

THE TEACHER'S ABILITY IN MAKING HOTS QUESTIONS IN THE THEMATIC LEARNING CONTENT OF SOCIAL STUDIES

KEMAMPUAN GURU DALAM PEMBUATAN SOAL HOTS PADA PEMBELAJARAN TEMATIK MUATAN IPS

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Abstract

This study aims to describe the teachers' abilities and obstacles in making HOTS questions in the thematic learning of social studies for class V at MI Jombor, Semarang. This study used a descriptive research method with data collection techniques through interviews, observation, and documentation. The results of this study concluded that: (1) the teachers did not have good understanding and ability in making HOTS questions of the thematic learning of social studies, and (2) MI Jombor had not been able to apply the curriculum 2013, which was oriented to HOTS learning and the teachers still had problems in making HOTS questions in the thematic learning of social studies. These findings need the teachers' concern. In other words, 21st-century learning requires teachers to continuously improve their innovation and creativity in making quality evaluation questions for their students.

Keywords: *The Teacher, HOTS, The Thematic Learning Content of Social Studies*

Abstrak

Penelitian ini bertujuan untuk mendeskripsikan kemampuan dan kendala guru dalam pembuatan soal HOTS pada pembelajaran tematik muatan IPS kelas V di MI Jombor, Semarang. Penelitian ini menggunakan metode penelitian deskriptif dengan teknik pengumpulan data wawancara, observasi, dan dokumentasi. Hasil penelitian ini menyimpulkan bahwa (1) guru belum mempunyai pemahaman dan kemampuan yang baik dalam pembuatan soal HOTS pada pembelajaran tematik muatan IPS, dan (2) MI Jombor belum mampu menerapkan kurikulum 2013 yang berorientasi pada pembelajaran HOTS dan guru masih mengalami kendala dalam pembuatan soal HOTS pada pembelajaran tematik muatan IPS. Hal ini menjadi catatan yang perlu diperhatikan oleh guru. Dengan kata lain, pembelajaran abad 21 menghendaki guru untuk selalu meningkatkan inovasi dan kreativitasnya dalam membuat soal evaluasi yang berkualitas bagi siswanya.

Kata Kunci: *Guru, HOTS, Pembelajaran Tematik IPS*

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1. Introduction

The development of science and technology demands good adjustments in education. The world of education as a means of developing science and technology must continue to process and develop following the times. Standards in the world of education also continue to increase along with the changes and demands of the times.

One of the current issues in modern education is the ability of teachers to make Higher Order Thinking Skills (HOTS) questions for students.

Achieving HOTS requires processes and interactions that produce a strong balance between all education actors. It must be implemented in a real and meaningful way, starting from the curriculum as the basic foundation of educational activities. The curriculum is essential in building the progress of the world of education in the 21st century and is a solution for the increasingly competitive future of students. The end of the curriculum 2013 is the birth of competent students following predetermined graduation standards (Fajriyah & Agustini, 2017). The curriculum emphasizes higher-order thinking skills gifted by divine values and social values integrated into the learning process (Kusdianti, Sitompul, & Mahmuda, 2019).

The current implementation of HOTS in the curriculum 2013 is expected to answer various complex national education problems. To improve the national education system and create students with character who understand the nation's identity and create superior students who can compete in the international world (Beddu, 2019). Education is an activity of learning, teaching, and educating, which in essence, always puts the ability to think (Sanusi, 2013). Learning limited to low thinking skills can also cause students to be hampered and weak in facing various problems requiring creative thinking and problem-solving. Therefore, the implementation of the curriculum 2013 at the elementary school level is an effort to improve the quality of education in Indonesia to achieve HOTS and is a very good effort in improving students' thinking skills as early as possible.

HOTS learning began to emerge with various improvements leading to 21st-century competencies, including communicative, creative, collaborative, and critical thinking skills (Redhana, 2019). These competencies can be achieved if learning activities and evaluation lead to critical thinking skills. Learning to think critically is not like learning about the material directly, but learning to think critically is related to solving interrelated problems (Maharani & Utami, 2019).

