DO HOTS AND LOTS MATTER IN AN ENGLISH TEXTBOOK?

**1Agvy Rena Fakhrillah, 2Suharyadi**

1English Department, Faculty of Letters, Universitas Negeri Malang, Indonesia

2 English Department, Faculty of Letters, Universitas Negeri Malang, Indonesia

Co. Author Email: agvyrena@gmail.com

|  |  |
| --- | --- |
| ***Article Info*** | **Abstract** |
| ***Article History*** *Received:* *Revised:* *Published:*  | *Questions items in a test can be divided into two categories: Higher Order Thinking Skills (HOTS) and Lower Order Thinking Skills (LOTS). HOTS pertains to critical thinking and problem-solving abilities, while LOTS deals with the ability to identify and recall information. HOTS is a skill that students need to possess in this 21st century. Textbooks that incorporate HOTS exercises can help students enhance their critical thinking skills. This study aims to analyze the manifestation of HOTS and LOTS in listening, speaking, reading, and writing exercises in an English textbook entitled “English for Nusantara” for Grade VII. Employing the qualitative method with a content analysis design, this study utilizes Revised Bloom’s Taxonomy framework, which has six cognitive dimensions: remember, understand, apply, analyze, evaluate, and create. The first three levels are classified as LOTS, and the rest are classified as HOTS. The finding shows that the four English skill exercises within the textbook are still dominated by LOTS, with 81% of the exercises in the form of instructions and 89% in the form of questions. Thus, it is recommended that the next textbook authors integrate a greater proportion of HOTS exercises in the textbook to better foster critical thinking skills among students.* |
| ***Keywords****English textbook;**Exercises;**HOTS;**LOTS;**Revised Bloom’s Taxonomy;* |
| ***How to cite:***Last Name, Last name, Last name. (2024). Title. *JOLLT Journal of Languages and Language Teaching*, volume (issue), page, DOI: (empty) |

**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 educators. 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. Consequently, conducting a thorough analysis of textbooks prior to their integration into the teaching and learning process is essential. The content of textbooks must be thoroughly examined to determine its effectiveness in fostering critical thinking. Furthermore, Ahour et al. (2014) also emphasize the importance of textbook evaluation to ascertain whether the materials are in line with the established educational standards.

Exercises in textbooks serve as an important tool to promote critical thinking. Considering that HOTS and LOTS are two categories of exercises, there is a need to increase the prevalence of HOTS exercises to enhance students’ cognitive development in alignment with the demand for 21st-century skills. 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). To evaluate the distribution of HOTS and LOTS in a textbook, the Revised Bloom’s Taxonomy by Anderson et al. (2001) provides a framework for categorizing cognitive processes engaged by students during learning. This framework also classifies educational objectives students are expected to acquire and has three cognitive domains, namely, cognitive, affective, and psychomotor domains (Anderson et al., 2001). The cognitive domain encompasses students’ thinking processes involved in learning; the affective domain focuses on students’ emotional responses and attitudes; and the psychomotor domain addresses the physical actions associated with the learning process (Hoque, 2016). Of these domains, the cognitive domain is particularly prominent, as it is commonly employed to assess students’ intellectual abilities and competencies (Mohammed & Omar, 2020)

A number of studies have investigated the distribution of HOTS and LOTS exercises in an English textbook. Unfortunately, many of these studies highlight a predominance of LOTS exercises. Examining textbooks published by the Indonesian government, Atiullah et al. (2019) analyzed reading comprehension questions in a textbook entitled “Bahasa Inggris SMA/MA/SMK/MAK Kelas X” revealing that LOTS were emphasized more, where LOTS accounted for 84,81% of the total. Conversely, Febrina et al. (2019), in their analysis of reading comprehension questions in a textbook entitled “Bahasa Inggris SMA/MA/SMK/MAK Kelas XI” found the HOTS percentage at 66.8%. In the context of textbooks published by private publishers, Pratiwi (2014) analyzed reading exercises in “Pathway to English” published by Erlangga and identified the majority of LOTS exercises, which comprise 90.4% of the total. Similarly, a study by Janah (2020) on a textbook entitled “Bahasa Inggris When English Rings A Bell for SMP/MTs Kelas VII” also demonstrated that LOTS exercises dominated at a range of 55.6%. The recent study by Shalihah et al. (2022) conducted an analysis of reading essay questions in the English SMK/MAK Edisi Revisi 2017 for grades X, XI, and XII published by Bumi Aksara, revealing that LOTS accounted for 91% in book 1, 93% in book 2, and 90% in book 3, clearly overshadowing HOTS. In contrast, Sucipto and 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. However, the next study by Febriyani et al. (2020), who examined a textbook entitled “Bahasa Inggris SMA/MA/SMK/MAK Kelas XII” revealed that LOST gained the highest frequency with 77.78%. These findings shows that LOTS manifests a higher level of dominance than HOTS.

