of HOTS exercises in the textbook, teachers can add activities that target higher-order thinking skills. After completing the exercises, teachers can ask students to analyze, evaluate, or create their own interpretations of the material. Role-playing and debates (Purnama & Nurdianingsih, 2019), along with problem-solving tasks (Yurniwati and Soleh, 2020) could be included in speaking and writing exercises to promote HOTS. These activities encourage students to engage with the content in more meaningful ways. Additionally, teachers can facilitate collaborative learning (Alharbi et al., 2022; Raiyn & Tilchin, 2016; Siew & Basari, 2024) and Problem-based Learning (Raiyn & Tilchin, 2016; Sarnoko et al., 2024; Siew & Basari, 2024; Wijayanto et al., 2023) where students work in groups to further enhance their critical thinking and problem-solving abilities.

This study also reveals a focus on LOTS in the textbook, suggesting that more HOTS activities should be incorporated. The lack of HOTS exercises in listening and reading tasks indicates that curriculum developers and textbook authors need to include more exercises that encourage higher-order thinking, such as analysis, evaluation, and creation. HOTS is essential for developing critical thinking and problem-solving skills. Textbook authors can better emphasize HOTS in future editions by prioritizing higher-order cognitive skills across all language skills, while still incorporating essential foundational skills to provide a comprehensive learning experience. Textbooks should provide a progression from LOTS to HOTS, starting with basic exercises to build foundational skills and gradually introducing exercises that challenge students to analyze, evaluate, and create. Incorporating project-based assignments (Jameel et al., 2023; Rosmawaty et al., 2024), real-world problem-solving scenarios (Yurniwati and Soleh, 2020), and collaborative tasks would further engage students in higher-level thinking. Moreover, using diverse question types and exercise formats that appeal to different cognitive processes is key. This balance will help students develop both foundational and higher-order thinking skills, providing a more well-rounded education.

## CONCLUSION

Regarding the findings of this study, it can be concluded that the composition of HOTS exercises in each English skill exercise in the textbook entitled “English for Nusantara” for grade VII is lower than LOTS. First, HOTS has a null distribution in listening instructions because all the instructions belong to LOTS with 100%. HOTS in listening questions obtains 8%, and LOTS obtains 92%. Second, speaking instructions promote 21% HOTS and 79% LOTS. Third, reading instructions promote 7.5% HOTS and 92.5% LOTS, while reading questions promote 13% HOTS and 87% LOTS. Fourth, writing instructions promote 48% HOTS and 52% LOTS, while writing questions promote 100% LOTS. In total, 19% HOTS and 81% LOTS were used in the exercise in the form of instructions, and 11% HOTS and 89% LOTS were used in the English exercises in the form of questions.

Furthermore, the *understand* cognitive level emerges as the most frequent across all exercises, and no exercises at the *evaluate* level in instructions or the *create* level in questions were found. These findings highlight that, similar to previous studies, LOTS dominates the exercises in this textbook. Despite this, the textbook remains suitable for classroom use, though several recommendations can enhance its alignment with the need to promote HOTS. First, teachers should supplement the textbook with activities that foster higher-order thinking. Teachers could incorporate debates, case studies, and project-based assignments that push students to analyze, evaluate, and create. Additionally, teachers can ask HOTS-based questions spontaneously during lessons to encourage critical thinking and use collaborative learning activities where students work together to analyze or solve problems.

For textbook authors, future editions should integrate more HOTS exercises across all English skills. Textbooks should introduce a gradual progression of tasks—beginning with LOTS exercises to develop foundational skills, followed by HOTS exercises that challenge students to analyze, evaluate, and create. It would be helpful to include more open-ended questions, real-world problem-solving scenarios, and collaborative tasks. Such revisions would ensure a more emphasis on HOTS across language skills, enhancing students’ overall cognitive development. Last, future researchers could examine textbooks from other publishers within the context of *Kurikulum Merdeka*, to investigate whether this dominance of LOTS is widespread or specific to this particular textbook. Such research could provide valuable insights into how textbooks across the curriculum can better support the development of higher-order thinking skills and assist teachers in meeting the evolving demands of education. Future researchers could also confirm this study by interviewing the textbook author about the development of HOTS and LOTS in the textbook used in this study.