Implementing HOTS learning is not an easy thing for teachers. They must be able to master the strategies and learning materials. Teachers are also faced with environmental challenges of the students they teach (Ariesta, 2018). One of the demands for teachers is how teachers must make HOTS questions for all learning content studied in elementary schools (Maksum & Suntari, 2019). HOTS questions are evaluation instruments used to measure critical thinking skills, which include skills that do not only recall (remember), restate (expose), and recite (refer without processing) (Ministry of Education and Culture, 2018). In the curriculum 2013 assessment, teachers are expected to be able to make HOTS questions so that students not only answer at levels C-1 (remembering), C-2 (understanding), and C-3 (applying), but also at levels C-4 (analyze), C-5 (evaluate), and C-6 (create).

However, the facts in the field are that there are still many teachers who are confused about making HOTS questions and have wrong perceptions regarding it. The inability of teachers to plan and develop learning and make HOTS questions almost occurs throughout Indonesia. Republika reported that the JPPI (Indonesian Education Monitoring Network) considers that higher-order thinking methods or HOTS in various regions are not comprehensive and optimal. JPPI formulated that the non-optimality was caused by the low quality of the teachers, who did not even understand the concept of HOTS (Maharani, 2018).

Thus, through the problems described previously, the researchers want to know how to apply higher-order thinking skills in MI Jombor. Researchers want to analyze various support for student learning, especially in the thematic learning content of social studies. Thematic learning is a learning approach that intentionally links several aspects of the subject matter and social studies as a science that discusses social science and humanities disciplines that are packaged objectively for students at the elementary and middle levels to provide in-depth knowledge and insight (Majid & Rochman, 2014; Susanto, 2013). Researchers do this to find out that the learning gained by students is not only from rote abilities, but students can get good grades based on higher-order thinking skills applied by the teacher.

Based on the background of the problem, researchers were interested in knowing more about the application of HOTS in the thematic learning of social studies at MI Jombor. This research was carried out on the learning process, understanding, abilities, and obstacles of making questions. Through this research, it was hoped that many parties, especially in the field of education, know the extent of the implementation of HOTS at the elementary school level so that all relevant parties could take further steps towards the reality of the implementation of HOTS in the field.

2. Research Method

This study used a descriptive research method, which described and analyzed various events, social activities, thoughts, perceptions, and abilities individually or in groups that could be explained either by numbers or words. Descriptive research did not determine the relationship between variables or test hypotheses (Hamdi & Bahruddi, 2014). Regarding the location, this research was conducted in MI Jombor, Semarang. The informants of this study were the fifth-grade teacher and the principal as supporting informants. The reason for choosing this informant was because they were considered to know various things and could provide the expected information and data. Instruments were needed to obtain information or data. The data collecting techniques used were interviews, observations, and documentation. Data obtained through interviews used guidelines containing questions related to the research focus to informants. Data or information is also obtained through observation with a procedure and documentation study. Data were obtained from the archive of the final examination for class V at MI Jombor.

The observation data obtained were interpreted to solve the research focus in the next step. Then, the researchers transcribed the interview results and reduced them by taking data following the research focus. The results of the documentation study were identified and analyzed by looking at the suitability of the questions with the HOTS question development criteria. Then, the information on observation data, interviews, and documentation studies was combined. The results of the data combination were used as valid data information in answering the focus and research problems (Sugiyono, 2018).

3. Results and Discussion

Teachers have a very important role in determining student achievement. Teachers must always update themselves by developing continuous professionalism, such as teacher understanding in making HOTS questions. In the view of Islam, teachers are responsible for students' development by seeking all the potential, one of

which is cognitive potential (Arifin, 2013). As in this study, several results were obtained regarding the ability of teachers in making HOTS questions, as follows:

3.1 Teacher's Understanding and Ability in Making HOTS Questions

Table 1. Overall Question Category

Question Category	C1 (Remembering)	C2 (Understanding)	C3 (Applying)	C4 (Analyze)	C5 (Evaluate)	C6 (Create)
Multiple Choice	13	3	0	4	0	0
Fill-the-blank	9	1	0	0	0	0
Essay	1	3	1	0	0	0

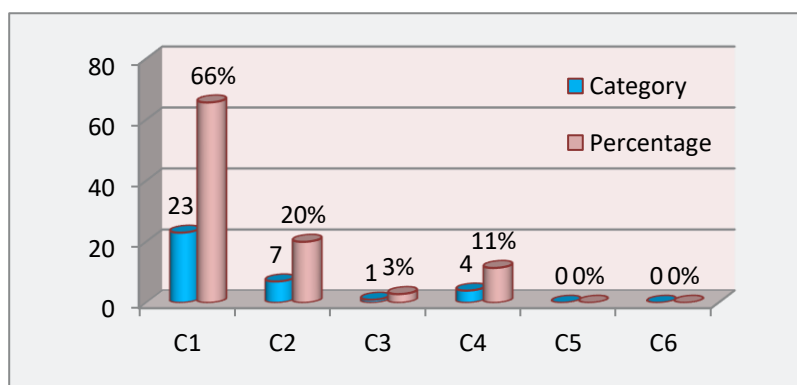


Figure 1. Cognitive Level Categorization Chart of Questions.