In international studies, Freahat and Smadi (2014) analyzed reading comprehension questions in “Action Pack 11”, “Action Pack 12”, and “New Headway Plus Pre-Intermediate” and found LOTS percentage of 69% in “Action Pack 11”, 82.5% in “Action Pack 12”, and 83.22% in “New Headway Plus Pre-Intermediate.” Additionally, Assaly and Igbaria (2014), who analyzed reading and listening in a textbook entitled “Master Class” also found a similar finding, where LOTS dominated at a range of 65.89%. Ulum (2016), in his analysis of reading questions in 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 and Ismail (2018), who examined reading questions in “Action Pack 12” reported a majority of LOTS, comprising 69.28% of the total. Based on these findings, most previous studies indicate that LOTS exercises are more frequently represented than HOTS exercises.

Although numerous studies have examined the manifestation of HOTS and LOTS exercises in textbooks, previous studies—including that conducted by Pratiwi (2014), Atiullah et al. (2019), Febrina et al. (2019), Sucipto and Cahyo (2019), Janah (2020), and Shalihah et al. (2022)—has a primary concern on exercises from *Kurikulum* *2013* textbook, whether published by the Ministry of Education or private publishers such as Bumi Aksara and Erlangga. Furthermore, the majority of earlier studies—including those by Freahat and Smadi (2014), Ulum (2016), Al Raqqad and Ismail (2018), Atiullah et al. (2019), Febrina et al. (2019), Shalihah et al. (2022), etc­—has largely focused on reading exercises, with findings consistently showing that LOTS remains to be the most promoted exercises. If the evaluation is limited to reading activities, students may only develop critical thinking in that specific area. Given that English textbooks are designed to cover all four language skills—listening, speaking, reading, and writing—there is a need for comprehensive evaluation across these skills. Moreover, as students are expected to master a range of 21st-century skills, such as communication, collaboration, critical thinking, creativity, etc., it is essential to assess both HOTS and LOTS across these diverse language skills.

In light of the factors outlined above, this study aims to analyze the four English skill exercises in a grade VII textbook from *Kurikulum* *Merdeka*. This developmental stage is crucial as students begin to establish their identities (Prihatiningsih et al., 2021). While adolescents typically demonstrate intellectual, social, and emotional development, some may struggle to fully realize their potential (Prajapati et al., 2016). In addition, adolescence is a time of major brain development, particularly those related to abstract thinking and reasoning (Dumontheil, 2014). 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 for analyzing listening, speaking, reading, and writing exercises was the same, i.e., the Revised Bloom’s Taxonomy by Anderson et al. (2001). This study focused only on the cognitive domain. However, not all six cognitive levels is represented in every English skill exercise. Listening and reading skills do not facilitate exercises at the *create* level as those skills are receptive skills, whereas speaking and writing promote exercises at that level as those skills are productive skills where students need to *create* something.

**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 is the main *Kurikulum* *Merdeka* textbook written by Indonesian authors and published by The Ministry of Education. The authors stated that this textbook was written in accordance with the *Kurikulum* *Merdeka* learning outcomes. In addition, “English for Nusantara” has also been widely used by many schools (Dewantara, 2023). Five chapters in the textbook were analyzed in this study. Each chapter has learning objectives and three units. The exercises in each unit are arranged based on their complexity. Each exercise has around 1-6 numbers.

