Representations of HOTS in English Reading Comprehension Exam Questions for Islamic Senior High Schools in Jepara

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ABSTRACT
The enactment of the latest curriculum in the Indonesian educational system requires the use of Higher Order Thinking Skills (HOTS) throughout the learning process. Hence, it is crucial to examine the exam questions to ascertain the presence of HOTS in the instruments for assessment. This study aims to analyze the representation of HOTS questions contained in the exam questions and to explain why the questions are categorized as HOTS. This research is a descriptive qualitative using content analysis techniques. The data sources employed were English exam questions for grades 10, 11, and 12 of senior high schools issued by Islamic education organizations in Jepara for the academic year 2022/2023. It was also analyzed using Bloom-Anderson and Krathwohl’s Taxonomy with a three-dimensional model. The results showed that the representation of HOTS questions based on the domain of cognitive processes in the exam questions for grade 10 was 11.8%, grade 11 was 20%, and grade 12 was 12.1%. Based on the knowledge dimension for grades 10, 11, and 12, questions with factual and conceptual knowledge categories were dominated, while procedural and metacognitive were less distributed. The research findings indicate that the distribution of HOTS representation in the test questions for reading comprehension is lower for grades 10, 11, and 12 compared to Lower Order Thinking Skills (LOTS).

Keywords: HOTS, Reading Assessment, Three-Dimensional Bloom Taxonomy

ABSTRAK
Pemberlakuan kurikulum terbaru dalam sistem pendidikan Indonesia memerlukan penerapan Higher Order Thinking Skills (HOTS) dalam proses pembelajaran. Oleh karena itu, analisis pertanyaan sangat penting untuk mengetahui ketersediaan HOTS dalam instrumen penilaian. Penelitian ini bertujuan untuk menganalisis representasi HOTS yang terdapat pada soal-soal ujian

Kata kunci: HOTS, Penilaian Membaca, Taksonomi Bloom Tiga Dimensi

INTRODUCTION

The development of science and technology in the 21st century is growing rapidly. The reason for this is the continuous production of highly advanced technologies and inventions that emerge on a daily basis. This development affects several aspects of life, including the aspect of education (Drake & Reid, 2020; Martinez, 2022). Consequently, it is essential for students to acquire 21st-century skills and English as a communication medium to cope with globalization (Al Hakim, 2021). Higher-order thinking skills are necessary for a reliable workforce in the 21st century. According to the National Education Association (Mountains, 2017), four abilities are recognized as essential in the 21st-century abilities framework, called the “4Cs”. Basically, these four skills can improve students’ higher-order thinking skills. The four essential skills that are widely recognized as crucial in many academic and professional contexts are Critical Thinking, Communication, Collaboration, and Creativity (Joynes et al., 2019). Martinez (Martinez, 2022) revealed that education systems around the world must develop a framework that emphasizes the development of soft skills such as critical thinking, problem-solving, creativity, and digital technology needed for success in the 21st century. Therefore, educational institutions must improve their education quality and teach their students soft skills, such as by teaching higher-order thinking skills.

In order to improve the quality of education in Indonesia, the Ministry of Education and Culture (Kemendikbud), through the Directorate General of Educators and Education Personnel
(Ditjen GTK), created the Merdeka Belajar - Kampus Merdeka Curriculum (MBKM Curriculum) or Freedom to Learn program which requires the application of Higher Order Thinking Skills (HOTS) in the learning process. The application of HOTS is needed to improve students’ thinking skills. HOTS is a vital skill that helps individuals innovate and be creative (Ganapathy & Kaur, 2014). In addition, developing HOTS in the learning process is an essential goal of educational institutions because it influences learning performance (Zohar & Dori, 2003). Ahmad et al. (2018) state that HOTS is important in education because it improves student academic achievement, reduces weaknesses, interprets, synthesizes, solves problems, and manages information, ideas, and daily activities. Students’ HOTS can be trained by providing HOTS questions and supporting materials. One of the ways is to use reading texts and questions because reading is the most complex skill and is closely related to HOTS. At the same time, reading requires a high level of understanding to analyze and interpret the contents of the reading.

