



Evaluating Teachers' Work in Developing Higher-Order Thinking Skills Instruments for Economics Education in High School: A Case Study

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Abstract. This study assesses teachers' ability to create Higher Order Thinking Skills (HOTS) questions, which are necessary for evaluating students' critical thinking abilities. The study uses a case study research methodology to investigate the incorporation of HOTS into end-of-year summative exams in Economics for tenth-grade students at Muhammadiyah High School 1 in Sragen, Indonesia. The methodology consists of a variety of qualitative methods, including interviews, observations, and documentation. Interviews were performed with one economics teacher, one school principal, one vice principal in charge of curriculum, and three students to learn more about the end-of-year assessments, specifically the development of HOTS questions. The findings indicate a predominant emphasis on Lower Order Thinking Skills (LOTS) and Moderate Order Thinking Skills (MOTS). This highlights a significant deficiency in teachers' HOTS question formulation, warranting guidance. Recommendations include targeted professional development for teachers in crafting HOTS questions and the implementation of mentoring programs. Ongoing support and resources are essential for seamlessly integrating HOTS into end-of-year summative assessments, fostering improved student critical thinking outcomes.

Keywords: assessment, higher order thinking skills, high schools, economics education

1 Introduction

Education plays a pivotal role in the advancement of human civilization, serving as a key indicator of the Human Development Index (HDI). HDI, based on life expectancy, literacy rates, average years of schooling, and purchasing power parity, underscores the significance of learning in human development. However, contemporary global education tends to reduce rationality to "rationally without reason," producing graduates often described as "cheerful robots" devoid of creative energy and detached from societal and self-realities (Chasanah, 2019a).

In 2021 the Government of the Republic of Indonesia through the Ministry of Education, Culture, Research and Technology (Kemendikbudristek) carried out curriculum

reform at the primary and secondary education level (Herlandy et al., 2024). One of these curriculum programs is Merdeka Belajar. The Merdeka Belajar program, introduced by the Indonesian Ministry of Education and Culture, aims to enhance the meaning of education and simplify the learning process, emphasizing improvement rather than replacement of existing programs (Purnomo et al., 2022, 2023). This initiative aligns with the global shift towards education systems fostering critical and creative thinking skills, particularly Higher Order Thinking Skills (HOTS) (Fitriani, 2019). HOTS skills (Higher Order Thinking Skills) refer to high-level thinking abilities that involve problem solving, analysis, synthesis, evaluation, and creativity (Ishartono et al., 2021; Saputro et al., 2021). Therefore, it is important for students to be able to improve critical thinking skills based on HOTS (Sidiq et al., 2021; Sulistyanto et al., 2022a).

HOTS, MOTS, and LOTS are concepts related to learning and thinking skills. HOTS, or Higher Order Thinking Skills, encompass analysis, evaluation, and creation, and are crucial for preparing students for the 21st century (Pertiwi, 2019; Ping & Hua, 2017). MOTS, or Middle Order Thinking Skills, are not explicitly defined in the provided research. LOTS, or Lower Order Thinking Skills, are basic cognitive skills such as remembering, understanding, and applying (Erfan & Ratu, 2018). In a different context, hot lots are a group of products with high priority in semiconductor wafer fabs, and their presence can impact the performance of regular lots (Zhou & Rose, 2020).

The development of higher order thinking skills (HOTS) in high school students in developing countries is a critical area of focus, with teachers playing a key role in this process (Purnomo & Mulianingsih, 2021). HOTS, which encompasses critical, creative, and analytical thinking, is essential for character building and problem-solving in the era of Industry 4.0 (Mubarok, 2019). Strategies for cultivating HOTS include providing challenging open-ended questions and projects, promoting group discussions, and guiding students in metacognition and reflection (Mao, 2023). However, there are challenges in the application of HOTS, as evidenced by the need for improvement in mathematical HOTS among eighth-grade students in a junior high school (Badjeber, 2022).