**Instruments**

This study adapted an analysis card by Anderson et al. (2001) as an instrument to collect the data. The instrument was then validated by an expert in Teaching English as a Foreign Language (TEFL) and Instructional Materials (Material Evaluation and Development). The researcher grouped the exercises based on each language skill. Two tables are used to analyze the exercises: the first table is the analysis card consisting of keywords of each cognitive levels, and the second table is the checklist tables consisting of exercises from the textbook.

**Data Analysis**

To analyze the data, the researcher classified the exercises into two categories: exercises in the form of instructions and exercises in the form of questions. Exercises in the form of instructions directly instruct students to do 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?”. After that, the exercises were classified based on the cognitive level in the Revised Bloom’s Taxonomy. Then, each cognitive level was counted and displayed in the form of percentages. The result was presented in the form of a table to make it easier to understand. To avoid biases in analyzing the exercises, the researcher validated the result to a senior from English Language Education department who already graduated from the program. Hence, this study would provide a valid and trustworthy conclusion.

**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** | **Skill** | **Total** | **Percentage** |
| --- | --- | --- | --- |
| **Listening** | **Speaking** | **Reading** | **Writing** |
| Create/C6  | - | 5 | - | 13 | 18 | 16% | 19% |
| Evaluate/C5 | - | - | - | - | - | - |
| Analyze/C4 | - | 1 | 3 | - | 4 | 3% |
| Apply/C3 | - | 18 | 1 | 12 | 31 | 27% | 81% |
| Understand/C2 | 13 | 3 | 22 | 2 | 40 | 34% |
| Remember/C1 | 7 | 2 | 14 | - | 23 | 20% |
| Total | 20 | 29 | 40 | 27 | 116 | 100% |

Table 1 shows that out of 116 instructions, reading provides 40 instructions, followed by speaking with 29 instructions, writing with 27 instructions, and listening with 20 instructions. In listening instructions, 7 instructions belong to *remember* and 13 to *understand*. Instructions in speaking have a more varied distribution where 2 instructions belong to *remember*, 3 to *understand*, 18 to *apply*, 1 to *analyze*, and 5 to *create*. Reading promotes 14 instructions at the *remember* level, 22 at the *understand* level, 1 at the *apply* level, and 3 at the *analyze* level. In writing, 2 instructions belong to *understand*, 12 to *apply*, and 13 to *create*. In total, there are 23 instructions at the *remember* level, 40 at the *understand* level, 31 at the *apply* level, 4 at the *analyze* level, and 18 at the *create* level. For the percentage, 20% instructions belong to *remember* level, 34% to *understand*, 27% to *apply*, 3% to *analyze*, and 16% to *create*. Thus, 81% of instructions in the textbook are promoted by LOTS and 19% by HOTS. Instructions at the *evaluate* level are not found in this study. 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** | **Skill** | **Total** | **Percentage** |
| **Listening** | **Speaking** | **Reading** | **Writing** |
| Create/C6  | - | - | - | - | - | - | 11% |
| Evaluate/C5 | 1 | - | 4 | - | 5 | 8% |
| Analyze/C4 | - | - | 2 | - | 2 | 3% |
| Apply/C3 | - | - | 3 | 8 | 11 | 16% | 89% |
| Understand/C2 | 11 | - | 38 | - | 49 | 73% |
| Remember/C1 | - | - | - | - | - |  |
| Total | 12 | - | 47 | 8 | 67 | 100% |

Table 2 shows that exercises in the form of questions is fewer than exercises in the form of instructions. In addition, not all English skills have exercises in the form of questions. Out of 67 questions in the textbook, listening has 12 questions, 11 of which are at the *understand* level and 1 at the *evaluate* level. Speaking questions are not found in this study. Reading provides 47 questions, 38 of which belong to *understand*, 3 to *apply*, 2 to *analyze*, and 4 to *evaluate*. Writing contributes 8 questions at the *apply* level. In total, 49 questions are categorized in *understand*, 11 in *apply*, 2 in *analyze*, and 5 in *evaluate*. The percentage of *understand* is 73%, *apply* is 16%, *analyze* is 3%, and *evaluate* is 8%. Thus, 89% of questions found in the textbook are promoted by LOTS, and 11% are promoted by HOTS. Still, LOTS is the dominant level.

**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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 has 1 instruction belonging to *remember* and 2 to *understand*. Chapter 4 has no instruction belonging to *remember* and 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%. An example of the listening instruction in the textbook is as follows.