In practicing HOTS for reading comprehension, questions for exams, particularly those related to reading comprehension, are very beneficial for learning. Reading comprehension skills were determined to be the most suitable for assessing HOTS. As a result, it was chosen as the focus for analyzing the presence of HOTS. Additionally, reading comprehension is crucial for students to exercise their cognitive abilities at all levels. When students are introduced to HOTS by reading texts and asking questions, they apply their understanding and creative thinking to understand and construct unique responses to the texts they read (Choy et al., 2009). Thus, it can be seen that reading comprehension questions are one way to assess high-level reasoning skills. Therefore, analyzing the representation of high-order thinking skills in reading comprehension test items is very important because HOTS questions teach students to identify and analyze problems while carefully evaluating possible solutions.

Thinking skills are usually classified or grouped according to type/learning objectives. This grouping is called taxonomy. One of the most frequently used taxonomies for assessing thinking skills in education is Bloom’s Taxonomy (Valdev Singh & Shaari, 2019), which was introduced by Benjamin Samuel Bloom in 1956 in collaboration with Max Englehart, Edward Furst, Walter Hill, and David Krathwohl (Bloom, 1956). In Bloom’s taxonomy, learning objectives are classified into three general classification areas: cognitive domain, affective domain, and psychomotor domain. The ability to think in the cognitive domain is divided into lower-order thinking skills.
(LOTS), which consist of knowing, understanding, and applying, and higher-order thinking skills (HOTS) which consist of analyzing, synthesizing, and evaluating. However, this study uses a three-dimensional model of Bloom’s taxonomy, revised by Anderson and Krathwohl in 2001, with the cognitive process and knowledge dimensions. The cognitive process dimensions include Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. In comparison, the knowledge dimensions include factual, conceptual, procedural, and metacognitive knowledge (Anderson & Krathwohl, 2001).

The relationship between knowledge and cognitive process dimensions can be seen in a three-dimensional graphic, as shown in the figure below.

Figure 1. 3-Dimensional Model of Bloom’s Taxonomy
Revised Edition by Anderson and Krathwohl

The dynamic blocks in Figure 1 represent different degrees of proficiency. These blocks consist of a combination of cognitive processes and knowledge dimensions. Based on the revised taxonomy of Bloom's three-dimensional model above, it can be inferred that the HOTS category encompasses a combination of cognitive process dimensions. These dimensions include C4 (Analytical), C5 (Evaluate), and C6 (Create), which represent the highest level of knowledge (conceptual, procedural, and metacognitive). It is important to note that the HOTS category is not limited to a specific dimension. In the three-dimensional taxonomy model, the lowest level of thinking is found in the factual knowledge blocks in the remember dimension, such as the primary and secondary colors listed. On the other hand, the highest level of thinking is found in the metacognitive knowledge in the create dimension, such as creating a creative learning portfolio.
The LOTS category is positioned between the knowledge dimensions columns (factual, conceptual, procedural, metacognitive) and the cognitive process dimensions C1, C2, and C3. In addition, if the cognitive process dimensions C4, C5, and C6 include learning indicators, the knowledge dimension is limited to factual information. Consequently, these indicators do not fall within the category of HOTS. Indeed, the factual knowledge portion lies at a high degree of complexity. The HOTS category lies between the cognitive process dimensions C4, C5, and C6, which correspond to the conceptual, procedural, and metacognitive knowledge dimensions.

Many experts have proposed definitions of higher-order thinking skills. Brookhart argued that higher thinking skills are classified into three categories based on learning objectives: higher-order thinking in terms of transfer, critical thinking, and problem-solving (Brookhart, 2010). In the context of higher-order cognitive abilities, transfer refers to the ability to apply acquired information and skills to unfamiliar circumstances. Moreover, transferring higher-order thinking skills includes acquiring analysis, assessment, and planning abilities. Higher-order cognitive abilities, such as critical thinking, may be described as the process of intelligently assessing and analyzing information using valid and sound reasoning. Higher-order thinking abilities include effectively solving issues by recognizing them, finding solutions to real-life difficulties, and creating innovative ways. Complex thinking involves explaining the material, drawing conclusions, constructing expressions, analyzing and establishing relationships, and the most basic mental activities (Resnick, 1987). On the other hand, HOTS is identified as the ability to think logically, reflectively, and complexly, not only knowing, remembering, and understanding but also being able to analyze, evaluate, and creativity (Alimuddin & Hariati, 2019).

