



LOTS and HOTS reading questions in EFL textbooks (Kurikulum Merdeka): unveiling every learning process purposes

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ABSTRACT

Higher-order thinking skills (HOTS) have received much attention in Indonesian English textbooks and research in recent years. However, the role of lower-order thinking skills (LOTS) is inevitable because it creates a stepping stone to reaching HOTS. The current research aimed to fill the gap of research in Bloom's taxonomy by demonstrating the function of LOTS to shape students' higher-order thinking skills in reading comprehension aside from another thinking category. Secondly, the research explored the implication of EFL Senior High School Textbooks' (Kurikulum Merdeka) different characteristics represented in Bloom's Taxonomy reading comprehension questions pattern. Each textbook has a different Bloom's taxonomy question pattern. The second aims are inspired by research investigating Bloom's taxonomy, which mainly did not discuss English textbooks used in Kurikulum Merdeka. This research employed document analysis to investigate Bloom's taxonomy in two Senior High School English textbooks. To triangulate the data analysis results, the researchers analyzed the answers to open-ended questions from two graduating undergraduate English education students. An experienced English teacher also verified the results of the analysis. The findings show that LOTS enabled students to pay attention to important details and the main ideas and apply the text structure. HOTS enhanced critical thinking, problem-solving, strategic thinking, empathy, and creativity. LOTS and HOTS questions should be complementary to empower students' reading skills. The findings provide insights into the nuance in reading comprehension through the balanced structure of LOTS and HOTS questions.



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INTRODUCTION

Bloom's taxonomy, differentiated into higher-order and lower-order thinking skills, plays an important role in shaping students' reading comprehension. Benjamin Bloom invented Bloom's Taxonomy in 1956, which is construed as a construction of cognitive skills (Anderson & Krathowl, 2001). In structuring the thinking skill, the cognitive dimension in Bloom's taxonomy definition varies according to the levels classified into LOTS (Lower-Order Thinking Skill) and HOTS (Higher-Order Thinking Skill). LOTS include remembering, understanding, and applying (Anderson & Krathowl, 2001). Remembering is recognized by learners' long-term information retrieval. Understanding is defined as meaning constructed from oral or written resources. Applying levelled understanding enables learners to employ a procedure in a situational aspect. HOTS consists of analyzing, evaluating, and creating. Analyzing determines how a part relates to other components and the big picture of the whole part—evaluating judges the decision following specific criteria. Creating is presented in the form of composing separated parts to generate products.

Regarding Bloom's taxonomy's history, discussing Bloom's taxonomy in education is note-worthy evidence stemming from this concept's valuable position in education. Bloom's taxonomy advocated functionality in educational settings, including English language classes. Nurmatova and Altun (2023) addressed the urgency of Bloom's taxonomy in the EFL classroom. They posited that Bloom's taxonomy engages students with critical thinking skills and problem-solving development. Promising competence in educational areas includes the reading activity assigned to develop critical thinking skills or vice versa (Morales et al., 2023). Morales et al. (2023) found that teachers acknowledge the importance of critical thinking. As a result, their teaching and learning processes implement critical thinking. In the aforementioned critical review, Bloom's taxonomy revealed various thinking levels in the context of English language learning to shape critical thinking and problem-solving skills.

As part of Bloom's taxonomy, HOTS in reading comprehension is included in the English textbooks published in Indonesia. As Bloom's taxonomy is applied in English language learning, reading is not the exception. Reading, which becomes the focus of this study, is an important skill. Reading is made up of word recognition and language comprehension (Tennent, 2014). Reading comprehension is defined as inferring the meaning

of the text and connecting it with prior knowledge by realizing something beyond the passive process of obtaining information (Erlidawati, 2023). Thus, Bloom's taxonomy facilitates students' reading learning by the expectation of questions.

Therefore, as an active process, deciphering written text may also generate an interplay between reading and critical thinking. Critical thinking is advocated by many governments around the world, including Indonesia (Mbato, 2019). Furthermore, the inquiry findings of Hidayati et al. (2020) confirm the essence of critical thinking in reading. Critical thinking generates reading success in teaching-learning (Hidayati et al., 2020).

In connection with critical thinking, the current curriculum in Indonesia applies Bloom's taxonomy and underlines HOTS as the essential thinking skill to fulfill 4C's skills (i.e., critical thinking, collaboration, creativity, and communication) needed in the 21st century (Tahir et al., 2023). This is associated with the expectation of student-centered learning as the characteristic of Kurikulum Merdeka, which is their opportunity to explore themselves through activities representing 4cs. As a result, the nature of HOTS as part of Bloom's taxonomy is more favorable than LOTS. Thamrin and Agustin (2019) asserted that HOTS is part of the strategy to gather and analyze information and create new ideas to be implemented on other occasions. In other words, HOTS encourages students to go beyond superficial thinking skills. Simultaneously, critical thinking can be obtained from HOTS-based reading comprehension questions (Aprilia, 2021). Three of them highlight HOTS in terms of analyzing, synthesizing, and evaluating, which reflects going deeper rather than only seeing the surface. Furthermore, another study confirmed the reason why HOTS is important. HOTS signifies its part in enhancing reading comprehension (Munawati & Nursamsu, 2019).