The integration of Higher Order Thinking Skills (HOTS) in the Indonesian curriculum presents several challenges for high school teachers. These include varied perceptions of HOTS (Tyas et al., 2019), the need for effective strategies in teaching reading skills (Indriyana & Kuswandono, 2019), and the importance of teachers' awareness and knowledge of HOTS (Kusumastuti et al., 2019). Despite the Ministry of Education's provision of English textbooks that accommodate HOTS, there is a need for further improvement in the content to align with HOTS criteria (Putri et al., 2021).

Despite the emphasis on HOTS in the curriculum, many teachers still grapple with its implementation. This gap is evident in the planning of learning tasks, objectives, activities, and assessments, where teachers struggle to transform Low Order Thinking (LOTS) into HOTS (Sulistyanto et al., 2022b).

In the context of economics learning in the high school, the development of higher-order thinking skills (HOTS) in high school economics students is influenced by various

factors, including teaching methods, self-concept, family and learning environments, and assessment tool (Acheampong et al., 2023; Saptono et al., 2020). Acheampong et al., 2023 and Kurniawan (2020) both emphasize the importance of HOTS-oriented assessment and the use of instructional strategies that promote critical thinking and problem-solving. However, the effectiveness of HOTS-based questions in improving critical thinking in economics subjects is debated, with Simanihuruk et al., (2022) finding them to be less effective. Further research is needed to explore the most effective methods for developing HOTS in high school economics students.

Based on the issues, this research aims to analyze the need for HOTS assessment instruments in the Economics curriculum for tenth-grade students at Muhammadiyah 1 Sragen High School based on teacher and student's perception. The study is prompted by the necessity to improve assessment practices for enhancing competitiveness and educational quality.

2 Method

2.1 Research Design

This qualitative study employs a case study design to explore the alignment between end of year summative test instruments and Higher Order Thinking Skills (HOTS) in the Economics curriculum for tenth-grade students at Muhammadiyah 1 Sragen High School. The case study involves in-depth exploration and continuous data collection.

2.2 Location and Time of Research

This research conducted at Muhammadiyah 1 Sragen High School due to the need for effective HOTS-based question development. The research spans from May to June 2023.

2.3 Data Sources

Collected through end of year summative test questions in the Economics curriculum for tenth-grade students at Muhammadiyah 1 Sragen High School. Data sources included the Curriculum Vice Principal, a tenth-grade student, and an Economics teacher at Muhammadiyah 1 Sragen High School.

2.4 Data Collection Techniques

Interviews involve structured sessions to gather insights on the necessity for Higher Order Thinking Skills (HOTS)-infused assessment instruments in end of year summative

test Economics questions. Observations center on the Economics teacher's approach in administering and assessing students' responses during the end of year summative test. Additionally, documentation captures key moments during teaching and learning activities in the Economics class.

2.5 Data Validity and Analysis Technique

To ensure data validity, triangulation employed multiple sources, incorporating insights from the Curriculum Vice Principal, a student, and an Economics teacher. The qualitative analysis methodology encompassed systematic data organization, synthesis, and presentation through charts or tables. The conclusion-drawing process relied on robust evidence, adhering to the principles outlined by Sugiyono (2018).

3 Result and Discussion

3.1 The Process of Teachers in Formulating Higher Order Thinking Skills (HOTS) Questions in Economics Learning for the Tenth Grade at SMA Muhammadiyah 1 Sragen

The implementation of the Merdeka curriculum places a significant responsibility on teachers to plan, execute, and assess students' learning outcomes using Higher Order Thinking Skills (HOTS). This shift aims to enhance the quality and competitiveness of graduates. According to Desilva et al., (2020), Higher Order Thinking Skills encompass problem-solving, creative thinking, critical thinking, argumentation skills, and decision-making abilities. High-order thinking occurs when students can transform or create new knowledge from what they know.

Constructing HOTS questions requires teachers to identify the behavior to be measured and formulate the stimulus material based on expected behaviors in specific situations (Chasanah, 2019a). Additionally, the content for questions demanding high-level reasoning is not always available in textbooks. Consequently, writing HOTS questions demands mastery of the subject matter, skill in question construction, and the teacher's creativity in selecting stimuli that align with the local context. The steps for developing HOTS questions are outlined.