Several researchers have researched higher-order thinking skills in reading textbooks. Research has been conducted to evaluate the availability of higher-order thinking skills in reading exercises in English grade 8 textbooks for Palestine (Keshta & Seif, 2013), in Pathway to English textbooks for grade 11 students (Anasy, 2016), in the AP12 textbook according to Bloom’s Taxonomy (Raqqad & Ismail, 2018), and in Bright English Course Books for Class IX Middle School (Daniati & Fitrawati, 2020). Additionally, several studies have been done to determine the types and uses of HOTS, which is often used in reading essays and textbook exercises in English lessons (Hidayat, 2019), to determine the composition of HOTS questions and explain the

Some researchers also discussed HOTS in English tests. Research from (Putra & Abdullah, 2019) focuses on analyzing higher-order thinking skill (HOTS) questions in the English national examination in Indonesia. It analyzed their research based on the revised Bloom Taxonomy and used quantitative methods through content analysis. The results of his research show that the number of high-order thinking skills in the National Examination is inadequate. Only 25.23% are classified as high-order thinking skills with the Analyze category. Other studies were also conducted to analyze the IELTS and TOEFL reading and listening tests regarding Revised Bloom’s Taxonomy (Baghaei et al., 2020). It shows that higher-order thinking skills are more prominent in the TOEFL listening test than in IELTS. The IELTS reading test ranges from three categories of low-level thinking, while the TOEFL covers low-level and high-level thinking categories. Several studies have focused on applying HOTS in English textbooks and using some English test. The above researchers prove that the availability of higher-order thinking skills does not fully provide questions that can exercise students’ thinking skills at a higher level.

Based on the previous research above, no research has been conducted to analyze the distribution of HOTS in English exam questions in Indonesia, especially those issued by Islamic education organizations in Jepara, for the academic year 2022/2023. This document of English exam questions is officially published by the Islamic educational organizations in Jepara. This organization issues exam questions every semester to measure students’ learning abilities at the end of the learning period. This exam is usually held twice a year, in the middle and end of the semester. The researcher chose English exam questions for grades 10, 11, and 12 for the midterm assessment for the academic year 2022/2023.

Therefore, the researchers assume that this study is significant to be conducted. However, the researchers used the revised edition of Bloom’s taxonomy with a three-dimensional model by Anderson and Krathwohl. The researchers chose this model of Bloom's taxonomy to analyze the representation of HOTS in English exam questions for senior high school grades 10, 11, and 12 issued by Islamic education organizations in Jepara for the academic year 2022/2023. The purpose of this research is to analyze the representation of HOTS questions in English exam questions issued by Islamic education organizations in Jepara based on the revised edition of Bloom’s
taxonomy with a three-dimensional model and to explain the reason why those questions are considered or categorized as HOTS questions. Therefore, researchers put forward research questions as follows:

1. How do the Higher Order Thinking Skills (HOTS) representations appear on the English exam questions, especially the reading section issued by Islamic education organizations in Jepara?
2. How can English exam-related reading questions be considered Higher-Order Thinking Skills (HOTS) questions in this study?

**RESEARCH METHOD**

This study uses a qualitative approach with a descriptive design. In this study, researchers used research techniques with content analysis. Richard Budd argues that this analysis is a systematic technique for analyzing message content and processing messages or a tool for observing and analyzing communication behavior that appears from the chosen means of communication (Mahmud, 2011). Content analysis can be used to analyze books, documents, and others (Rukminingsih et al., 2019). The researchers used the content of the English exam questions as a document for analysis. In addition, the researchers used a qualitative description method to obtain detailed information about the higher-order thinking skills presented in the English questions. The researchers then describe and analyze the research results in detail using the information obtained in the field. In this case, the qualitative descriptive research method is suitable.

The primary data source in this research is English exam questions for grades 10, 11, and 12, which are tested at a senior high school in Jepara in the academic year 2022/2023. This document is officially published by the Islamic educational organizations in Jepara. This organization was appointed to make exams to be distributed to all Islamic schools or madrasas in Jepara that are affiliated with that organization. The researchers used all the English exam questions for analysis. However, in the analysis using Anderson and Krathwohl’s three-dimensional model based on the latest edition of Bloom’s taxonomy, the researchers only focus on issues related to reading comprehension questions.