Based on the previous findings, it can be seen that the teacher has indeed seen understanding in making HOTS questions. However, after cross-checking the data by comparing the findings with other sources, it was found that the teacher only knew but did not understand well about making HOTS questions. Therefore, in making HOTS questions, the teacher must be able to comprehend well regarding the making of HOTS questions and their characteristics, including: (1) using attractive stimuli, (2) based on contextual problems, (3) managing the level of difficulty, (4) cognitive complexity separately, and (5) measuring critical thinking skills so that it requires students to be creative and not just remember.

HOTS-based assessment is still a new form of assessment for teachers at the elementary school level. This HOTS-based assessment also maximizes the skills of teachers in conducting assessments (Chng & Lund, 2018). Because in carrying out their duties, teachers are required to have adequate competence and abilities. However, based on the findings and cross-check data, it could be seen that the teacher's ability to make HOTS questions is in the category of not being able to. It is evidenced by the 35 questions created by the teacher. There are only four questions (11%) in the HOTS category and the remaining 31 questions (89%) in the LOTS category. Therefore, several skills must be mastered by teachers to make HOTS questions, namely: (1) ability in analyzing basic competencies, (2) compile a grid of questions, (3) determine the form of the stimulus and determine the description of the stimulus, and (4) create scoring guidelines or answer keys (Ministry of Education and Culture, 2018).

The results obtained through Operational Verbs analysis resulted in four categories of cognitive levels, namely C1, C2, C3, and C4. It was found that there was a discrepancy between the questions and the provisions on ideal cognitive level distribution on questions. Each criterion must be listed on the question, and it was still a concern for the teacher. Therefore, a comparison of the distribution of cognitive levels could be produced as follows:

Table 2. Comparison Results of LOTS and HOTS Questions

Cognitive Level	Ideal Thinking Level Distribution		Research Result
C1	5%	5%	66%
C2	10%	55%	20%
C3	45%	0%	3%
C4	25%	40%	11%
C5	10%	0%	0%
C6	5%	0%	0%
Total	100%	100%	100%

From table 2, it can be explained that the distribution of the ideal level of thinking already had a provision that the percentage of learning assessment in cognitive aspects should be distributed at the cognitive level C1 (5%), C2 (10%), C3 (45%), C4 (25%), C5 (10%), and C6 (5%) (Helmawati, 2019). However, from the researchers' analysis, the percentage of questions made by the teacher was not by the existing provisions. Most of those questions contained the LOTS category, which should have applied the HOTS category questions in class V. The provision of HOTS questions should be expected to improve students' thinking, prepare them to face 21st-century learning, and improve the quality of assessment.

In simple terms, it could be said that being a professional figure was being an expert in the field of work being carried out, and almost everyone can undoubtedly become a teacher, but not all teachers have the skills or expertise (Dewi, 2018; Rusydie, 2012). One of the competencies was that the teachers must master their ability to conduct evaluations (Amelia, 2016). Efforts to improve teachers' ability in preparing HOTS assessment scenarios were through forums such as educating and training or KKG (teacher working group) activities which were strategic means to increase knowledge and skills. Making HOTS questions certainly requires various pedagogical and professional skills for teachers. Therefore, teachers must also be sensitive to developments and through various forums can add insight and help teachers as study material for making HOTS questions.

