

APPLICATION OF HIGH ORDER THINKING SKILLS ON LANGUAGE SKILL QUESTIONS IN INDONESIAN TEXTBOOK AT SENIOR HIGH SCHOOL

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Abstract. The curriculum requires the application of high-level thinking skills (High Order Thinking Skills) in the learning process. Learning in the form of textbooks can be effective in the application of HOTS. In many references to the thought process Bloom-Anderson Taxonomy consists of the ability: remembering (C1), understanding (C2), applying (C3), analyzing (C4), evaluating (C5), and creating (C6). The purpose of this study is to explain 1) the distribution of cognitive levels of language skills aspects in the problems of each chapter of the book, 2) identifying the development of problems seen from their cognitive level. Data is obtained from the question of each chapter in the textbook Indonesian Grade 10 Senior High School. The method used is qualitative descriptive research. The results: 1) the suitability of problem development with Basic competencies, 2) writing about developing skills arts (language and literature) 3) distribution of problem writing based on cognitive level.

Keywords: high-level thinking, remembering, understanding, implementing, analyzing, evaluating, creating.

INTRODUCTION

The world of education needs to prepare learners to face the increasingly complex challenges of the 21st Century. Education is not enough to only equip learners with knowledge and simple thought processes, but also needs to prepare them to have and be able to develop the essential skills of this century (Kemendikbud, 2019: 1). This is as also revealed by Gultom (2020) in the UKIN Refreshment activity. "The paradigm of building a nation begins with building a way of thinking. That's what's called the High Order Thinking Skills" because high-level thinking skills can encourage students to think broadly and deeply about the subject matter.

The School as the technical implementer of HOTS learning and assessment is one form of educational quality service. In the context of the assessment of learning outcomes, the school prepares materials in the form of problems that contain HOTS problems. Steps that can be done by schools include: a) Improving the teacher's understanding of learning and assessment that measures high-level thinking skills (HOTS), b) Improving the teacher's skills to compile assessment instruments related to the preparation of learning outcome assessments (Kemendikbud, 2019: 45). Another corroborating view is that Higher Order Thinking Skills (HOTS) is students' ability to think at a higher level. Students who have HOTS will be able to analyze, evaluate, and create innovations in solving environmental problems. Hots needs in science and environmental learning. That's because many environmental problems can be solved using HOTS capabilities.

In increasing his role, a teacher can utilize learning resources in the form of textbooks. Rusyana et al. (2002: 1) revealed as part of a very important learning device, textbooks are one of the factors that help to learn success. The textbook presented questions and or exercises. However, HOTS has

not been optimized as part of learning activities. HOTS-based learning will be achieved if there is a strong synergy between educators. Starting from the curriculum to the components below and the educators, namely a teacher is required to develop his ability in the learning process so that learners can reach the level of HOTS. Based on preliminary studies it can be revealed that 1) it is still not optimal for teachers to use problems in textbooks as critical thinking exercises, 2) Not all teachers understand the form of questions that contain HOTS, 3) Very few teachers make problems with modeling on textbook problems, 4) not all questions in textbooks contain HOTS, 5) Not all teachers have a HOTS writing guide that contains language, language skills, and literature.

The questions in textbooks can be a model for developing HOTS questions. Teachers and even learners can learn from models. As Dahar states (in Rosdiana, 2014: 52), this modeling concept is in conjunction with the theory of social learning based on the concept of Albert Bandura. Most of the learning experienced by humans is not formed from consequences, but rather that humans learn from a model. Therefore, in order for learners to be able to instruct and discover new knowledge, concrete examples are often needed. These concrete examples are identified and classified into a model or pattern that can then be replicated to create something new. This strategy is known as modeling.