HOTS as a learning goal cannot be disassociated from its presence in EFL textbooks. A textbook aids teachers and students in putting awareness in the learning direction by reflecting on the ready-made items in this educational resource. Consequently, textbooks teachers and students use are integrated with assignments and guidance to enhance English skills (Nawawi et al., 2023). The textbook represented the country's educational ideal. Therefore, Bloom's taxonomy played a role in representing educational standards revolving around reading comprehension questions in textbooks.

Extensive research suggested and highlighted the importance of HOTS in Bloom's Taxonomy English textbook. Various studies attempt to disclose and give insight into what EFL textbooks should display. The highlights on the importance of HOTS can be inferred from the significant distribution in LOTS as a result of research findings. Ekalia et al. (2022) and Laila and Fitriyah (2022) studied Bloom's taxonomy by analyzing textbook questions. Employing a quantitative approach to analyze the textbook, Laila and Fitriyah

(2022) found that LOTS represented more in the Senior High School textbook than HOTS. Using the same research approach as Laila and Fitriyah (2022), Ekalia et al. (2022) revealed similar findings regarding LOTS's domination of the Senior High School textbook. Ariawan, Kholidi, and Putra (2023) employed a quantitative approach and found that knowledge and comprehension levels have the highest distribution. Three studies chose more than 100 questions for analysis, suggesting HOTS gets more of the spotlight. On the contrary, the following studies focused on HOTS by analyzing HOTS questions more profoundly (Mujayanah et al., 2022; Utami, Nurkamto & Kristiandi, 2022; Sukmawijaya et al., 2020). Regarding paying attention to HOTS, Mujayanah et al. (2022) centered the study on analyzing 10 HOTS questions in depth. The research focus of Mujayanah et al. (2022) is different from those of Ekalia et al. (2022) and Laila and Fitriyah (2022). The impact explains the concentration on the expected cognitive skills (HOTS), resulting in the analysis level being the highest proportion among other HOTS questions. Utami, Nurkamto, and Kristiandi (2022) utilized a quantitative approach and expert validation to investigate Bloom's taxonomy in the "Pathway to English" textbook. Considering the importance of HOTS, they suggested that the textbook had to cover complete cognitive skills in HOTS. Sukmawijaya et al. (2020) explored HOTS questions relevance with Kurikulum 2013. It is concluded that they are relevant to Kurikulum 2013.

Studies above highlighted the importance of HOTS. The first way is by recommending that the number of HOTS needs to be expanded. In contrast, the second way is to find HOTS and issue its relevance with Kurikulum 2013. However, this perspective needs an alternative. Of all the research investigated, this study intends to fill the gaps. A study (Kamarulzaman et al., 2017) confirmed that LOTS and HOTS complemented and influenced the HOTS score. Horváthová and Nad'ová (2021) deepened this finding in the context of ESP and EAP learners. They found that employing all thinking strategies of Bloom's taxonomy in reading can lead students to possess the ability to accomplish HOTS-based targets. Considering the lack of studies about the less biased perspectives on LOTS and HOTS in English textbooks, the current research aimed to fill the gap by unfolding the role of every thinking category without overly focusing on the need to prioritize one of the thinking classifications.

While reviewed studies employed document analysis only to evaluate textbooks, this study employed triangulation to increase its validity. The triangulation processes were completed by comparing the researchers' analysis and the answers to the open-ended questions from two graduating English education undergraduate students. An experienced English teacher also verified the results of the analysis.

The research gap follows the research question and textbook selection to accomplish the research aims. Therefore, the research question formulated was “How is Bloom’s taxonomy represented to show every learning purpose in reading comprehension of two English textbooks that have different LOTS and HOTS question structure patterns?” The significance of the study refers to teachers and textbook publishers who needed insight into developing material content for differentiated instruction.

METHOD

Research Design

The study employed document analysis. It is grounded on qualitative analysis that enables an in-depth discovery of documents such as two textbooks for data sources (Ary et al., 2010). The key component in this methodology, a document, namely two textbooks, can be the starting point to raise questions (Bowen, 2009). Thus, two textbooks inspired the study to explore the implementation of Bloom’s taxonomy

The qualitative research utilized the problem formulation to instigate Bloom’s taxonomy in EFL textbooks. The problem formulation is crafted using exploratory questions. Exploratory question in “How is Bloom’s taxonomy represented to show every learning purpose in reading comprehension of two English textbooks which have different LOTS and HOTS question structure patterns?” aims to explore more the issue of LOTS and HOTS in reading textbooks, which focus on one chapter discussing recount text, with less subjectivity. Exploratory questions thickly represent less bias because the research aims to investigate every learning purpose in LOTS and HOTS. From the exploratory question, the expected answer included the grouping of LOTS and HOTS using percentage and qualitative description, analyzing LOTS and HOTS, and evaluating the implication of LOTS and HOTS.

