

Analysis of Student Capacity Ability about Higher Order Thinking Skills (HOTS) in Elementary School

Novi Eka Putri¹, Yoserizal², Fadlul Fajri³, Yanti Fitria⁴

¹Universitas Negeri Padang Magister Program, Putri, Novi Eka, Padang, Indonesia

²Universitas Negeri Padang Magister Program, Yoserizal, Padang, Indonesia

³Universitas Negeri Padang Magister Program, Fajri, Fadlul, Padang, Indonesia

⁴Universitas Negeri Padang, Primary School Teacher and Training Education, Yanti Fitria, Padang, Indonesia

Abstract: *This study aims to determine the ability to absorb elementary school students on HOTS. The type of research used is descriptive research, type of content analysis or document. The subjects of this study were 5 grade students of SDN 29 Ganting Utara, namely class 5A with 30 students. The data in this study were in the form of the percentage of absorptive power of students at SDN 29 Ganting Utara in working on HOTS categorized questions which were analyzed descriptively. Based on data analysis, it was found that the absorption of students in working on the HOTS category was 51.33%. Thus it can be concluded that the ability to absorb students is still quite good.*

Keywords: Elementary School Students, Student Ability, Higher Order Thinking Skills (HOTS)

1. Introduction

When A country can see its progress or decline through education or the quality of human resources in the country. quality human resources can be obtained through quality education. Education is a process of extracting and processing experiences continuously. Education is a process of developing the existence of students who are social, cultured, in a way of life that has local, national and global dimensions. Education can be defined as the overall learning experience of every person throughout his life which lasts not within a certain age but lasts throughout life from birth to death Education is a conscious and planned effort to create a learning atmosphere and learning process so students actively develop his potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by himself, society, nation and state.[7]. The Indonesian government is aware of this and in its implementation, this education uses a guideline called a curriculum . The curriculum is a set of plans and arrangements regarding the purpose, content, and material of learning and the methods used as guidelines for the implementation of learning activities to achieve certain educational goals.

The success of a learning process is influenced by several components. Therefore, the assessment in the 2013 Curriculum is considered well. Because, it aims to provide valid / valid and accurate information about things that are truly known and can be done by students. [5] Measuring instruments in learning can be done using test or non-test instruments. [1]. In the cognitive realm, in testing students' abilities test instruments are used. The test is a number of questions that require answers or some statements that require a response to measure the level of ability of an individual who is given a test. The most widely used test is

the objective test. Objectives in this case have an understanding, namely the form of a test that checks or scans the answers / responses of the full test participants can be done objectively by the corrector. Because of its objective nature, it does not need to be done by humans. The work can be done by a machine, for example a scanner machine. Thus the score of the test results can be done objectively. This objective test is widely used in the midterm, the end of semester, school exams and National exams. Tests that are constructed without regard to their quality may not be able to express students' abilities appropriately

In actual judgments involving high-level thinking skills. [4]. Where the domain of cognitive processes included in high-order thinking (High Order Thinking) is the domain of analysis, evaluation and creation.[3].

One of the competencies that need to be possessed by the teacher is the ability to arrange questions as students test instruments well and analyze the results of these tests. Teachers in Primary Schools need to have an understanding of different assessments and assessments, not just traditional ones. However, the increasing complexity of problems in education with changing curricula has led to the importance of students being able to think at a higher level so that the assessment models in the 2013 curriculum should adapt international standard assessment models that are expected to help students improve their higher-order thinking skills (High Order Thinking).

Based on the results of the preliminary study, this matter has not yet been implemented, there are still many teachers who have not developed students' abilities optimally. Students should do things that are more than listening, facts in the field also show that there is still a lot of learning done in Elementary Schools that is only oriented towards developing

and testing students' memory so that their thinking ability is just memorizing or memorizing. So that the level of thinking of students is still at a low level of thinking, even though future challenges require learning, especially in learning that requires high-level thinking skills or known as higher order thinking skills, which are then abbreviated.[2].

HOTS. Given this, this study focused on analyzing students' ability to HOTS problems in class 5 themes 2 sub-themes 2 humans and the environment

2. Methods

This research was conducted at SDN 29 Ganting Utara in October-November 2018. The subjects of this study were students of SDN 29 Ganting Utara VA class with 30 students using the research instrument, namely the HOTS problem in the theme 2 sub-themes 2 of humans and their environment. The data analysis technique used in this study is descriptive analysis, which is a data analysis technique used to describe the state of the object qualitatively. The ability or absorption of students is analyzed based on the HOTS question tested. Following are the criteria for the category of student absorption ability in solving HOTS questions:

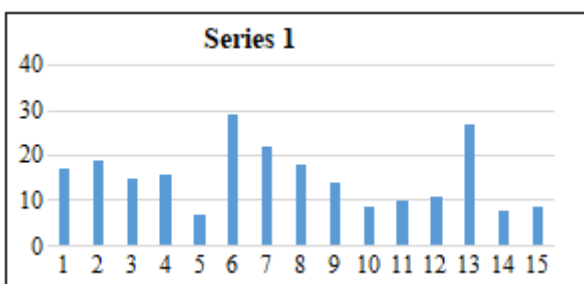
Table 1: Student Absorption Category

Absorption Power (%)	Absorption Power Category
$85\% \leq x \leq 100\%$	Very Good
$70\% \leq x < 85\%$	Good
$50\% \leq x < 70\%$	Good enough
$0\% \leq x < 50\%$	Poor

This study uses descriptive analysis that describes the percentage of the results of the analysis of students' ability to absorb the HOTS problem is still in a fairly good category.