Research on test analysis, was conducted by I Komang Budiasa (2011) with the title "Formative Test Analysis Made by Junior High School Teachers in Singaraja in Terms of Communicative Approach Based on Authentic Assessment". The results showed that the quality of formative tests was in accordance with the authentic assessment-based communicative approach and fulfilled elements of communicative competence (grammatical, sociolinguistic, discourse, and strategy); Another study, "Item Analysis of Multiple-Choice Subjects Indonesian SMK Negeri 3 Singaraja";, "Study of Teacher and Student Handbook textbooks on Subjects Indonesian Class VII Based curriculum 2013". The results of this study revealed that the quality of teacher handbooks and student handbook textbooks belonged to the category of sufficient. This is because there are some components / subcomponents that do not meet the standards set by the BSNP. Looking at previous studies, research on the development of questions in the issue of Yudhistira Grade 10 which examines the development of HOTS problems on language skills and the fulfillment of problem writing standards has never been done.

For this reason, the purpose of this study is to describe the quality of problems at the cognitive level, identify problem characteristics in textbooks that contain HOTS in skills based on the basic competency content of Indonesian Grade 10 high school. The results of this study are expected to be a reference for teachers in practicing high-level thinking skills in the learning process.

RESEARCH METHOD

Research high thinking skills in the problems in the textbooks of Indonesian High School Grade 10 uses qualitative descriptive methods with content analysis techniques. With this method, researchers can obtain data on high-level thinking skills empirically in textbooks published by Yudhistira and published by the Ministry of Education: BSE. Descriptive methods underlying a study based on existing facts or phenomena empirically. Therefore, the results obtained or recorded are in the form of a description of high-level thinking skills.

The analysis in this study is descriptive of analytics, which means that interpretation of the content is made and structured systemic and systematic with content analysis techniques. Content analysis techniques are used to find facts by data interpretation. Content analysis is a research technique for making references that can be imitated and valid data with regard to the context.

Data facts in the form of questions in textbooks Indonesian Yudhistira and published by Kemendikbud: BSE. The data that has been classified is then interpreted using theoretical references relevant to the problem. The next stage is to provide an adequate or adequate interpretation of the facts found. At this stage, research has reached the stage of analysis and interpretation of data. A study can be realized also as a problem-solving effort by comparing the similarities and differences in symptoms found, measuring the dimensions of a symptom, conducting symptom classification, assessing symptoms, establishing standards, establishing relationships between the found inter-ground.

RESULT AND ANALYSIS

Yudhistira's book Grade 10 High School contains the development of basic competencies that refer to the 2013 Curriculum. The object of this analysis consists of nine problem devices from the nine chapters listed in the book. In the first chapter on the text of the observation report, chapter 2 of exposition text, chapter 3 of anecdotal text, chapter 4 of saga text, chapter 5 of fiction and nonfiction books, chapter 6 of negotiation text, chapter 7 of debate text, chapter 8, biographical text, and chapter 9 of poetry text.

The questions presented take the form of multiple-choice questions and description questions. The number of questions for multiple choice 6 chapters contains ten multiple-choice questions and three more chapters fifteen questions. The description of each chapter amounted to five questions. There are questions presented single-handedly and questions that require requirements to answer the next question.

1.1 Cognitive Level of Description in Each Chapter

After the assessment, obtained data that for multiple-choice questions, the achievement of new problem formulations to the level of analysis only. Three levels of *lower order thinking* and one level of high order *thinking skills*, while the level of evaluating and creating does not exist. It should be developed to the level of evaluating because creating is difficult to realize for this type of problem. Here's the visualization in graphics.

SEBARAN LEVEL KOGNITIF SOAL PILIHAN GANDA
PADA SETIAP BAB

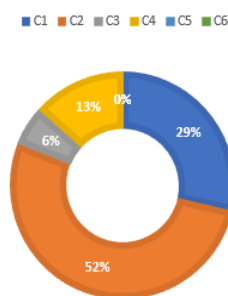


Fig 1. percentage distribution of Cognitive levels in PG

Based on the table above, the distribution of multiple-choice question creation from the highest is understanding (C2) 52.4%, remembering (C1) 29%, analyzing 13% (C4), and applying (C4) 6%. This shows that the questions in the Indonesian textbook are still developing multiple-choice questions with low-order thinking *skills*. Questions containing *high-order thinking skills* are very few (13%) at the analysis level. If compared then the development of the question of multiple choice is still dominant at the low order level *thinking skills*.