Data Source

Table 1. Data Sources

Sources	Status	Purpose
Two textbooks	Primary Data	-Grouping which answers is included as LOTS and HOTS -Calculating the percentage of LOTS (LOTS or HOTS/total

		questions in reading text x 100) and HOTS in two textbooks -Describing the structure of LOTS and HOTS and their benefits
Teacher	Triangulator/research collaboration	-Crosschecking the importance of LOTS and HOTS that is analyzed using document analysis using an open-ended questionnaire.
Two undergraduate students	Triangulator /research collaborator	-Crosschecking the importance of LOTS and HOTS that is analyzed using document analysis through open-ended questionnaires.

The selection of the textbooks and the three participants is grounded on purposive sampling. Purposive sampling reflects the characteristics of an object to justify the decision-making process (Denieffe, 2020). The data sources for this research were two senior high school English textbooks for the primary data sources and three research collaborators for the triangulation process. The data sources correspond to characteristics that fit with the research aim.

The textbooks for document analysis were selected due to the presence of recount text that can be analyzed using Bloom's taxonomy. Recount text is chosen because this text connects students with personal experience. Hopefully, from personal experience, students can dive into the text more easily because recount text naturally positions the writer from a personal perspective. By doing so, this experience may reduce cognitive dissonance in connecting background knowledge with reading text. In this case, the research intended to explore LOTS and HOTS comprehension questions after reading the recount text. Thus, the textbooks reflected various patterns of question structure.

The document analysis in the textbook investigated what each textbook can offer in general by calculating the percentage of two textbooks individually. Then, descriptions of LOTS and HOTS question structure and the benefits were conveyed. The first textbook was chosen because of the pattern in reading comprehension that exhibits LOTS, HOTS, and the coherent progressive of two thinking stages (Q4 and Q5). The second textbook

was selected because of HOTS questions that lead students to have high skills in reading the text and bring students to value strategic reading in general. Thus, HOTS in the second textbook allows students to develop competence in reading skills and be aware of the importance of reading strategy, which becomes a mechanism to achieve goals. In this case, textbooks aid teachers in facilitating suitable requirements for students' reading skill development.

Document analysis needs strong verification. So, triangulation was utilized in this research to strengthen the validity of the analysis of the chosen textbooks because a single methodology cannot fulfill the desired credibility (Patton, 1990; Mbato, 2013). By incorporating multiple elements in qualitative analysis, the research reaches better credibility and confirmability (Johnson, Adkin, & Chauvin, 2020). It checks the consistency of document analysis, whose purpose is to explore multiple perspectives (Patton, 1990). Two final-year English undergraduate students and one senior high school English teacher were chosen to be the research collaborators to verify findings from document analysis. The two final-year English undergraduate students were selected because they had learned English for four years and completed the teaching practicum at school. The two fresh graduates gained a GPA above 3.7. The English teacher was selected as she had been teaching English in senior high school for six years and, therefore, gained substantial experience in using English textbooks. The English teacher was pursuing an English master's program.

Data Collection Method

The data was collected by analyzing textbooks. The study chose reading recount text. Then, the process was followed by trying to think of the answer and position the researcher as a student to know the function of each Bloom's Taxonomy. The two textbooks' Bloom's taxonomy patterns were also considered in hopes of gaining more novel perspectives on how Bloom's taxonomy has positive implications on reading comprehension.

Data triangulation was used to confirm the validity of the research findings. The three triangulators accomplish trustworthy data collection procedures because they verify if their perspectives align with the findings from the data source. Three triangulators/research collaborators agreed to participate in the study. The open-ended questionnaire was used as an instrument and distributed. The two final-year undergraduate students were invited to answer comprehension questions of a reading passage from textbook one and then answer the questions in the questionnaire about the benefits of LOTS and HOTS. The English teacher verified the textbook analysis results and the answers to the open-ended questions provided by the two undergraduate students.

Data Analysis Procedures

Data analyses were carried out in four major stages. The first stage was analyzing the English textbooks. Analyzing the textbook comprises four processes: Preparing the material, extracting, analyzing, and distilling findings (Dalglish, Khalid, & McMahon, 2020). The second major stage involved document analysis using percentages, qualitative description, and investigating the English teachers' answers to the open-ended questionnaire to determine the main messages in relation to Bloom's Taxonomy. Then, this study compared the results of textbook data analysis and perspectives obtained from three research collaborators. The English teacher was invited to verify the results of the data analysis from the two sources to increase the validity of the findings. The final stage was data representation based on Bloom's Taxonomy.