3. Results and Discussion

Capability Analysis of Student Absorption on HOTS problems. This research was conducted in October - November 2018. The absorption of all students in working on HOTS sub-themes 2 people and the environment is shown in the following table: Table 1



From Figure 1. above there are numbers of students who are able to answer each question. The ability to absorb students is still heterogeneous. The questions that can be answered by almost all students are 3 questions with questions number 6, 7, and 13 with the number of students who answer correctly is > 20 students.

Problem number 6 is a question with Indonesian subjects. With a question indicator "Given an image, students can

make the right questions according to the answers given." The questions are presented with pictures.

Problem number 7 is a question with Indonesian subjects. With a question indicator "Given an image, students can make the right questions according to the answers given." The questions are presented with pictures.

Furthermore, for question number 18 is a matter with material changes in physical and chemical properties, with indicators of the problem "Given several pieces of pictures, students can compare what includes economic activities managed individually and in groups". These questions are presented with pictures.

The questions that were able to be answered by most were ≥ 15 students ranging from 5 questions. Namely on questions no 1, 2, 3, 4, and 8. Whereas the questions that the participants were barely able to do were questions about numbers 5,10,11,12,14,15.

Problem number 5 requires the ability of students to be accurate and to connect the compatibility of the text with the choice of the answer. The number of students who were able to answer correctly was only 23.33%. And for question number 11 is a question that requires students to be able to solve a given problem as well as question number 12. The number of students who are able to answer correctly is only 30% and 33.33% respectively.

Problem number 14 is a problem where students already know cooperative tasks but need to re-analyze and understand the purpose of the answer choices and their interrelationships. Likewise with question number 15. The number of students who are able to answer the question correctly are 4 and 3 in a row of 20 students with a percentage of 26.67% and 30%.

It was clearly seen that the students who were able to answer HOTS questions were only quite a few even though there were a number of questions that were able to be answered correctly by a large number of students but only 3 items from 15 items in question. This is reinforced by the study of Nurina & Endah (2008) which states that not all students who are able to work on the HOTS category.

The average absorption of students who are able to answer the HOTS category is 51.33%. this means that the students of SDN 29 North Ganting still have a fairly good level of thinking ability.

4. Conclusion

Based on the results of the research that has been done, it is found that the HOTS problem in class v theme 2 sub-theme 2 human and environment with the ability to absorb students in doing it is still relatively good with a percentage of 51.33%. Where only slightly crossed the bad category.

Based on the results of the research that has been done, the authors suggest that teachers and prospective teachers be able to improve their ability to have a high level of work on the problem or in making questions and because the

absorption of students to work on HOTS is still quite low and this is caused by a lack of students practicing questions with a high level of thinking, even according to the research of Ani Syahida & dedi (2015) who stated HOTS questions in national examinations only ranged from 7.5% - 15%. [6].

So that students get used to the questions with a low level of thinking, it is suggested to the teacher to conduct learning activities oriented to improve students' ability to work on HOTS problems or improve students' thinking skills at a high level.

References

- [1] Arifin, Zainal, *Evaluasi Pembelajaran*, PT Remaja Rosdakarya, Bandung, 2014.
- [2] Ayuningtyas, Nurina. *Proses Penyelesaian Soal Higher Order Thinking Materi Aljabar Siswa SMP Ditinjau Berdasarkan Kemampuan Matematika Siswa*. Universitas Negeri Surabaya.
- [3] Budiarti, Herni, *Analisis Ujian Nasional IPA SMPA Tahun 2014 Berdasarkan Dimensi Pengetahuan dan Dimensi Proses Kognitif*. *Jurnal Biologi, Sains, Lingkungan, dan Pembelajarannya*, 2014, Available:(Accessed:Feb, 15, 2018).
- [4] Herrington, J., & Herrington, A, *Authentic conditions for authentic assessment: Aligning task and assessment*, 2006, [Online], Available: http://edserver2.uow.edu.au/~janh/assessment/authentic%20assessment_files/HERDSAHerringtonFinal.doc. (Accessed:Feb, 15, 2018).
- [5] Sukardi, *Evaluasi Pendidikan Prinsip dan Operasionalnya*, Bumi aksara, Yogyakarta, 2008.
- [6] Syahida, Ani., dan Irawan, Dedi, *Analisis Keterampilan Berpikir Tingkat Tinggi pada Soal Ujian Nasional Kimia*. *Jurnal Edusains*, 2015, [Online]. Available:(Accessed:Feb, 15, 2018).
- [7] Wahyudi, Din.,dkk, *Pengantar Pendidikan.*, Penerbit Universitas Terbuka,Jakarta, 2007.