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## REFERENCES

- Al-Qahtani, E. M. (2019). Critical thinking pedagogy: Using Textbooks evaluation and content analysis techniques for Saudi university students. *International Journal of Linguistics, Literature and Translation*, 2(5), 239–244
- Al Raqquad, Y. M., & Ismail, H. H. (2018). Analyzing the reading questions of AP12 textbook according to Bloom's Taxonomy. *International Journal of Education, Psychology and Counseling*, 3(22), 84–94.
- Alharbi, S. M., Elfeky, A. I., & Ahmed, E. S. (2022). The effect of e-collaborative learning environment on development of critical thinking and higher order thinking skills. *Journal of Positive School Psychology*, 6(6), 6848–6854.
- Anderson, L. W. (Ed.), Krathwohl, D. R. (Ed.), Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives; abridged edition*. (abridged). Longman.
- Atiullah, K., Fitriati, S. W., & Rukmini, D. (2019). Using Revised Bloom's Taxonomy to evaluate higher order thinking skills (HOTS) in reading comprehension questions of English textbook for year X of high school. *English Education Journal*, 9(4), 428-436.
- Barut, M. E. O., & Wijaya, A. (2021). *Examining Middle School Student's Lower Order Thinking Skill*: In 7th International Conference on Research, Implementation, and Education of Mathematics and Sciences (ICRIEMS 2020). Yogyakarta, Indonesia. <https://doi.org/10.2991/assehr.k.210305.052>
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Fifth edition). Pearson.
- Damayanti, I. L., Febrianti, Y., Nurlaelawati, I., Suharto, P. P., Fellani, A. J., & Rahmadhani, R. (2022). *English for Nusantara*. Kementrian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia.
- Daniels, E. (2022). Understanding middle school teachers' levels of efficacy to meet the needs of young adolescents. *Middle Grades Review*, 8(3). <https://scholarworks.uvm.edu/mgreview/vol8/iss3/5>
- Dewantara, K. A. K. (2023). Type analysis of speaking performance assessment task in English for Nusantara textbook. *Jurnal Pendidikan Bahasa Inggris Undiksha*, 11(1), 62–69. <https://doi.org/10.23887/jpbi.v11i1.64928>
- Febrina, Usman, B., & Muslem, A. (2019). Analysis of reading comprehension questions by using Revised Bloom's Taxonomy on higher order thinking skill (HOTS). *English Education Journal (EEJ)*, 10(1), 1–15.
- Febriyani, R. A., Yunita, W., & Damayanti, I. (2020). An analysis on higher order thinking skill (HOTS) in compulsory English textbook for the twelfth grade of Indonesian senior high schools. *Journal of English Education and Teaching*, 4(2), 170–183. <https://doi.org/10.33369/jeet.4.2.170-183>
- Feller, R. (2018). Audio production and critical listening: Technical ear training. *Computer Music Journal*, 42(1), 82–86. [https://doi.org/10.1162/comj\\_r\\_00454](https://doi.org/10.1162/comj_r_00454)
- Griffin, P., & Care, E. (Eds.). (2015). *Assessment and Teaching of 21st Century Skills: Methods and Approach*. Springer Netherlands. <https://doi.org/10.1007/978-94-017-9395-7>
- Indrawati, S., Erna, E., Sri Utami, S., Turama, A. R., & Novritika, N. (2022). Pelatihan penyusunan soal-soal tes high order thinking skill (HOTS) pada guru-guru smp sekolah mitra FKIP UNSRI di Palembang. *Journal of Sriwijaya Community Service on Education (JSCSE)*, 1(1), 22–29. <https://doi.org/10.36706/jscse.v1i1.362>