FINDINGS

Before the main part of the discussion, tables are presented to convey the cognitive level distribution and their contributions to evolving reading skill development. The four tables depict the answers to the research questions: "How is Bloom's taxonomy represented to show every learning purpose in reading comprehension of two English textbooks which have different LOTS and HOTS question structure patterns?". The tables consist of Bloom's taxonomy in each textbook, the percentage of Bloom's Taxonomy and the Implication of the textbook's Question Structure, The data gained from document analysis, and the data gained by triangulation.

Table 2. Bloom's taxonomy in each textbook

Code	Questions	Reading Passage	Textbook	Cognitive Level
Q1	What is the email about?	1	1	Understand (LOTS)
Q2	What did Nora write in the first paragraph?	1	1	Understand (LOTS)
Q3	Who do you think Nora send the email to?	1	1	Apply (LOTS)
Q4	What is Nora like?	1	1	Understand (HOTS)
Q5	Do you have a similar character to Nora? Why? Why not?	1	1	Evaluate (HOTS)
Code	Questions	Reading Passage	Textbook	Bloom's Taxonomy
Q6	What do you think would happen to the woman if no one else helped her cross the street?	2	1	Evaluate (HOTS)

Q7	What would you do if you were in the same situation?	2	1	Apply (LOTS)
Code	Questions	Reading Passage	Textbook	Bloom's Taxonomy
Q8	Are there any parts of the writer's experience in watching the game that are similar to yours?	1	2	Evaluate (HOTS)
Q9	Why do you think the writer stated that the winner was unpredictable? (Analyze)	1	2	Analyze (HOTS)
Q10	Could you feel the same excitement of watching the game by just reading the text? (Evaluate)	1	2	Evaluate (HOTS)
Q11	How do you think the writer can help you to do active reading using the five senses? (Analyze)	1	2	Analyze (HOTS)

Table 3. The Percentage of Bloom's Taxonomy and The Implication of Question Structure Formations in Revealing Learning Purposes

Textbook	Percentage of Bloom's Taxonomy Distribution		The Implications of Bloom's Taxonomy Reading Comprehension Question Patterns in Revealing Learning Purposes
	LOTS	HOTS	Implications
Textbook 1	71.43% (5 out of 7)	28.57% (2 out of 7)	LOTS and HOTS are available in Textbook 1. The characteristics imply that LOTS can build a foundation before moving forward to HOTS. The second implication is LOTS and HOTS questions that connect with each other can strengthen the argument that each skill is important. The third is HOTS can shape students' advanced level in reading.
Textbook 2	-	100% (4 out of 4)	People can see a more comprehensive view of the functions of HOTS, which can level up students' thinking skills to be more creative, critical, and strategic.

Table 1 displays the distribution of Bloom's taxonomy in two textbooks and the overall construction structure of LOTS and HOTS questions. Table 2

shows the percentage of each cognitive element category in two textbooks and the implications of two textbooks different characteristics in structuring Bloom's taxonomy reading comprehension questions. It is concluded that LOTS questions are more dominant in textbook 1 than in textbook 2. Meanwhile, all of the questions in Textbook 2 are categorized as HOTS. Regarding the implications of different characteristics in constructing Bloom's taxonomy used in reading comprehension questions, textbook one offers benefits of two thinking categories that relate to learning purposes. LOTS can provide a basic foundation (explained further in LOTS: Sound Superficial but Crucial to Shape Important Foundation). An example of the LOTS question is in Q2. Q2 inquired about the understanding of the text. Before possessing an advanced level, understanding basic information about the text can help us. Next, making LOTS and HOTS questions that connect with each other solidified the fact that two thinking categories are equally important (explained further in "Bridging LOTS to HOTS: Constructing the Comprehensive Balanced Learning"). An example of this is in "What is Nora Like? (LOTS)" "Do you have a similar character to Nora? Why? Why not? (HOTS)". In these questions, students stepped up to next-level questions with lower-order questions in which students' answers help to reflect on Nora's character and themselves. And HOTS facilitate students to shape advanced ability in reading skills (explained further in "HOTS-based questions: Stretching Students' Thinking Capacity"). Textbook 2 concentrates on the functions of HOTS questions to elevate students' thinking skills beyond the superficial level (explained further in "HOTS-based questions: Stretching Students' Thinking Capacity").

Table 4. The data gained from document analysis

Bloom's taxonomy category	Functions
LOTS	Paying attention to important details in Q1, Q2, and Q4 (L1), main ideas in Q1, Q2, and Q4 (L2), and teaching to carry out procedures in real settings through knowledge about text structure (L3) and textual comprehension (L4).
LOTS-HOTS that are intertwined	LOTS can build the ability to answer difficult questions (LH1).
HOTS	Enhancing reflective attitude in Q5 (H1), creativity in Q11 (H2), critical thinking in Q9 (H3), problem-solving in Q11 (H4), empathy in Q10 (H5), and strategic approach in Q11 (H6).