Figure 1. 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. Kementrian Pendidikan,Kebudayaan, Riset, dan Teknologi Republik Indonesia)

Figure 1 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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Skill** | **Level** | **Cognitive Level** | **Chapter** | **Total** | **Percentage** |
| **1** | **2** | **3** | **4** | **5** |
| Listening | HOTS | Create/C6  | - | - | - | - | - | - | - | 8% |
| Evaluate/C5 | - | - | 1 | - | - | 1 | 8% |
| Analyze/C4 | - | - | - | - | - | - | - |
| LOTS | Apply/C3 | - | - | - | - | - | - | - | 92% |
| Understand/C2 | - | - | 2 | 4 | 5 | 11 | 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 question at the *evaluate* level. Chapter 4 has 4 questions in *understand* level. Last, Chapter 5 has 5 questions in *understand*.

All listening questions in this study are found at the *understand* and *evaluate* level only. For the overall total of HOTS and LOTS, 92% of questions in listening skills in the textbook belong to LOTS while 8% belong to HOTS. Thus, it can be said that LOTS also dominates the listening questions. An example of the listening question in the textbook is as follows.



Figure 2. Example of a listening question

(Source: 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)

Figure 2 can be found in Chapter 4 (My School Activities) p.177. 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 the cognitive level. 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 more variety of the 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 instructions at the *remember* level, 3 instructions at the *understand* level, 18 instructions at the *apply* level, 1 instruction at the *analyze* level, and 5 instructions at the *create* level.

Moreover, based on the analysis, 7% of instructions are promoted by *remember*, 10% by *understand*, 62% by *apply*, 4% by *analyze*, and 17% by *create*. *Apply* is the cognitive level promoted the most in the textbook, while *evaluate* is the opposite. 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%. The following is an example of the speaking instruction in the textbook.



Figure 3. Example of speaking instructions

(Source: 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)

Figure 3 can be found in Chapter 2 (Culinary and Me) p.71. This 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. The finding in Chapter 5 is the same as in Chapter 3 since the instructions are at the *remember* and *understand* level. 2 instructions are at the *remember* and *understand* level. In total, the textbook provides 14 reading instructions at the *remember* level, 22 at the *understand* level, 1 at the *apply* level, and 3 at the *analyze* level.

Based on the table above, 55% of instructions are dominated by the *understand* level. It shows that the *understand* level has the highest frequency. The *remember* level contributes 35%, *apply* level 2.5%, and *analyze* level 7.5%. Thus, the percentage of HOTS is 7.5%, and LOTS is 92.5%. Still, LOTS is the most dominant. An example of the reading instruction found in the textbook is as follows.



Figure 4. Example of reading instruction

(Source: 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)

Figure 4 can be found in Chapter 1 (About Me) p.46. In this 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  | - | - | - | - | - | - | - | 13% |
| Evaluate/C5 | 1 | - | - | 3 | - | 4 | 9% |
| Analyze/C4 | - | - | - | 2 | - | 2 | 4% |
| LOTS | Apply/C3 | - | 3 | - | - | - | 3 | 6% | 87% |
| Understand/C2 | 15 | 5 | 4 | 14 | - | 38 | 81% |
| Remember/C1 | - | - | - | - | - | - | - |
| Total | 47 | 100% |

Table 7 reveals that there are 47 reading questions found in the textbook. Questions at the *understand* level in Chapter 1 have the highest frequency because there are 15 questions at that level. 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 *understand* level. In Chapter 4, the *understand* level promotes 14 questions, the *analyze* level promotes 2 questions, and the *evaluate* level promotes 3 questions. For the total analysis, *understand* has 38 questions, *apply* has 3 questions, *analyze* has 2 questions, and *evaluate* has 4 questions.

Furthermore, Table 7 also shows that the percentage of *understand* is 81%, *apply* 6%, *analyze* 4%, and *evaluate* 9%. *Understand* is promoted the most frequently. In total, the percentage of reading questions that can be classified as HOTS is 13%, and LOTS is 87%. An example of the reading question in the textbook is as follows.