The data collection used in this study was obtained using documents and interviews. For this study, the researchers selected the documents from English exam questions issued by the
Islamic Education Organizations in Jepara in the academic year 2022/2023. The researchers conducted interviews with the authors of the English exam questions and an English teacher in one of Jepara’s senior high schools. The researchers conducted interviews to add data to the study data collection. The researchers used checklist tables to reduce, analyze, and categorize higher-order and lower-order thinking skills questions in exam questions. The table format of the checklist consists of exam question text, question topic, domain process cognitive, and knowledge dimension.

**FINDINGS AND DISCUSSION**

**Representation of HOTS and LOTS in the English Exam Questions for Grades 10, 11, and 12 based on the Cognitive Process Domain**

The English exam has 50 multiple-choice questions per class. Of the 50 questions, only reading comprehension questions were selected for analysis. Items were analyzed using a checklist table to determine the distribution of cognitive process domains and knowledge dimensions based on the revised Bloom's taxonomy. After analyzing the data, the analysis results are shown in the table below:

<table>
<thead>
<tr>
<th>GRADE 10 English Exam Questions for Grades 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
<tr>
<td>6.</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that question occurrences based on the cognitive process dimensions show inconsistent results; for grade 10, the English reading comprehension test consists of 34 questions. Only 4 out of 34 questions are distributed as HOTS, consisting of Analyzing, Evaluating, and Creating. The surprising results show that all questions are dominated by the Analyzing domain (C4), whereas the Evaluating and Creating domains (C5 and C6) are null-distributed. The lower-order thinking skill distribution gets 30 items, in which the Remembering domain (C1) gets 11
items, the Understanding domain (C2) gets as many as 19 items, and the Applying domain (C3) gets a null distribution. The distribution of higher-order thinking skills was 11.8%, while lower-order thinking skills reached 88.2%.

Table 2. Representation of HOTS and LOTS on English Exam Questions for Grades 11

<table>
<thead>
<tr>
<th>No.</th>
<th>Process Cognitive Domain</th>
<th>Number of Questions</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Remembering</td>
<td>18</td>
<td>18/40x100% = 45%</td>
</tr>
<tr>
<td>2.</td>
<td>Understanding</td>
<td>14</td>
<td>14/40x100% = 35%</td>
</tr>
<tr>
<td>3.</td>
<td>Applying</td>
<td>0</td>
<td>0/40x100% = 0%</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>32</strong></td>
<td><strong>32/40x100% = 80%</strong></td>
</tr>
<tr>
<td>4.</td>
<td>Analyzing</td>
<td>8</td>
<td>8/40x100% = 20%</td>
</tr>
<tr>
<td>5.</td>
<td>Evaluating</td>
<td>0</td>
<td>0/40x100% = 0%</td>
</tr>
<tr>
<td>6.</td>
<td>Creating</td>
<td>0</td>
<td>0/40x100% = 0%</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>8</strong></td>
<td><strong>8/40x100% = 20%</strong></td>
</tr>
</tbody>
</table>

There are 40 reading comprehension questions in the English exam for grade 11. Only 8 out of 40 questions are distributed as HOTS, which consists of Analyzing, Evaluating, and Creating. All questions are dominated by the Analyzing domain (C4) only, while the Evaluating and Creating domains (C5 and C6) receive null distributions. The distribution of lower-order thinking skills consisted of 32 questions, 18 items in the Remembering domain (C1), 14 items in the Understanding domain (C2), and 14 items in the Applying domain (C3) get null distribution. The distribution of higher-order thinking skills reaches only 20%, while lower-order thinking skills reach 80%.

