



ANALYSIS OF STUDENTS' ABILITY IN SOLVING MIDDLE SEMESTER EXAM (UTS) TYPES OF HOTS OF IPA LESSONS

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Abstract

The purpose of this study was to determine the ability of students in solving problems of the Higher Order Thinking Skills (HOTS) type. The sample based on this research is Junior High School 05 Bengkulu City. The form of research used to analyze students' abilities in solving HOTS questions is a research method with a qualitative approach. The results of the study explained that "almost all" (92.5%) UTS questions were of the HOTS type. The characteristics in the UTS items are "almost all" (97.3%) synchronous items using indicators of competency achievement. Half of the stimuli used in the problem are pictures, while some of the mini are diagrams, tables, models & less based on are case fragments. While the characteristics of critical thinking questions as much as 85%, less based on half an indicator of focusing in questions.

Keyword: Analysis, High Order Thinking Skill (HOTS), Science Lessons.

A. INTRODUCTION

The era of globalization has had a major impact on all aspects of life, including the need for education. One of the real challenges is that education is able to produce human resources who have complete abilities, known as 21st century capabilities. (Ikhsan et al., 2019). In the era of globalization, competitive human resources are needed so that they are able to face the development of an increasingly advanced era (Deda et al., 2020).

The progress or decline of a country is determined by the quality of its human resources, quality human resources can be obtained through quality education. For Indonesia, as a developing country, quality education is currently a priority in order to create an intelligent nation, able to face changes and developments as well as challenges that will surely occur in the future (Iffa et al., 2017).

Education is the basic capital in shaping mindsets and intellectual development as well as a means of transmitting values, ideas and perfecting ways of thinking (Iffa et al., 2017). Given that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively increase their potential to have religious spiritual strength, self-control, individuality, wisdom, noble character and skills needed in society, nation and state which is stated in the RI Law No. 20 of 2003 article 1 paragraph 1 regarding the national education system (Ningsih et al., 2018).

Improving the quality of education The Indonesian government conducts various courses on how to educate. Where this course emphasizes more on creativity, activeness and students' higher thinking skills including HOTS thinking skills, questions that involve higher-order thinking processes tend to be complex and are questions that have many solutions or many ways of working according to the experience and knowledge of each participant. students (Deda et al., 2020).

HOTS (Higher Order Thinking Skill) covers aspects of critical thinking skills, creative thinking skills, and problem solving skills. Critical thinking is the ability to analyze, create and use criteria objectively, and evaluate data. Creative thinking is the ability to use complex thinking structures to generate new and original ideas. The ability to solve problems, namely the ability to think in a complex and deep way to solve a problem (Lailly & Wisudawati, 2015)



To encourage students to think broadly and understand the material in depth. Higher thinking skills are part of the modified Bloom classification in the form of Operational verbs, including analysis C4, evaluate C5 and make C6 Can be used to solve exam questions (Ikhsan et al., 2019)

The purpose of this study was to determine the ability of students to complete the HOTS-based midterm exam at SMP N 05 Bengkulu City.

B. RESEARCH METHODS

This research is a qualitative research conducted at SMP 05 Bengkulu City on October 30, 2021. The subjects in this study were seventh grade students of SMP 05 Bengkulu City consisting of 6 people, namely 2 people with high abilities, 2 people with moderate abilities and 2 people with low abilities who selected from the results of the ranking of tests performed. The research procedures are (1) collecting the 2021 UTS questions; (2) choosing UTS questions that are categorized as HOTS according to Bloom Anderson's Taxonomy; (3) validate the UTS questions in the HOTS category; (4) modifying the UTS questions into description questions; (5) test the HOTS questions; (6) processing data and drawing conclusions.

The instruments in this research are test questions and interview guidelines. Data collection techniques in the form of document questions, written tests and interviews. Data analysis techniques in this study were data reduction, data presentation, and conclusions. The analysis was preceded by analyzing documents, analyzing test results, and interview data. Analyzing students' higher-order thinking skills in solving the HOTS category National Examination based on written test results supported by interview results.

C. RESULTS AND DISCUSSTION

The results obtained according to the analysis of the 15 UTS questions of 13 included in the HOTS type questions as a result the questions analyzed were 13 questions (Table 2) Table 2. Quality of the 2020/2021 Science UTS Questions for Junior High Schools (N=15)

Question Type	(%)	Criteria
HOTS	92,5%	Almost Perfect
LOTS	7,5%	Fraction

Description: % = Percentage

Based on the data presented in table 2, it can be seen that "almost all" of the questions are of the HOTS type & "a few" are of the LOTS type, this is because the KD demands that require HOTS KD are more demanded according to the LOTS at the Junior High School level, as a result the questions that must be made more poly of HOTS type according to LOTS type.

The results of the study (Table 2) explain that "almost all" questions are of the HOTS type, this is in line with Arti & Hariyatmi (2015: 10) that the questions that should be given to junior high school students are HOTS questions because at the junior high school level, children Students will be more demanding in high-level reasoning abilities, solving problems, making decisions, arguing, thinking critically and creatively in completing questions that measure technical abilities related to memory and calculations alone. From the quality of the questions using the HOTS type, the suitability of the questions analyzed using indicators of competency achievement, & the characteristics of the questions. The following is a table of output data for conformity between questions and indicators of competency achievement.

D. CONCLUSION

The results of the study explained that "almost all" (92.5%) UTS questions were of the HOTS type. The characteristics in the UTS questions are "almost all" (97.3%) of



synchronous questions using indicators of competency achievement. Stimulus used in the problem half is a picture, while some mini are diagrams, tables, models and less based on half is a fragment of the case. While the characteristics of critical thinking questions are as much as 85%, less based on half are indicators of focusing in questions. The characteristics of case solving questions are only 22.5%, a small part of which is an indicator of identifying cases, identifying cases that are out of sync and solving cases from data and cases.

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