- Jameel, A. H., Gafur, A., & Sapta, A. (2023). Hots question analysis on e-learning: a 21st century competency evaluation. *Edukasi*, 17(1), 56–66.
- Jamil, M., Bokhari, T. B., & Ahmad, D. (2024). Evaluation of critical thinking elements: A qualitative content analysis of Physics textbook grade IX. *Qlantic Journal of Social Sciences*, 5(1), 344–350. <https://doi.org/10.55737/qjss.337110358>
- Janah, N. F. (2020). *Lots and Hots Item Analysis Based on Bloom's Taxonomy Revision in Exercise of English Textbook Entitled Bahasa Inggris: When English Rings A Bell for SMP/MTS Kelas VII*. [Bachelor's thesis, IAIN Surakarta]. IAIN Surakarta Repository. <https://eprints.iain-surakarta.ac.id/90/1/163221024%20Nurul%20Fatkhuril%20Jannah.pdf>.
- Kamarulzaman, M. S., Sailin, S. N., Mahmor, N. A., & Shaari, A. J. (2017). Correlation between LOTS and HOTS scores among UUM students. *Asian Journal of Educational Research*, 5(3), 71–76
- Khashabi, D., Chaturvedi, S., Roth, M., Upadhyay, S., & Roth, D. (2018). Looking beyond the surface: a challenge set for reading comprehension over multiple sentences. *Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long Papers)*, 252–262. <https://doi.org/10.18653/v1/N18-1023>
- Muhayimana, T., Kwizera, L., & Nyirahabimana, M. R. (2022). Using Bloom's taxonomy to evaluate the cognitive levels of Primary Leaving English Exam questions in Rwandan schools. *Curriculum Perspectives*, 42(1), 51–63. <https://doi.org/10.1007/s41297-021-00156-2>
- Prajapati, R., Sharma, B., & Sharma, D. (2017). Significance of life skills education. *Contemporary Issues in Education Research (CIER)*, 10(1), 1–6. <https://doi.org/10.19030/cier.v10i1.9875>
- Prihatiningsih, F., Petrus, I., & Silvhiyany, S. (2021). Cultural representation in EFL textbooks for the seventh graders: A multimodal analysis. *Lingua Cultura*, 15(1), 121–133 <https://doi.org/10.21512/lc.v15i1.7319>
- Purnama, Y. I., & Nurdianingsih, F. (2019). The impact of higher order thinking skills (hots) instructions in teaching EFL speaking skill from the perspective of students' motivation. *Lingua Cultura*, 13(4), 313. <https://doi.org/10.21512/lc.v13i4.6105>
- Qasrawi, R., & BeniAbdelrahman, A. (2020). The higher and lower-order thinking skills (hots and lots) in unlock english textbooks (1st and 2nd editions) based on bloom's taxonomy: An analysis study. *International Online Journal of Education and Teaching (IOJET)*, 7(3). 744-758. <https://iojet.org/index.php/IOJET/article/view/866>
- Raiyn, J., & Tilchin, O. (2016). The impact of adaptive complex assessment on the hot skill development of students. *World Journal of Education*, 6(2), 12. <https://doi.org/10.5430/wje.v6n2p12>
- Rosmawaty, R., Sumarsih, S., Joharis, M., & Yuhdi, A. (2024). Learning Design of Creative Writing in Higher Education Based on Case and Team Based Project Methods in Creating High Order Thinking Skill. *Proceedings of the 5th International Conference on Innovation in Education, Science, and Culture, ICIESC 2023, 24 October 2023, Medan, Indonesia*. <https://doi.org/10.4108/eai.24-10-2023.2342320>
- Sari, R. N., & Sakhiyya, Z. (2020). An analysis of the English course book viewed from higher-order thinking skills. *ELT Forum: Journal of English Language Teaching*, 9(2), 97–106
- Sarnoko, Asrowi, Gunarhadi, & Usodo, B. (2024). Feasibility of a problem-based social constructivism learning model to improve higher-order thinking skills among primary school students. *Journal of Education and E-Learning Research*, 11(3), 588–596. <https://doi.org/10.20448/jeelr.v11i3.5927>