Khotimah et al., (2021a) provides guidelines for crafting high-order thinking questions, emphasizing that the content to be assessed aligns with Bloom's cognitive domain, including analyzing, evaluating, and creating. To stimulate high-order thinking, each question is based on a stimulus in the form of reading materials as information sources. The findings, presented in a diagram, reveal insights into the effectiveness of the implemented strategies.

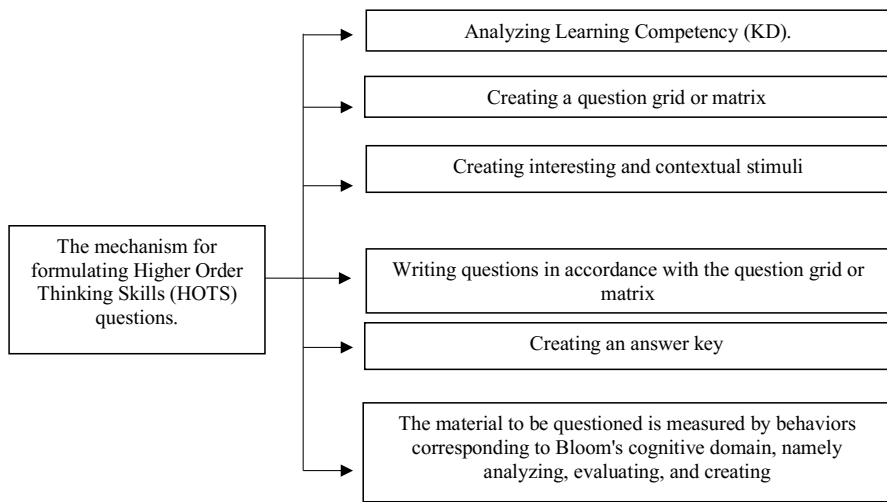


Fig. 1. Diagram of Findings on the Mechanism of Formulating HOTS Questions

Based on Figure 1, on the mechanism of formulating HOTS questions, the process can be explained as follows:

- **Analyzing Competence Standards (KD)**, upon analyzing the competence standards (KD), the research results indicate that Economics teachers at SMA Muhammadiyah 1 Sragen analyze the KD before formulating HOTS questions for the end of year summative test. The teachers follow the steps of determining the KD outlined in Permendikbud No. 37 of 2018. The analysis involves identifying the cognitive level of each KD, and questions are formulated for KDs at levels C4, C5, and C6. This aligns with findings by Desilva et al., (2020), stating that teachers prioritize KDs suitable for creating HOTS questions.
- **Developing Question Guidelines**, the creation of question guidelines involves teachers at SMA Muhammadiyah 1 Sragen utilizing findings from the research and interviews with Economics teachers and the Curriculum Vice Principal. These guidelines assist teachers in selecting KDs suitable for HOTS questions, determining the scope of material, formulating question indicators, assigning question numbers, specifying cognitive levels, and selecting question formats. The purpose of these guidelines is to aid teachers in composing HOTS questions and ensuring alignment with the minimum competency level for each KD, as suggested by Handayani & Hakim (2022), Khotimah et al., (2021).
- **Creating Engaging and Contextual Stimuli**, the findings reveal that Economics teachers at Muhammadiyah 1 Sragen High School struggle with creating HOTS questions following the designated steps. Limited stimuli are observed in assessing

students' critical thinking abilities. Effective stimuli should be novel, enticing students to engage with the question, and contextually relevant to their daily lives. According to Sulistyanto et al., (2022), stimuli should be captivating, encouraging students to read and should align with real-life situations.