Figure 5. Example of a reading question

(Source: 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)

Figure 5 can be found in Chapter 4 (My School Activities) p. 173. Students are given a text and questions to be answered. This question is categorized in the *evaluate* level because it leads students to make judgements. Students should think of several advantages or disadvantages of making online learning rules before they give their opinion and answer the questions.

**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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Skill** | **Level** | **Cognitive Level** | **Chapter** | **Total** | **Percentage** |
| **1** | **2** | **3** | **4** | **5** |
| Writing | HOTS | Create/C6  | 3 | 3 | - | 4 | 3 | 13 | 48% | 48% |
| Evaluate/C5 | - | - | - | - | - | - | - |
| Analyze/C4 | - | - | - | - | - | - | - |
| LOTS | Apply/C3 | 2 | 5 | 4 | - | 1 | 12 | 45% | 52% |
| Understand/C2 | - | - | 1 | - | 1 | 2 | 7% |
| Remember/C1 | - | - | - | - | - | - | - |
| Total | 27 | 100% |

Table 8 shows that the textbook has 27 writing instructions. Instructions in Chapter 1 and Chapter 2 are at the *apply* and *create* level. 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 (1 instruction). Chapter 3 also contains instructions at the *apply* level (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 with 13 writing instructions, followed by *apply* with 12 writing instructions, and *understand* with 2 writing instructions.

Table 8 also shows that *create* is the only cognitive level in the HOTS category found in the writing instructions in the textbook. However, it has a big contribution since 48% of instructions in writing belong to it. Instructions in LOTS category are found at the *understand* and *apply* level. *Apply* is promoted the most for the LOTS category, with 45%. Then, it is followed by *understand* with 7%. Thus, there is only a slight difference between the percentage of HOTS and LOTS since HOTS is promoted 48% and LOTS 52%. The following are examples of the writing instruction.







Figure 6. Example of writing instructions

(Source: 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)

Figure 6 can be found in Chapter 5 (This is My School) p. 24. These instructions are considered at the *create* level because it leads students to develop a new product. Through that exercise, students do a planning and brainstorming activity, outlining and drafting activity, and writing and editing activity to write descriptive paragraphs. It is a complex exercise since students take several steps to accomplish it.

*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% | 100% |
| Understand/C2 | - | - | - | - |  | - | - |
| Remember/C1 | - | - | - | - |  | - | - |
| Total | 8 | 100% |

It is shown clearly from the Table 9 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 more than one chapter. Moreover, all the questions in Chapter 3 are at the *apply* level only. So, there are 8 questions in total, and all those questions are categorized in LOTS. Since all the questions are categorized in *apply* level only, the percentage of questions at that level is 100%. Thus, 100% of the writing questions in the textbook are categorized in LOTS. An example of the writing question is as follows.



Figure 7. Example of a writing question

(Source: 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)

Figure 7 can be found in Chapter 3 (Home Sweet Home) p. 139. There is a question “What are the steps in making recycled tissue paper?”. This question belongs to the *apply* level. This question lead students to apply their understanding of the procedure text.

**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. Among the three LOTS levels, *understand* gains the highest frequency. This finding is in line with studies done by Pratiwi (2014) and Assaly and Igbaria (2014) 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 contradicts the study by Assaly and Igbaria (2014) who found that cognitive levels in the HOTS category also contribute to the exercises.

**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. The similarity between the findings on reading instructions and questions is that neither promotes exercises at the *create* level. This is because receptive skills do not focus on students creating a product. The textbook also provides reading exercises at the HOTS level although the proportion is still under the LOTS ones. Students need to get HOTS exercises in reading to master reading skills (Izzah et al., 2023). Based on the findings, *understand* is the most dominant level. 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), so it 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 LOTS. However, the most outstanding finding reveals that the *create* level obtains the highest distribution in writing instructions. Surprisingly, no previous study mentioned in the literature review found that *create* is the most dominant. 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 strong 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.