- Shalihah, M., Fikri, D., & Mustofa, M. (2022). Analyzing higher order thinking skills (HOTS) questions of reading essay tasks in senior high school English textbook. *English Education Journal*, 13(1), 106–121. <https://doi.org/10.24815/eej.v13i1.23956>
- Sinayev, A., Peters, E., Tusler, M., & Fraenkel, L. (2015). Presenting numeric information with percentages and descriptive risk labels: A randomized trial. *Medical Decision Making*, 35(8), 937–947. <https://doi.org/10.1177/0272989X15584922>
- Singh, C. K. S., & Marappan, P. (2020). A review of research on the importance of higher order thinking skills (HOTS) in teaching English language. *Journal of Critical Reviews*, 7(08), 740–747. <https://doi.org/10.31838/jcr.07.08.161>
- Sucipto, S., & Cahyo, S. D. (2019). A content analysis of the reading activities in “Bright 2” an English textbook for junior high school students. *English Language Teaching Educational Journal*, 2(1), 13. <https://doi.org/10.12928/eltej.v2i1.918>
- Surono, S., Prato, B. W., & Hanun, S. L. (2023). Analysis of HOTS and LOTS of instructional questions in the English textbook “When English Rings a Bell” for grade VIII. *English Language Teaching Educational Journal*, 5(3), 240–252. <https://doi.org/10.12928/eltej.v5i3.8168>
- Tahir, S. (2015). Improving Students’ Speaking Skill through Yahoo Messenger at University of Iqra Buru. *International Journal of Language and Linguistics*, 3(3), 174. <https://doi.org/10.11648/j.ijll.20150303.20>
- Tikhonova, E., & Kudinova, N. (2015). Sophisticated thinking: lower order thinking skills. *2nd International Multidisciplinary Scientific Conference on Social Sciences and Arts, Volume 2* (pp. 352–360). <https://doi.org/10.5593/SGEMSOCIAL2015/B12/S3.117>
- Ulum, Ö. (2016). A Descriptive Content Analysis of the Extent of Bloom’s Taxonomy in the Reading Comprehension Questions of the Course Book Q: Skills for Success 4 Reading and Writing. *The Qualitative Report*, 21(9), 1674–1683. <https://doi.org/10.46743/2160-3715/2016.2172>
- Ulum, Ö. (2022). Is the Revised Bloom’s Taxonomy revisited in the EFL/ESL reading textbooks?. *OPUS Toplum Araştırmaları Dergisi*, 19(45), 170–177. <https://doi.org/10.26466/opusjr.1062878>
- Wijayanto, B., Sumarmi, S., Hari Utomo, D., Handoyo, B., & Aliman, M. (2023). Problem-based learning using e-module: Does it effect on student’s high order thinking and learning interest in studying geography? *Journal of Technology and Science Education*, 13(3), 613. <https://doi.org/10.3926/jotse.1965>
- Wilson, L. O. (2016). Anderson and Krathwohl Bloom’s Taxonomy Revised understanding the new version of Bloom’s Taxonomy. *The Second Principle*, 1(1), 1-8.
- Xie, S. (2024). An analysis of the cognitive demands of senior high school English as a foreign language textbooks in China. *Sage Open*, 14(3), 21582440241280457. <https://doi.org/10.1177/21582440241280457>
- Yurniwati, Y. & Soleh, D. A. (2020). The effectiveness of computer-based problem solving to improve higher order thinking skills on prospective teachers. *International Journal of Instruction*, 13(2), 393–406. <https://doi.org/10.29333/iji.2020.13227a>