Table 3. Representation of HOTS and LOTS on English Exam Questions for Grades 12

<table>
<thead>
<tr>
<th>No.</th>
<th>Process Cognitive Domain</th>
<th>Number of Questions</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Remembering</td>
<td>14</td>
<td>14/33x100% = 42,4%</td>
</tr>
<tr>
<td>2.</td>
<td>Understanding</td>
<td>15</td>
<td>15/33x100% = 45,4%</td>
</tr>
<tr>
<td>3.</td>
<td>Applying</td>
<td>0</td>
<td>0/33x100% = 0%</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>29</strong></td>
<td><strong>29/33x100% = 87,9%</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Analyzing</td>
<td>3</td>
<td>3/33x100% = 9,1%</td>
</tr>
<tr>
<td>2.</td>
<td>Evaluating</td>
<td>0</td>
<td>0/33x100% = 0%</td>
</tr>
<tr>
<td>3.</td>
<td>Creating</td>
<td>1</td>
<td>1/33x100% = 3%</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>4</strong></td>
<td><strong>4/33x100% = 12,1%</strong></td>
</tr>
</tbody>
</table>

There are a total of 33 reading comprehension questions in English exam questions for grade 12. The HOTS distribution consists of Analyzing, Evaluating, and Creating, and it only
receives 4 out of 33 questions. The three questions are dominated by the Analyzing domain (C4), the Evaluating domain (C5) receives a null distribution, and the Creating domain (C6) receives only one question. On the other hand, for the distribution of lower-order thinking skills, 29 questions were contained, 14 points for Remembering domain (C1), 15 points for Understanding domain (C2), and null distribution for Applying domain (C3). The distribution of HOTS is only 12.1%, and the proportion of lower-order thinking skills is 87.9%.

From the data results, we can conclude that HOTS has a smaller distribution composition than LOTS in English exam questions for grades 10, 11, and 12 based on cognitive process domains. Additionally, Analyzing domain has the highest distribution of HOTS among the other three domains. However, the Analyzing domain is still relatively small compared to the other six domains. This is possible because Brookhart suggests that students should be asked questions that explain and encourage them to explore how one thing relates to another. Teaching students to analyze ideas and information is also important, even if they do not have much analysis skills. This study is similar to the research conducted by (Anasy, 2016) on the Pathway to English textbooks for Class XI. The Analyzing domain (C4) shows the highest distribution among the other three higher thinking skill levels, which is possible. The Analyzing domain represents the first stage of the cognitive process including higher-level reasoning. Therefore, the degree of difficulty for pupils is relatively low, and the workload is minimal.

Analysis of the Representation of Knowledge Dimension in the English Exam Questions for Grades 10, 11, and 12.

Table 4. Representation of Knowledge Dimension

<table>
<thead>
<tr>
<th>GRADE 10</th>
<th>Knowledge Dimension</th>
<th>Number of Questions</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Factual</td>
<td>15</td>
<td>15/34x100% = 44.1%</td>
</tr>
<tr>
<td>2.</td>
<td>Conceptual</td>
<td>19</td>
<td>19/34x100% = 55.9%</td>
</tr>
<tr>
<td>3.</td>
<td>Procedural</td>
<td>0</td>
<td>0/34x100% = 0%</td>
</tr>
<tr>
<td>4.</td>
<td>Metacognitive</td>
<td>0</td>
<td>0/34x100% = 0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GRADE 11</th>
<th>Knowledge Dimension</th>
<th>Number of Questions</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Factual</td>
<td>14</td>
<td>14/40x100% = 35%</td>
</tr>
<tr>
<td>2.</td>
<td>Conceptual</td>
<td>26</td>
<td>26/40x100% = 65%</td>
</tr>
</tbody>
</table>

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3. Procedural
4. Metacognitive

<table>
<thead>
<tr>
<th>No.</th>
<th>Knowledge Dimension</th>
<th>Number of Questions</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Factual</td>
<td>20</td>
<td>20/33x100% = 60.6%</td>
</tr>
<tr>
<td>2.</td>
<td>Conceptual</td>
<td>12</td>
<td>12/33x100% = 36.4%</td>
</tr>
<tr>
<td>3.</td>
<td>Procedural</td>
<td>0</td>
<td>0/33x100% = 0%</td>
</tr>
<tr>
<td>4.</td>
<td>Metacognitive</td>
<td>1</td>
<td>1/33x100% = 3%</td>
</tr>
</tbody>
</table>

Based on the results and discussion in Table 4, it can be seen that the representation of the knowledge dimension in the English exam questions, especially for grade 10, out of a total of 34 reading comprehension questions, 15 questions are classified as factual knowledge and 19 questions are classified as conceptual knowledge. Furthermore, for grade 11, out of 40 reading comprehension questions, it was found that 14 questions belonged to the category of factual knowledge and 26 questions of conceptual knowledge, while procedural and metacognitive knowledge were not distributed in the exam questions for grades 10 and 11. Then, for grade 12, out of 33 reading comprehension questions, only one question of metacognitive knowledge, 20 questions of factual knowledge, and 12 questions of conceptual knowledge, while procedural knowledge was not distributed in it. From this representation, it can be concluded that the English exam questions for grades 10 and 11 are more dominated by conceptual knowledge, while the exam questions for grade 12 are more dominated by factual knowledge.