To clarify the understanding of problem development, the following are presented examples of some problems that *lower-order thinking skills* and examples of problems that have been *higher-order thinking skills*.

*A book about the life history written by the author himself is called... (answer choice: a. biography, b. **autobiography**, c. novel, d. saga, and e. memoir (p. 184). This is directly on the subject. Though the category of HOTS should use stimulus. When not using a stimulus, it means that the problem only wants one step to think. Students will only have answers relevant to the question. Not exploring high-level thinking skills. This question only meets the level of understanding (C2).*

Another example of the following question. *Chairil Anwar Day is celebrated every date. The answer item is a. May 14, b. August 17, c. February 29, d. May 1, e. **April 28**. (p. 184) This question is a question of memory because it repeats the answer as stated in the reading and does not use a stimulus.*

The following questions already meet the requirements of high-level thinking. **Excerpt The following biographical text for questions numbers 6 and 7.** *Nh. Dini was born on February 29, 1936, in Semarang. After high school literature (1956), he took the course of land flight attendant GIA Jakarta (1956) and courses in the Department of History (1957). From 1957 to 1960, he worked at GIA Kemayoran Jakarta. After marrying Yves Goffin, Nh. Dini settled in Japan, France, and the United States. However, since 1980, he has lived in Jakarta and Semarang. Written literary works, among others: *Dua Dunia* (1956); *Hati yang Damai* (1961); *La Barka* (1975); *Namaku Hiroko* (1977); *Keberangkatan* (1977); *Sebuah Lorong di Kotaku* (1978); *Padang Ilalang di Belakang Rumah* (1979); *Langit dan Bumi Sahabat Kami* (1979); *Sekayu* (1981); *Kuncup Berseri* (1982); etc. . The following are not included in the novel by Nh. Dini is ... (The choice of answer) a. *Dua Dunia*, b. *Hati yang Damai*, c. ***Sebuah Lorong***, d. *Namaku Hiroko*, dan e. *Keberangkatan*. (p.184)*

The question above is about the work produced by the character. Presented with a biographical text Nh. Dini, students should be able to determine answers that do not include the work of a figure appropriately. It aims to measure the ability to use and apply factual, conceptual, and procedural knowledge. Based on the rules of writing about multiple choice, the above problems have fulfilled the rules, both materially, construction, and language. The matter has used stimulus in the form of a biographical text Nh. Dini. These include cognitive level analysis (C4). Therefore, this question includes hots.

Here's also a lot of hots. **Biographical text quotes for questions number 8 and 9!** *In addition to his position in the government, Sri Sultan Hamengku Buwono IX also became chairman of the National Scout Movement, The Indonesian National Sports Committee, and others. In addition to being a good politician and statesman, the arts and culture are also well mastered. In adolescence, he actively created dance, including Golek dance, Peacock, which is guided by menek story. The positive attitude of Sri Sultan Hamengku Buwono's life that is so tempestuous from the biography quote above is... (The answer is:) a. focused and creative with positions in government, b. **Active in the fields of government, scouting, sports, arts, and culture**, c relying on the value of politicians when occupying the office, d. be a good statesman because he is good at creating dance, and d. spends adolescence engrossed in the art of dance. (p. 185).*

The above is about the things that can be traced from the character. Presented with the biographical text of Sri Sultan Hamengkubowono IX, students must be able to determine the things that can be traced from a figure appropriately. It aims to measure the ability to use and apply factual, conceptual, and procedural knowledge. Based on the rules of writing multiple-choice questions. The question above has fulfilled the rules, both materially, in construction, and in language. The matter has used stimulus in the form of a biographical text of Sri Sultan Hamengkubowono IX. These include level cognitive analysis (C4). Therefore, this includes *hots*.