- **Crafting Questions According to Question Guidelines**, the process of writing questions in line with the Kisi-Kisi Soal involves adhering to the specific rules for crafting HOTS questions. Chasanah (2019) state that the writing guidelines for HOTS questions differ slightly from those for general questions, mainly concerning the material aspect. Each question is written on a question card following the provided format.
- **Developing Scoring Guidelines (Rubric) or Answer Keys**, the research findings indicate that Economics teachers at SMA Muhammadiyah 1 Sragen generally possess scoring guidelines or answer keys when formulating HOTS questions. Every HOTS question should be accompanied by a scoring guideline for open-ended questions. Meanwhile, answer keys are essential for multiple-choice, complex multiple-choice (true/false, yes/no), and short-answer questions (Kusumaningtyas et al., 2023a).
- **Aligning Material with Bloom's Cognitive Domain**, to ensure the material aligns with Bloom's cognitive domain, specifically analyzing, evaluating, and creating, teachers at SMA Muhammadiyah 1 Sragen adhere to the guidelines proposed by Desilva et al., (2020). The material's assessment is based on behaviors corresponding to Bloom's cognitive domain, encouraging higher-order thinking in students. Each question is rooted in a stimulus, typically in the form of reading materials, to stimulate students' higher-order thinking abilities.

Based on the interviews conducted and compiled by the researcher, several challenges faced by 10th-grade economics teachers in creating PSAT questions can be identified, particularly concerning the steps of formulating HOTS questions. The interviews revealed that teachers face obstacles such as neglecting the initial step of analyzing the Competence Standards (KD). This oversight occurs as not all KDs are suitable for constructing HOTS questions. Additionally, some teachers lack attention to developing question indicators into actual questions, and a portion of them struggles to comprehend the creation of HOTS questions using stimuli as informational material. An essential aspect that requires attention in the question formulation process is the preparation of answer keys or scoring guides. The insufficient knowledge of 10th-grade economics teachers at SMA Muhammadiyah 1 Sragen results in their inability to independently craft HOTS-characterized questions, indicating a need for guidance or training in this area.

This finding is further supported by the researcher's observation that teachers at SMA Muhammadiyah 1 Sragen predominantly create PSAT questions sourced directly from books and the internet. Notably, these teachers lack clarity regarding whether the questions obtained from these sources meet HOTS criteria.

In the development of HOTS questions, teachers are expected to adhere to certain characteristics. These characteristics are operationalized through specific steps in the creation of HOTS questions, including analyzing KDs, determining engaging and

contextual stimuli, formulating question guidelines, writing questions in accordance with guidelines and question-writing standards, and creating answer keys or scoring guides. The identified characteristics aim to guide teachers in fulfilling the criteria for developing HOTS questions when creating PSAT questions, serving as a means to assess students' critical thinking skills.

3.2 Factors Influencing Teachers' Ability to Develop HOTS Questions in 10th-Grade Economics Learning at SMA Muhammadiyah 1 Sragen

Enhancing teachers' understanding of higher order thinking skills (HOTS) questions is imperative, given the current low level of comprehension among educators. As stated by (Hartini & Martin, 2020), teachers wield significant influence over the success of students. Unfortunately, many economics teachers in 10th grade at Muhammadiyah 1 Sragen High School continue to employ memorization-oriented questions, a practice that contradicts the principles of HOTS. In today's educational landscape, teachers face the challenge of developing skills such as analysis, creativity, evaluation, and critical thinking. Embracing HOTS-based learning and questions introduces a new paradigm for teachers, necessitating continuous training, particularly to foster critical thinking patterns and problem-solving in their teaching methods. In this discussion, the factors influencing teachers' ability to formulate HOTS questions were explored through interviews with economics teachers and the Curriculum Vice Principal at Muhammadiyah 1 Sragen High School. The findings, illustrated on Figure 2, shed light on the key factors impacting teachers' capacities in developing HOTS questions.