Table 4 revealed the result of document analysis and triangulation of qualitative data sources. The LOTS functions in L1 and L2 are gained from

analyzing Q1, Q2, and Q4. The L3 is the result of analysis of Q3, and L4 is generated from Q7. The LH 1 is concluded from Q4 and Q5; Q6 and Q7. H1 is found by investigating the function of Q5. H2 and H4 are obtained by discovering the function of Q11. H3 is concluded from the function of Q9. H5 is concluded from Q10. H6 is concluded from Q11.

Table 5. The data gained from triangulation

Functions of Bloom's Taxonomy	Document Analysis/Open-Ended Questionnaire from Triangulator	Purposes of Stating Function
<p>"This is important for reading because it enhances accuracy to find the main idea" (Student's Answer 1)</p> <p>"I think it is important because this type of question helps the reader to identify the important detail" (Student's Answer 2)</p>	<p>Open-Ended Questionnaire answered by students.</p> <p>Open-ended questionnaire answered by students.</p>	<p>To confirm the function of LOTS found in document analysis (L1, L2).</p>
<p>"These questions help me because I can know what Nora likes and connect with my experience from number four" (Student's Answer 3)</p>	<p>Open-Ended Questionnaire answered by students.</p>	<p>To confirm that LOTS can build an understanding to answer higher-order thinking questions (LH1).</p>
<p>"I think Q5 is important because it encourages me to have reflection and connect myself with the text to consider how the passage relates to personal experience" (Student's Answer 4)</p>	<p>Open-ended questionnaired answered by students.</p>	<p>To confirm the function of HOTS in document analysis (H1).</p>
<p>The undergraduate student, as recapped in Student's Answer 5, commented, " Yes, question number 7 can help answer question number 6. When people imagine themselves in that situation, they might realize how dangerous it would be for the old</p>	<p>Open-ended questionnaire answer by students.</p>	<p>To confirm that LOTS can builds an understanding to answer higher order thinking questions(LH1) .</p>

woman if no one helped her. It makes them aware of why helping is important and what could happen if no one did” (Student’s Answer 5)		
“Yes, question number 7 helps connect safety procedures with daily life because it makes people imagine themselves in the same situation” (Student’s Answer 6).	Open-ended questionnaire answered by students.	To confirm the function of LOTS found in document analysis (L4).
“LOTS is important for understanding the written information. Once readers understand the information, this ability bridges them to comprehend the implicit message.” (Teacher’s Answer 1)	Open-ended questionaired answered by teacher.	To confirm the function of LOTS found in document analysis (L1 and L2) and the fact that LOTS can build a higher thinking skill (LH 1) and students’ answer.
“I agree HOTS are useful to build those things (critical thinking, creativity, and problem-solving). It is part of learning objectives”. (Teacher’s Answer 2)	Open-ended questionnaire answered by teacher.	To confirm the function of HOTS (H2, H3, and H4).

Table 5 exhibits the triangulation. The excerpts from Student’s Answers 1 and 2 are used to confirm and develop what the document analysis gained about LOTS’ functions. The excerpt student’s answer 3 confirmed the function of LOTS and HOTS that are directly connected. Teacher’s Answer 1, which is used to confirm the benefits of LOTS and its ability to enlarge students’ answering capacity, is in line with student’s answer 3. Student’s answer four is related to one of the functions of HOTS gained in document analysis. Teacher’s Answer 2 confirmed the document analysis and student’s answer about the benefits of HOTS.

DISCUSSION

LOTS: Sound Superficial but Cruicial to Shape Important Foundation

Q1, Q2, and Q4 in Table 2 fall under “understanding level”. Understanding involves recognizing important information and constructing meaning from the written resource (Anderson & Krathowl, 2001). In this case, this cognitive

dimension appears in the form of leading readers to find the answers through indirect instruction.

From the understanding-level questions, LOTS could be a building block for constructing foundational elements in reading. This is gained from the document analysis and confirmed by the undergraduate response towards the function of LOTS along with one high school teacher. The study found that LOTS questions promoted accurate interpretation, understanding of the text's details, discovering the text's main idea, and reading information globally.

Accuracy in understanding the text offered in LOTS-based questions represented the goal of reading literacy. The urge to emphasize accuracy was enforced for reading literacy. Reading literacy assigns concentration for an optimal digestion process of information retrieval to obtain knowledge (Shara, Andriani, Ningsih, & Shinoda, 2020). Reading literacy defines the nation's ideal since Indonesia values literacy as enacted in *Gerakan Literasi Sekolah* (School Literacy Program) (Shara et al., 2020). The understanding level may be seen as a low stage, but this opens the opportunity to shape reading literacy, which is considered Indonesia's education vision.