1.2 Cognitive Level of Description in Each Chapter

After the assessment obtained data for the description of the achievement of the new problem formulation to the level of analysis only. Three levels of *lower order thinking* and one level of high order *thinking skills*, while the level of evaluating and creating does not exist. It should be developed to the level of evaluating because creating is difficult to realize for this type of question. Here's the visualization in graphics.

SEBARAN LEVEL KOGNITIF SOAL URAIAN PADA SETIAP BAB

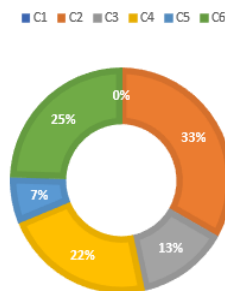


Fig. 2 Cognitive Level Distributions of Description

Based on the table above, the distribution of the description of the highest is understanding (C2) 33%, creating (C6) 25%, analyzing (22%), applying (C4) 13%, and evaluating (C5) 7%. For the level of remembering (C1) in the type of description problem, no data was found. This shows that the problems of the description in the textbook Indonesian Grade 10 published by Yudhistira is still developing problems with *low order thinking skills*. However, it has also raised the problem with *high-order thinking skills*. If compared between the problem of low order *thinking* and high order *thinking*, it seems clear that the problem of description has developed towards high-level thinking skills (HOTS).

To give an idea of the development of the problem, here is presented an example of a description at the level of *low order thinking skills* and high order *thinking skills*.

Jelaskan langkah-langkah membuat teks biografi! (hal. 186)

The above question is about the steps of the biography text. Students should be able to explain the steps of creating a biographical text. This question aims to measure the ability of factual, conceptual, and procedural knowledge. Based on the rules of writing about the description, this question has fulfilled the rules, both materially, construction, and language. It is unfortunate because the problem does not use a stimulus that can stimulate or motivate students to think before answering. These include cognitive levels of understanding (C2). Therefore, this includes *lots*.

Here's a HOTS question. *Explain how to express the attitudes of character in the biographical text! (p. 186)*

The question above is about exemplary attitudes. Students should be able to explain how to express the attitudes of the character in the biographical text. This problem aims to measure the ability of factual, conceptual, and procedural knowledge. Based on the rules of writing about the description, the above problem has fulfilled the rules, both materially, construction, and language. This problem goes into the problem with the evaluation level (C6) because it asks students to provide an assessment of data. An understanding of prerequisites is needed to answer questions related to this value, in addition to theoretical knowledge of the development of attitude (character). This includes HOTS.

CONCLUSION

The current qualitative research refers to the demands for changes in the 2013 Curriculum—the application of 21st Century Skills. 21st Century skills include critical thinking, creativity, collaboration, and communicative skills. Its implementation refers to the latest cognitive level, Bloom-Anderson on High Order Thinking Skills (HOTS). This paper examines the distribution of cognitive levels in Indonesian textbooks which include remembering (C1), knowing (C2), applying (C3), analyzing (C4), evaluating (C5), and creating (C6); the content of language skills, language, and literature, as well as analysis based on the criteria for preparing questions, both multiple-choice forms (PG) and descriptions.

The textbook is one of the learning tools that can be a reference in the learning process. Therefore, the implementation of HOTS in textbooks is very important. The results of research on the subject in Indonesian textbook (Grade 10) showed a distribution of varying cognitive levels. Multiple choice question does not contain cognitive levels C5 and C6. Especially for C6 is considered reasonable because the questions are in multiple choice form. However, C5 can be developed in this type of question. On the description already meets high-level thinking skills. In order to meet the curriculum, the content of language skills is fulfilled as well as aspects of language and literature.

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