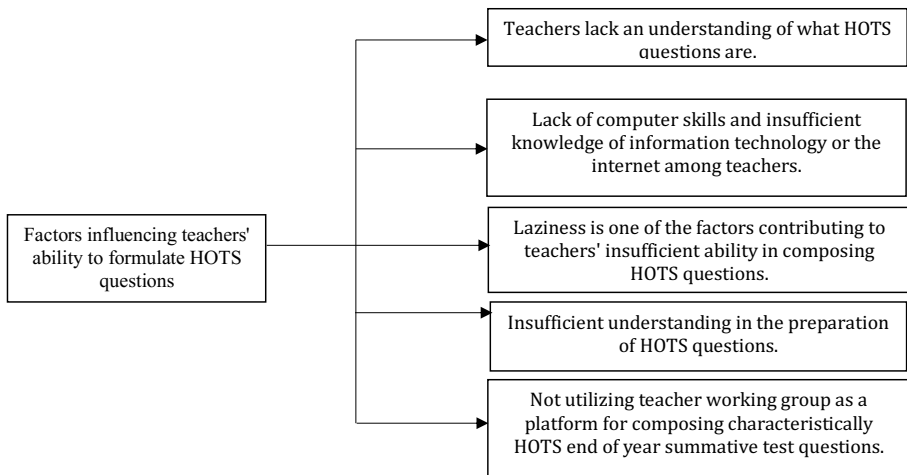


Fig. 2. Findings Diagram of Factors Influencing Teachers' Abilities in Developing HOTS Questions

From the findings diagram of factors influencing teachers' abilities in developing HOTS questions (Fig. 2), the following explanations can be provided:

- **Limited Understanding of HOTS Questions**, teachers lack comprehension of what constitutes HOTS questions because they admit to never having attended HOTS question development training. The disparity in teacher training indicates uneven distribution, with only a few teachers having received such training. According to Kusumaningtyas et al., (2023b), training is crucial for enhancing teachers' ability to create HOTS questions, and the absence of training leads to difficulties in question formulation due to a lack of understanding of the steps involved in HOTS-based question development.
- **Limited Computer Skills and Lack of Technological Knowledge**, the interview results reveal that one economics teacher at SMA Muhammadiyah 1 Sragen lacks understanding of computer usage, hindering the overall integration of HOTS in the teaching process. This deficiency impacts the formulation of HOTS-characterized PSAT questions, as the teaching process is not entirely HOTS-oriented. In the contemporary era, teachers must possess knowledge and skills in using digital learning media to help students achieve academic standards and develop their potential. According to Mohammedid & Omar (2020), educators should have the capability to use digital tools and resources for effective teaching, requiring willingness to implement technology/information technology-supported learning.
- **Lack of Initiative and Laziness as Contributing Factors**, laziness is identified as a factor impeding teachers' ability to create HOTS questions. Teachers can enhance their question-writing skills through literacy strengthening, not just in reading and writing but also in other types of literacy, such as information literacy, environmental literacy, art and culture literacy, science literacy, science and technology literacy (Sulistyanto et al., 2022). These literacy skills enrich the composition and variety of HOTS questions. A teacher's willingness to engage in various activities, including reading and continuous learning, is crucial for overcoming barriers in the teaching and learning process.
- **Limited Understanding of HOTS Question Formulation**, teachers admit that one of the challenges in creating PSAT questions with HOTS characteristics is their limited understanding of HOTS. Therefore, teachers need to engage in literacy activities related to HOTS question formulation and attend training sessions focusing on HOTS. Increased literacy through reading broadens teachers' knowledge about HOTS question development (Fitriani, 2019).

- Underutilization of MGMP Activities for HOTS Question Development, teacher working group activities serve as a platform for teachers to collaborate in developing Lesson Implementation Plans (RPP), syllabi, and end of year summative test questions to improve teaching quality. However, based on interview results, teacher working group activities are not functioning optimally for enhancing teachers' proficiency in creating HOTS questions. The teacher working group forum should be maximized for regular programs related to HOTS-oriented question creation (Hadiprayitno et al., 2020).

In conclusion, the interviews conducted by the researcher indicate several factors influencing teachers at Muhammadiyah 1 Sragen High School in developing HOTS questions. The constraints faced by teachers in creating characteristically HOTS daily exam questions should be a focal point for local authorities to address. Initiatives that bring positive benefits to teachers, particularly activities such as teacher working group, can be further empowered to provide additional knowledge and skills in HOTS question development. This collective effort within teacher working group can contribute to the continuous improvement of teachers' professionalism and competency in formulating HOTS questions that assess students' critical thinking skills in economics class X at Muhammadiyah 1 Sragen High School.