Accurate understanding plays out differently in the context of reading paragraphs. Reading text comprises paragraphs and the components that support students' understanding of the text. The examples are in the pattern of Q1, Q2, and Q4. Q1 inquired about the information of the text. Q2 expected students to infer the first paragraph. Q4 expected students to know Nora's character. The understanding level began from the big picture of the text and specific information. Thus, understanding the main idea and the details is needed. This was parallel with the undergraduate students' notion that is stated in Student's Answer 1, which highlighted the main idea's functions, the text's big picture, and the important details to gain knowledge from the text. How accuracy is defined in each part determines their reward for digesting the text and this could support reading literacy.

Concerning the main idea as one of the benefits, identifying the main idea received much attention. It is backed by studies that review challenges in finding the reading's main idea, the students' ability, and the implementation of the strategy. This strengthens the urgency that the main idea holds an important position in the reading comprehension process (Jumiaty, 2023). The main idea deserves high regard because this reading component conveys the overall messages in the passage (Ekorini, 2020). Noticing the main idea enables the reader to recognize the core point of the paragraph (Ekorini, 2020). So, LOTS questions facilitate readers to realize the importance of understanding the text's big picture, equal to the research collaborator's statement, an undergraduate student: "This is important for reading because it enhances accuracy to find the main idea". The implementation of

understanding the main idea can be found in Q1 and Q2. Q1 and Q2 require students' answers in terms of the overall text message. Q1 can be gained by understanding the main idea of each paragraph, and Q2 can be gained by understanding the main idea of the first paragraph.

Besides the main idea, the reading passage consists of supporting details, as stated in L2. This is also derived from Student's Answer 2. She stated that LOTS questions optimized students' ability to determine important details. Students thought in Students' Answer 2 informed, "I think it is important because this type of question helps the reader to identify the important detail". The student referred to Q4 as stated in L2. Q4 inquired about Nora's characteristics. This is also confirmed by the high school teacher. Her statement was supported by Erlidawati's (2023) statement, that is, mastering the specific information that should be taken into account besides the primary idea. The concern about comprehending detailed information in reading was addressed in the study conducted by Abbas and Masdelima (2018). They asserted that using reading in-detail techniques was not a mere strategy. In contrast, the reading-in-detail technique promoted the significance of pinpointing specific information and learning the text in detail. Thus, the reading-in-detail technique assigns careful observation to the text (Abbas & Masdelima, 2018). In conclusion to this finding, the requirement to answer Nora's character expects students to pay attention to specific information because her traits are described with meticulous elaboration. Consequently, students cannot just rely on the holistic content of the text but also seek answers by reading the text in detail.

Apart from understanding, the LOTS correspond to application. According to Anderson and Krathowl (2001), application means employing a procedure for task accomplishment. In Q3 (Table 4), the question constructed the application of using an E-mail structure to find the sender as derived from L3. This indicates that the text structure is a procedure for reading emails that is useful for knowing who sent the information. The vitality of text structure connects to the correctness of text understanding (He, 2023). Furthermore, one undergraduate student affirmed the statement. To answer Q3 (Table 2), readers must know the structure of the e-mail so they can spot who had sent the e-mail. It needs text structure awareness because the sender is implicitly stated.

On the other hand, "apply" can be perceived as applying information for a specific purpose (Ekalia et al., 2023). The blueprint of interpretation can be found in L4. Students confirmed (look at excerpt Student's Answer 6) "Yes, question number 7 helps connect safety procedures with daily life because it makes people imagine themselves in the same situation". In Q7, which asked about what would happen if no one saved the woman, the writers provided information about certain experiences in executing safety standards. The

question directed students to write how the safety standard was practical for personal use. Answering the question required the students' understanding of the text's specific purpose, which is to teach about safety. The questions represent the example of the textbook that teaches students to relate the reading text with the practical application which is called the safety standard. Safety standards are considered practical because being in traffic requires personal protection.

Bridging LOTS to HOTS: Constructing the Comprehensive Balanced Learning

LOTS and HOTS intertwined. This can be seen in two groups of related questions (Q4 & Q5; Q6 & Q7). Q4 asks students, "What is Nora like?". Q5 asks students, "Do you have a similar character to Nora? Why? Why not?". Q6 asks, "What do you think would happen to the woman if no one else helped her cross the street?". Q7 asks, "What would you do if you were in the same situation?". The intertwined LOTS and HOTS are not made in isolation because people can use LOTS to answer HOTS-based questions. The Senior High School teacher remarked that LOTS and HOTS questions complementary to each other clarify their balanced role. She said, as stated in Teacher's Answer 1, "LOTS is important for understanding the written information. Once readers understand the information, this ability bridges them to comprehend the implicit message". Teachers' thoughts on LOTS helped them understand what people miss in the landscape of Bloom's Taxonomy. LOTS can be made in a way that is more approachable for achieving Higher Thinking skills.