All in all, the total distribution of cognitive level of the Revised Bloom’s Taxonomy in all English skill exercises shows that LOTS is more dominant than HOTS both in exercises in the form of instructions and questions. This finding aligns with most previous studies mentioned in the literature review. However, there are several findings that previous studies do not emphasize, such as 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, most previous studies focus more on one or two English skills, especially reading. It might happen because reading questions is easier to find rather 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. This might have happened because they did not focus on all English skills. Third, this study found the dominance of the *create* level in writing exercises because the *create* level in productive skills is a must. Although HOTS is more prioritized, it is good for a textbook to have LOTS exercises because both of them are interconnected (Tikhonova & Kudinova, 2015). LOTS is a foundational skill for the development of HOTS (Kamarulzaman et al., 2017). In addition, since the Revised Bloom’s Taxonomy ranks the cognitive levels based on the process complexity, students must first become proficient in the lower cognitive levels (Barut & Wijaya, 2021).

**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 promotes 7.5% HOTS and 92.5% LOTS, while reading questions promotes 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. The finding also shows that among the six cognitive levels of the Revised Bloom’s Taxonomy, *understand* gains the highest frequency both in the instructions and questions. Furthermore, English exercises lack instructions at the *evaluate* level and questions at the *create* level since none of them are found in this study. Thus, it can be said that this textbook and the textbook analyzed by previous researchers are still dominated by LOTS. Considering the findings of the study, this textbook is still recommended for use in the teaching and learning process. However, there are several recommendations: it is suggested that (1) the English teacher provide additional exercises that promote HOTS more from several sources or ask HOTS questions spontaneously to the students in the classroom, (2) the textbook author pay more attention, and provide HOTS exercises more, and (3) the future researchers to analyze the other textbook from other publishers since in this *Kurikulum* *Merdeka* era, teachers can use their own textbook or materials or to confirm this study by asking the textbook author about the development of HOTS and LOTS in the textbook used in this study.

**REFERENCES**

Ahour, T., Towhidiyan, B., & Saeidi, M. (2014). The evaluation of “English Textbook 2” taught in Iranian high schools from teachers’ perspectives. *English Language Teaching*, *7*(3), p150. https://doi.org/10.5539/elt.v7n3p150

Al Raqqad, 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.

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.

Assaly, I., & Igbaria, A. K. (2014). A content analysis of the reading and listening activities in the EFL textbook of master class. *Education Journal*, *3*(2), 24–38. https://doi.org/10.11648/j.edu.20140302.11

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

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.

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

Dumontheil, I. (2014). Development of abstract thinking during childhood and adolescence: The role of rostrolateral prefrontal cortex. *Developmental Cognitive Neuroscience*, *10*, 57–76. https://doi.org/10.1016/j.dcn.2014.07.009

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

Freahat, N. M., & Smadi, O. M. (2014). Lower-order and higher-order reading questions in secondary and university level EFL textbooks in Jordan. *Theory and Practice in Language Studies*, *4*(9), 1804–1813. https://doi.org/10.4304/tpls.4.9.1804-1813

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

Hoque, D. M. E. (2016). Three Domains of Learning: Cognitive, Affective and Psychomotor. T*he Journal of EFL Education and Research (JEFLER), 2*(2), 45–52

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

Izzah, N. N., Adiarti, D., & Kariadi, M. T. (n.d.). Higher order thinking skills in reading exercises: A course book content analysis. *Jurnal Edulanguage, 9*(1), 61-74

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)* (pp.252–262). New Orleans, Louisiana. Association for Computational Linguistics. https://doi.org/10.18653/v1/N18-1023

Mohammed, M., & Omar, N. (2020). Question classification based on Bloom’s taxonomy cognitive domain using modified TF-IDF and word2vec. *PLOS ONE*, *15*(3), e0230442. https://doi.org/10.1371/journal.pone.0230442

Prajapati, R., Sharma, B., & Sharma, D. (2016). Significance of life skills education. *Contemporary Issues in Education Research (CIER)*, *10*(1), 1–6. https://doi.org/10.19030/cier.v10i1.9875

Pratiwi, N. (2014). *Higher Order Thinking Skill in Reading Exercise (An Analysis of Reading Exercises in Pathway to English Textbook for the Eleventh Grade of Senior High School Students)* [Bachelor’s thesis, UIN Syarif Hidayatullah Jakarta]. Repository UIN Syarif Hidayatullah Jakarta

Prihatiningsih, F., Petrus, I., & Silvhiany, 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

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

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), 13–21. https://doi.org/10.12928/eltej.v2i1.918

Tahir, S. Z. A. B. (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. 2*nd 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