3.3 Analysis per Question Item of the End of Year Summative Test Based on HOTS Criteria

The development of Higher Order Thinking Skill (HOTS) questions, which assess high-level thinking abilities, requires various criteria, both in terms of the question format and the subject content. The writing technique for HOTS questions, whether in the form of multiple-choice or essay questions, is generally similar to the writing of lower-level questions, but there are several distinguishing features. According to Desilva et al., (2020), the criteria for writing HOTS questions include measuring the content based on behavior, such as aligning it with Bloom's cognitive domain. Every question is based on a fundamental question (stimulus), and the question assesses critical thinking skills.

For HOTS questions to demand high-level thinking skills, each question is always accompanied by a fundamental question (stimulus) in the form of reading materials, paragraphs, cases, images, graphs, photos, formulas, tables, word/symbol lists, examples, maps, films, or recorded sounds.

There are varying levels in question items. Teachers can determine the Cognitive Operational Verbs (COV) in the Bloom's Taxonomy for each question item. The cognitive competence of students can be evaluated based on the type of cognitive/knowledge. Anderson and Krathwohl in Anderson, Krathwohl, & Bloom (2001) outline knowledge categories into two aspects: 1) knowledge dimension and 2) process dimension. The knowledge dimension consists of four categories: 1) factual knowledge, knowledge about separate elements with distinct characteristics; 2) conceptual knowledge, knowledge about

more complex and organized forms of knowledge; 3) procedural knowledge, knowledge of how to do something; and 4) metacognitive knowledge, knowledge about cognition in general, awareness of and knowledge about one's own cognition. According to Arafah et al., (2021a), the cognitive domain consists of (in sequence) starting from the simplest to the most complex.

As explained by Kusumaningtyas et al., (2023a), in its implementation, high-level skills (HOTS) in learning evaluation are reflected through questions that students must answer. Questions given are not limited to the application level (C3) but also extend to the creation level (C6). Therefore, in the process of question writing, teachers can refer to the COV formulated for each cognitive level.

Table 2. Results of Overall Question Analysis

Question Numbers	Operational Verbs for Developing	Cognitive Levels	Conclusion
1	Memorization	C1	Lower Order Thinking Skills (LOTS)
2	Demonstrate	C3	LOTS
3	Understand	C2	LOTS
4	Demonstrate	C3	LOTS
5	Memorization	C1	LOTS
6	Identification	C1	LOTS
7	Identification	C1	LOTS
8	Identification	C1	LOTS
9	Memorization	C1	LOTS
10	Understand	C2	LOTS
11	Memorization	C1	LOTS
12	Understand	C2	LOTS
13	Understand	C2	LOTS
14	Understand	C2	LOTS
15	Determine	C3	LOTS
16	Memorization	C1	LOTS
17	Identification	C1	LOTS
18	Mentioning	C1	LOTS
19	Memorization	C1	LOTS
20	Memorization	C1	LOTS
21	Memorization	C1	LOTS
22	Memorization	C1	LOTS
23	Memorization	C1	LOTS
24	Memorization	C1	LOTS
25	Identification	C1	LOTS
26	Memorization	C1	LOTS
27	Memorization	C1	LOTS
28	Memorization	C1	LOTS
29	Memorization	C1	LOTS
30	Identification	C1	LOTS
31	Memorization	C1	LOTS

Question Numbers	Operational Verbs for Developing	Cognitive Levels	Conclusion
32	Memorization	C1	LOTS
33	Identification	C1	LOTS
34	Memorization	C1	LOTS
35	Memorization	C1	LOTS
36	Mentioning	C1	LOTS
37	Memorization	C1	LOTS
38	Mentioning	C1	LOTS
39	Mentioning	C1	LOTS
40	Demonstrating	C3	LOTS
41	Identification	C1	LOTS
42	Identification	C1	LOTS
43	Mentioning and Identification	C1	LOTS
44	Adjusting	C3	MOTS
45	Adjusting	C3	MOTS
46	Memorization	C1	LOTS
47	Memorization	C1	LOTS
48	Adjusting	C3	MOTS
49	Mentioning	C1	LOTS
50	Adjusting	C3	MOTS

*Ref.