Q4 and Q5 represent the connection between LOTS and HOTS. These findings supported Armala et al. (2022), who concluded that LOTS is a prerequisite to answering HOTS. Q4 was categorized as understanding. So, Q4 equips students with basic knowledge about Nora's character. Then, it could be used to answer Q5. One undergraduate student confirmed this positive impact by stating that the know questions helped her to know what Nora is like, and she could connect with experience from number four, which is derived from Student's Answer 3 ("These questions help me because I can know what Nora likes and connect with my experience from number four"). Q5 requires a sufficient building block about Nora's character as a guideline on how students can relate to personal experience that determines if they share similar traits or not. Thus, Q5 is categorized as Evaluate because it assigned standardized criteria which, in this context, Nora's character to respond to the case (Anderson & Krathowl, 2001). Regarding these processes, Gajeton (2016) stated that connecting text with oneself enhanced the comprehension process. Apart from Q4 and Q5 showing the importance of learning with proper building blocks, Q4 and Q5 affirmed the positive

implication of involving reading comprehension with high connectedness to personal life.

Q6 and Q7 (which asked about what readers would do if they were in the same position and what would happen if no one saved her) modelled the LOTS that bridged to the HOTS question, although not being arranged in order. Q7 demanded lower-order thinking skills than Q6. Q7 expected readers to use the information for the specific procedures (apply). Then, it was connected with instruction in Q6, which was categorized as evaluation. Q6 instructed readers to answer if the woman was not helped, although the text told the story about being saved from an accident. To answer Q6, students can use Q7 to know what they could do if they were in the situation mentioned in the text before assessing if no one saved the woman.

The undergraduate student, as recapped in Student's Answer 5, commented, "Yes, question number 7 can help answer question number 6. When people imagine themselves in that situation, they might realize how dangerous it would be for the old woman if no one helped her. It makes them aware of why helping is important and what could happen if no one did". Q7 enabled students to position themselves in that situation so they could answer the significant impact if no one helped the old woman.

In reference to two groups of questions, participants perceived the reflection of LOTS and HOTS as complementary to each other. The two groups of questions align with Momen et al. (2022), who consider the necessity of prioritizing LOTS and HOTS. Therefore, the further implication underlines scaffolding as a contributing factor in learning structuralization. The senior high school teacher clarified the learning structuralization. The teacher's perspectives relate to the concept of scaffolding. Scaffolding is the tool to understand the reading passage (Praveen & Rajan, 2014). This also can be shown in the textbook's reading comprehension. Scaffolded questions in the textbook support students to achieve higher learning accomplishments (Gusyarani, 2014). In summary, the study underlines the importance of LOTS and HOTS and acknowledges the essence of scaffolding in learning. Scaffolding in learning is manifested in proper thinking and organization when reading questions in a textbook. As a result, this pattern signifies the necessity of providing good construction to bridge basic skills in LOTS to HOTS.

HOTS-based Questions: Stretching Student's Thinking Capacity

HOTS questions stretch students' thinking capacity because they promote critical thinking, reflective skills, active reading, and strategy utilization from the structure of the text. The teacher confirmed the benefits of HOTS by remarking, "I agree HOTS are useful to build those things (critical thinking, creativity, and problem-solving). It is part of learning objectives".

Suggestions from Laila and Fitriyah (2022) can describe the teacher's perspectives. It is said that teachers need to take the initiative in developing HOTS reading comprehension questions. The teachers' statement aligns with Laila and Fitriyah (2022) because the teacher has built the awareness that HOTS need to be incorporated into the subject. Moreover, the teachers suggested that HOTS appear to offer skills that are beyond superficial ability or ability to dive into underlying implicit messages using the text.

HOTS questions in two textbooks feature distinctive benefits according to question formulation. HOTS in textbook 2 are more dominant than in textbook 1. As a result, textbook 2 portrayed more nuance to the HOTS question structure. While textbook 1 has HOTS, where students must use reading comprehension for a different approach (Q6) and reflect on the character, textbook two dug into questions that enable empathy and seeing the text as a vehicle to be strategic (Q11). Q11 is a rare form of question that can show the benefit of reading, which accounts for strategic thinking.

Mbato (2019) suggested the essence of critical thinking in reading. Critical thinking in reading reinforces students' ability to produce logical conclusions (Mbato, 2019). Other than concluding remarks on the text, critical thinking also produced relevant commentary and critical ideas (Arif, 2019). This is supported by a question that requires reasoning in Q9 (Analyze). Reading comprehension involves reasoning (why) and seeking the relevance of the text. As the question pattern that characterizes "Analyze", Q9 (Why do you think the writer stated that the winner was unpredictable?) can be solved by framing how the text structure matches the required part to convey the reason (Anderson & Krathowl, 2001). Reading comprehension in Q9 facilitated analysis because the reader constructed the meaning from text organization and sharpened their reasoning skill (H3).