The Representation of HOTS and LOTS.

The grade 10 exam questions contain LOTS consisting of 7 C1-factual questions, 7 C2-factual questions, 1 C4-factual questions, 4 C1-conceptual questions, and 12 C2-conceptual questions. In the question category developed by HOTS, there are only 3 questions in the C4 concept category. Class 11 contains LOTS, which consists of 9 C1-factual questions, 3 C2-factual questions, 2 C4-factual questions, 9 C1-conceptual questions, and 11 C2-conceptual questions. There are only 6 questions in the C4 conceptual category of questions that develop HOTS. Class 12 contains LOTS consisting of 9 C1-factual questions, 9 C2-factual questions, 2 C4-factual questions, 5 C1-conceptual questions, and 6 C2-conceptual questions. In the category of questions that develop HOTS, there is a C4-conceptual category, which contains 1 question, and C6-
metacognitive only contains 1 question. Based on these facts, improving the quality of English exam questions that develop higher-order thinking skills is necessary.

**The Rationales for Categorizing the Reading Exam Questions as HOTS Questions.**

The data below are excerpts from the exam questions and the explanation of why a particular excerpt of the English exam questions is classified as HOTS or LOTS with the respective domains based on Anderson and Krathwohl's modified version of Bloom's taxonomy, as follows:

**Excerpts from English exam questions for grade 10**

*Hello everybody. Let me introduce myself in short. I am Julie and I work as Journalist. I have got two sisters and one brother. I live with my mom in Jepara, a beautiful town near by the coast. I am small but I am strong. Sometimes I am shy around people and I don’t know why. With my friends and family, I am very outgoing. My mom says that I have a pretty smile. Do you agree? She also likes my long, curly brown hair. My favorite color is blue and I am always optimistic. I am youthful, but I am an old soul.*

1. What does Julie do?
   This question is in level C2 (Understanding) with *interpreting* subcategories. This problem asks students to interpret activities performed by Julie. This question includes explicit questions because the answers are explained in the reading passage in the first paragraph of the third sentence, “...I work as a journalist.” However, within the answer choices provided, students should interpret the same meaning of the word “journalist”.

2. How many siblings does Julie have?
   This question is included in level C1 (Remembering) with *recalling* subcategories. Students are only required to remember information that they have read in the text. The answer to this question is clearly found in the text (first paragraph, fourth sentence), “I have two sisters and one brother.”.

3. Which is not true based on the text?
   This question is included in level C4 (Analyzing) with *selecting* subcategories. This question asks students to choose the correct sentence based on the text they have read. The reading passage conveys information about Julie's life. After reading, students should remember the information clearly stated in the text read. So, it will be helpful for students to analyze the correct sentences based on the text read.
Excerpts from English exam questions for grade 11

Invitation Letter

To celebrate the Indonesian Independence Day, all students are invited to join a writing competition. Express your love to our country through writing. Contact each class captain for further information.

1. Independence Day of Indonesia is celebrated on…

This question is included in level C1 (Remembering) with recognizing subcategories. Students must demonstrate their ability to memorize the date of Indonesian Independence Day.

STUDENT ORGANIZATION “MA SURGAKU”

Jl. Kamboja 123 Jepara
Dear Miftahul Jannah
We invite you to attend our meeting that will be held on
Saturday, August 13, 2022
At 2.30 pm - 4.00 pm
in School Hall
Agenda Final preparation for Indonesia’s Independence-day celebration, on Next
Wednesday, please come on time, see you there.
Joko Tomo
Chair Person

2. The celebration will be held on?

This question is included in level C4 (Analyzing) with attributing subcategories. This question is implicit because the text does not explain the answer directly. Students are asked to analyze the Indonesia Independence Day celebration by arranging the day and date of the celebration from the date of the meeting that will be held. In the text, the day and date of the meeting will be held on “Saturday, August 13, 2022”, and the celebration will take place on “next Wednesday”.