3.2 Teacher Applications and Obstacles in Making HOTS Questions

It was undeniable that previous research could result from the teacher's unfamiliarity in making HOTS category questions. Teachers tended to be accustomed to learning and giving LOTS category questions which were still in the realm of C1 to C3, and there were C4 but limited. It was not in line with the supporting statement from the Head of that school during the observation and interview activities that stated MI Jombor had implemented the curriculum 2013, oriented to HOTS learning. It was not only the giving of LOTS category questions in the spotlight. The teacher's lack of understanding and ability to make stimulus designs on the questions that would be given to students was also an obstacle conveyed by the teacher during the interview session. It

was recorded in the results of the analysis of the obstacles for making HOTS questions as follows:

Table 3. Analysis of Obstacles in Making Questions

No.	Aspect	Results
1.	Analyzing base competencies and compiling HOTS indicators (C-4, C-5, C-6).	There were obstacles in adjusting the questions with operational verbs in the HOTS-based learning indicators.
2.	Developing a grid of questions, cognitive domains, and question indicators following the HOTS rules.	It was constrained by various students who have different ways to show their thinking ability.
3.	Developing contextual problems with interesting stimuli.	It was constrained in overcoming students with different abilities and difficult to find reference sources.
4.	Creating multiple-choice questions, descriptions, and entries by the rules for making HOTS questions and scoring guidelines.	The lack of time allocation for making questions according to the HOTS rules is due to the density of activities.

In addition, the development of the 4.0 industrial era also required teachers to adjust various learning patterns that were applied (Angelianawati, 2019). One of them was the application of HOTS in MI Jombor. It was in line with the Head of MI Jombor, who said that the demands for applying HOTS must indeed be balanced with the teacher's ability. I was part of the challenge to have a forward attitude in achieving goals by requiring teachers to always improve their innovation and creativity in making quality evaluation questions for their students. The most important goal of HOTS was how the individual could receive and filter a lot of information to improve creative thinking skills in solving problems with his knowledge and making decisions in various complex situations (Saputra, 2016).

HOTS-based learning and assessment were one of the objectives of implementing the curriculum 2013 (Fanani & Kusmaharti, 2018). Implementing the curriculum 2013 applied at MI Jombor, a paradigm shift in learning was hoped. Because making HOTS questions must be done with HOTS learning as well. Based on the findings and cross-checking the data, it could be seen that the implementation of the HOTS-based assessment in MI Jombor had not been successful as expected, and improvements still need to be made. In other words, learning was expected to be at a higher level following the times and the curriculum.

Implementing HOTS was still a challenge for most teachers today to develop innovative learning activities. In line with the implementation of the curriculum 2013, one of the expectations imposed on teachers was that teachers could apply HOTS-based learning and assessment (Khurotulaeni, 2019; Susilana & Rusman, 2015). The class V teacher said that in practice, the implementation of HOTS learning was not easy for teachers to carry out because teachers were also faced with different local characteristics of students. Sometimes the teacher felt that he/she was doing his/her best, but the student's response was still relatively passive. It is one of the toughest challenges that teachers have to overcome. Based on the results of the study through interviews, it could

be found various obstacles experienced by teachers, namely: (1) feeling confused in overcoming students with different abilities, (2) the lack of time allocation for making questions due to the density of activities, (3) obstacles in adjusting the questions with operational verbs contained in the HOTS-based learning indicators, and (4) constrained by various students who have different ways to show their ability to think.

In this context, it was seen how important it was for a teacher to have the skill or ability to become a professional teacher. The teacher would be called a professional if he/she met several criteria, namely: (1) having adequate intellectual abilities, especially concerning the learning materials being taught, it required the teacher to learn many things related to the material so that teaching resources were not only from guide books, (2) understanding the vision and mission of education so that it could make a scale of priorities and work in a directed manner, (3) having expertise in transferring knowledge or mastering good learning methodologies, and (4) having a good understanding of the concept of student development (Kholis & Murwanti, 2019; Kim, Raza, & Seidman, 2019; Rusydie, 2012). Therefore, the characteristics of learning that were oriented to the 4.0 industrial era signaled the importance of implementing a HOTS-based learning approach (Kusaeri, Hamdani, & Suprananto, 2019). The implementation of the learning approach, which included observing, asking, trying, reasoning, and communicating, was expected to change the learning atmosphere to be more active and stimulate the ability of students to think critically and creatively, even to make them produce a work.

4. Conclusion

Based on the analysis and discussion results in this research, several things could be outlined as conclusions in this study. Firstly, teachers did not have a good understanding and ability in making HOTS in social studies thematic learning. Secondly, MI Jombor had not been able to apply the curriculum 2013, oriented to HOTS learning. Teachers were still experiencing problems in making HOTS materials in thematic learning of social studies. Thus, it needed the teacher's concern. In other words, 21st-century learning requires teachers to always improve their innovation and creativity in making quality evaluation questions. It allows students to improve their thinking quality as well.

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