Besides critical thinking, two undergraduate students agreed that HOTS-based questions evoke reflective thinking in reading about Student's Answer 4, similar to what is obtained in document analysis, which is derived from H1. This relates to Chen (2024), who argued that reflective thinking employs reflection and management aligning with certain criteria and text comprehension. Reflective thinking assists readers in connecting with reading comprehension's purpose. Reflective thinking involves character analysis. In connection with character analysis, Sofa (2019) pointed out that analyzing characters gives room for reading comprehension development. In this context, the criteria refer to Q5. One student thought that, "I think Q5 is important because it encourages me to have reflection and connect myself with the text to consider how the passage relates to personal experience". So, the questions in Q5 instructed students to reflect on Nora's characteristics and similarities with them. It applies to questions about the connection between the reader's feelings and the text author's statement as the criteria.

Bloom's taxonomy in this study touched on the importance of empathy, as stated in Q10, which is derived from H5. Q10 is classified as "Evaluate". Evaluation requires students to judge something based on criteria (Anderson & Krathowl, 2001). The text became the guideline for evaluation. However, this evaluative aspect covers the importance of empathy. Empathy undermines recognizing other people's feelings (Adizon, 2018). The reader judges if there is a similar feeling by understanding the writer's attitude. Moreover, characters' emotional appraisal develops empathy based on the result concluded by (Alatawi & Harshan, 2023). Although the research above focused on literature, the recount text gives room to realize emotional appraisal. This is where recount text has an opportunity to develop empathy.

Other than the precedent functions, HOTS enables creativity and problem-solving as assured by the High School English teacher, which is derived from Teacher's Answer 2. Extensive research also suggested that HOTS performs those two functions. Mukhlis et al. (2023) claimed that HOTS provokes students to possess creative thinking. Creative people are prudent in spotting the hindering factors, sensing the knowledge gap, and generating ideas (Jaenudin, 2023). The traits of creative people optimize creative thinking. Creative thinking empowers individuals to operate cognition appropriate to specific conditions (Jaenudin, 2023). Meanwhile, problem-solving skills help to deepen understanding of the problem (Jala, 2020). In conclusion, creative thinking enables students to navigate problem resolution on specific conditions based on the students' developed cognition.

Q11, categorized as Analyze, can open the development in creative thinking and problem-solving, which is derived from H2 and H4. In Q11, this structure forms "analyze". Analyze defines the process of connecting how the whole structure means something. Q11 can expand the insight into perceiving research findings from Utami et al. (2022), in which the analysis level in Bloom's taxonomy relates to the interaction with the reader and text. Q11 shows that the text structure taught them to employ a reading strategy apart from validating the argument in the text. This is important because a good learner possesses various strategic inventories (Skehan, 1998). Skehan's notion of strategic learning is relevant to the teacher's statement that active reading enhances understanding. Therefore, being strategic enables improvement in reading comprehension. The textbook facilitates learners in carrying out the reading activity as a vehicle to shape strategic thinking in reading. Strategic thinking refers to the trait of creative people because this attitude allows them to generate conclusions diversely, and this enables people to resolve the problem.

CONCLUSION

The answer to research questions “How is Bloom’s taxonomy represented to show every learning purpose in reading comprehension of two English textbooks which have different LOTS and HOTS question structure patterns?” are divided into three groups which involve, LOTS, LOTS and HOTS that are connected with each other, and HOTS. LOTS involves students’ reading comprehension by understanding important details to know the supporting primary idea, pinpointing the main idea that highlights the global issue of text, carrying out text structure for actual use, and connecting students to real life. LOTS can be made in a way that is related to HOTS so students can experience direct function; HOTS contributes to critical thinking, problem-solving skills, and reflective thinking that trigger the characters’ relation with personal life.

The further implication is exploring how LOTS and HOTS are related to each other directly in reading comprehension questions. As a result, readers have the mindset that both contribute to reading enhancement. Also, from textbook 2, writers can set up HOTS to connect how the text structure connects with an important element in the skill, namely strategy. Consequently, text structure shows the function that expands beyond the text itself.

Reflecting on the conclusion, this study contributed to the research scope to a certain extent and has limitations. This study developed the idea of Bloom’s taxonomy through textbook analysis by exploring how LOTS and HOTS offer the potential to scale up reading comprehension since various studies need to look at the issue objectively (why both play an important role in developing students’ reading comprehension). Furthermore, the result suggested that LOTS and HOTS could be designed as complementary. This is useful because extensive studies on textbook analysis regarding Bloom’s taxonomy cover only the separate contexts of both groups. Since the research is limited to document analysis, future research can fill the gap by monitoring students’ reading comprehension development through textbooks in the classroom. Educators may get a more comprehensive insight into how LOTS and HOTS benefit students through actual implementation.

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