3. From the invitation text above, we can say …

This question is included in level C2 (Understanding) with summarizing subcategories. Students are asked to understand the text and find the most relevant nature of the text they have read. This question is included in the type of implicit question because the answer is not explained directly in the text, so students have to make their own deductions based on their understanding.
Excerpts from English exam questions for grade 12

Alyssa Diva Mustika, a student from Pamekasan Junior High School, East Java, won the gold medal at the International Mathematics Contest held in Romania between March 22 to 29, Antara news agency reported.

Speaking to journalists, Diva said she was glad that she had been able to win the competition, which she said had been very tight. “Thank God I won. I will study harder,” she said.

Indonesia sent 10 students to the competition in Romania. Diva is not the first Pamekasan student to win an international science competition. Oktavian Latief, a student from SMA Negeri 1 Pamekasan won gold at the International Physics Olympiad in 2006. Another student, Shohibul Maromi, won the same award in 2010.

“I thank Diva for giving a good name to Indonesia and Pamekasan on the international stage,” Pamekasan Regent Kholilurrrahman said, as quoted by Antara.

1. What is the suitable title from the text above?
   This question is included in level C2 (Understanding) with subcategories summarizing. This problem requires students to abstract a text’s exact theme/title. In this case, students need to read the entire text, understand the main ideas discussed in a text, and then draw conclusions to be used as appropriate titles.

2. What did Shohibul Maromi win?
   This question is included in level C2 (Understanding) with subcategories explaining. This problem requires students to understand the implicit message conveyed in the reading text. The answer to this question has been explained in the text, but implicitly. Therefore, students need a deeper understanding to find the correct answer.

3. Who won the first gold medal at International Science Competition as Indonesian student representative?
   This question is included in level C4 (Analyzing) with subcategories attributing. This problem requires students to determine who won the first gold medal from the text. To be able to find the answer, students need to set the stages of the thinking process because the answer is not explicitly stated in the text. First, students read the text to understand the information presented. Then, analyze and find conclusions from the presented conversational text.

   Based on the analysis of why the exam questions are classified as HOTS questions, the researchers can conclude that most of the English exam questions issued by Islamic education organizations in Jepara offer all lower-order thinking skills with the predominance of Remembering (C1) domain. Remember level means recalling relevant knowledge from long-term
memory. Questions classified as C1 are those that involve retrieving relevant knowledge from long-term memory or some remembering information. The answer to question C1 is usually clearly stated in the text. This is followed by the Understanding (C2) domain, which deals with constructing meaning or understanding, which involves verbal, written, and visual communication based on pre-existing knowledge. Then, the Analyzing (C4) domain involves dividing a document into small parts and determining how the parts relate to one another with an overall structure or purpose.

CONCLUSION

Based on the classification and data analysis results, the researchers concluded that the distribution of HOTs found in the English exam questions for senior high school grades 10, 11, and 12 issued by the Islamic educational organizations in Jepara was lower than that of LOTS. The questions in the exam are mainly dominated by Remembering (C1), followed by Understanding (C2), Analyzing (C4), and then Creating (C6). Meanwhile, Applying (C3) and Evaluating (C5) domains were not found. For the HOTs, the domain of Analyzing (C4) dominated the English exam compared to Evaluating (C5) and Creating (C6). In addition, the most dominant cognitive dimension used in the questions of this exam is Remember (C1), with the subcategory recalling.

This study has a limitation: the research results cannot be generalized because it was conducted on a small scale. Therefore, this research topic needs to be further studied to get broader yet in-depth discussions and insights on the representation of HOTs in reading comprehension questions. Despite this limitation, the researchers hope that future researchers will conduct further research with a broader range of HOTs in different ways to view the development of higher-order thinking skills. In addition, the researchers suggest that the exam makers use Anderson and Krathwohl’s Taxonomy Bloom revised edition as the basic conceptual framework to improve the question quality and train students’ higher-level thinking abilities. The researchers also suggest that policymakers need to ensure that the exam questions or assessments related to speaking skills follow the curriculum's required regulations.

REFERENCES

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