C1: Bloom's Cognitive Taxonomy, 1st level (Remembering), LOTS

C2: Bloom's Cognitive Taxonomy, 2nd level (Understanding), Middle Order Thinking Skills (MOTS)

C3: Bloom's Cognitive Taxonomy, 3rd level (Applying), MOTS

C4: Bloom's Cognitive Taxonomy, 4th level (Analyzing), HOTS

C5: Bloom's Cognitive Taxonomy, 5th level (Evaluating), HOTS

C6: Bloom's Cognitive Taxonomy, 6th level (Creating), HOTS

Based on the Table 2, the questions are categorized into different cognitive levels based on Bloom's Cognitive Taxonomy. Lower Order Thinking Skills (LOTS), these questions primarily involve tasks associated with the first two levels of Bloom's Taxonomy, namely "Remembering" (C1) and "Understanding" (C2). Examples include memorization, identification, mentioning, and understanding. The majority of the questions fall into this category, representing a significant portion of the assessment.

Medium Order Thinking Skills (MOTS), questions categorized under MOTS involve the application of knowledge and understanding. The operational verbs associated with MOTS include "Demonstrate" and "Adjusting." These questions require a higher level of cognitive processing compared to LOTS. Around eight questions fall into this category, indicating a moderate presence of medium-level thinking skills in the assessment.

High Order Thinking Skills (HOTS), the data does not explicitly mention questions categorized under the highest levels of Bloom's Taxonomy, which include "Analyzing" (C4), "Evaluating" (C5), and "Creating" (C6). These levels typically involve critical

thinking, analysis, and synthesis of information. It appears that the assessment may not have questions directly aligned with these highest cognitive levels.

To sum up, the assessment is predominantly focused on assessing lower-order thinking skills (LOTS), with a smaller representation of questions that require medium-order thinking skills (MOTS). There is no explicit mention of questions related to high-order thinking skills (HOTS) based on the provided data. This finding underscores the importance of considering the cognitive diversity of assessment items to ensure a well-rounded evaluation that encompasses both foundational knowledge and the application of more advanced cognitive skills. Balancing the distribution of cognitive levels in assessments is crucial for fostering a learning environment that not only tests students' understanding but also promotes the development of higher-order thinking abilities essential for real-world problem-solving and decision-making (Arafah et al., 2021b; P. Hartini et al., 2021; Mohammed & Omar, 2020; Wilson & Narasuman, 2020).

4 Conclusion

In summarizing the research findings, the process of formulating Higher Order Thinking Skills (HOTS) questions in tenth-grade Economics at Muhammadiyah 1 Sragen High School is intricately shaped by the Merdeka curriculum. The emphasis on critical thinking, problem-solving, and decision-making necessitates a meticulous approach. The breakdown of the mechanism reveals steps such as analyzing competence standards, developing question guidelines, and creating engaging stimuli. Challenges emerge in contextual stimuli creation, underscoring the need for real-world relevance.

Exploring factors influencing teachers, limited understanding of HOTS questions, challenges in computer literacy, and issues like laziness and lack of initiative are identified. The role of teacher working group activities is crucial, emphasizing the need for optimized platforms to enhance teachers' proficiency in crafting HOTS questions.

In conclusion, the research highlights the intricate process of HOTS question formulation, urging ongoing teacher development and collaborative initiatives to foster a dynamic learning experience. The challenges and influencing factors identified underscore the importance of a supportive educational environment for effective implementation.

The primary limitation of this research lies in its singular focus on a single school, Muhammadiyah 1 Sragen High School. While the findings provide valuable insights into the specific context of this school, generalizability to a broader educational landscape may be constrained. The uniqueness of each school environment, faculty, and student body implies that the identified challenges and influencing factors may not be universally applicable.

For future researchers, it is recommended to conduct multi-school studies to enhance the external validity of the findings. Investigating a diverse range of schools with varying socio-economic backgrounds, geographical locations, and curriculum implementations

would contribute to a more comprehensive understanding of the challenges and practices in formulating Higher Order Thinking Skills (HOTS) questions. Comparative analyses across multiple schools could reveal patterns, commonalities, and distinctions that enrich the overall body of knowledge.

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