IMPLEMENTATION OF HOTS LEARNING BASED ON ENVIRONMENTAL APPROACH IN ELEMENTARY SCHOOL IN BANJAR DISTRICT

Radiansyah, Raihanah Sari, Fathul Jannah, Wahyu Kurniawan, Siti Aisyah, Sapnah Wardini

PGSD, FKIP, Universitas Lambung Mangkurat, Banjarmasin, Indonesia.

Received : 14-09-2021

Accepted : 16-11-2021

Published: 17-01- 2022

e-ISSN 2502-4264

Abstract

This study aims to determine the extent of the teacher's skills in planning and implementing HOTS learning based on an environmental approach. The research method used is descriptive qualitative. Data collection techniques were carried out through observations, interviews, questionnaires, and documentation studies. Data collections were analyzed by data selection techniques, data tabulation, calculating alternative answers, then describing and analyzing the data. Based on data analysis results, the four indicators used in this study indicate that: 1) Learning planning shows that most teachers have implemented environment-based HOTS learning. However, there are still teachers who have not brought up HOTS in making lesson plans. 2) The implementation of learning shows that it has not been fully implemented because there are still teachers who do not understand how to teach HOTS-based learning. 3) Learning assessment shows that the implementation of the HOTS nuanced assessment is still not fully implemented. 4) The ability of the evaluation tool to analyze the causes of environmental changes showed that the learning outcomes had not described HOTS based on an environmental approach.

Keywords: HOTS, Environmental Approach, Elementary School.

INTRODUCTION

This research was motivated by the recent disaster in South Kalimantan, namely the flood. The flood in early 2021 was the worst flood that had stopped in South Kalimantan for days. The possibility of another flood could occur; for this reason, residents must be prepared to deal with it, especially in terms of knowledge. Students as community candidates need high-level knowledge and understanding of the environment, especially the causes and effects of disasters caused by nature or human activities. For this reason, higherorder thinking learning (HOTS) based on an environmental approach is needed.

Natural disasters that occur impact life today and will also harm the future. For this reason, every individual in the community must care about preserving the environment to achieve the welfare of the people. According to Mirna (2019), the community can play an active role in managing life. To increase public awareness that is active and concerned in preserving the environment, it is necessary to improve the quality of education.

Education is a form of effort in improving human resources to continue to change. Through education, a society that is intelligent, creative, broad-minded and has life skills is created, which will be the subject of improving the nation's state (Jannah, 2015). Entering the 21st century, higher-order thinking skills (HOTS) are indispensable. Higher-Order Thinking Skill (HOTS) is a high-level thinking skill that demands critical, creative, analytical thinking on information and data in solving problems (Barratt, 2014). Higher-order thinking is a type of thinking that tries to

explore questions about existing knowledge related to issues that are not clearly defined and do not have definite answers (Haig, 2014; Astawan, I. G., Anggreni, N. M. D., Atmojo, S. E., & Ardiansyah, A. 2021).

HOTS is used not only to memorize and convey the information obtained but also to construct, understand, and transform the knowledge and experience already possessed to be used in making decisions and solving problems in new situations. It cannot be separated from everyday life. day (Fanani & Kusmaharti, 2019). Students are no longer led to be told by being given information by the teacher but to find out for themselves by thinking intelligently and creatively.

The teacher is a factor that plays an important role in determining the success of the learning process because it is the teacher who plans, implements, and conducts assessments in the learning process. Therefore, it is necessary to improve their ability to manage learning activities, including their assessment. The main purpose of applying HOTS learning is how to improve students' thinking skills at a higher level, especially those related to the ability to think critically in receiving various types of information, think creatively in solving a problem using the knowledge they have and make decisions in situations complex situations (Sofyan 2019).

An environmental approach is an that utilizes the approach natural surroundings to be used as teaching aids or learning resources. In utilizing the environment, students are invited to understand concepts, apply concepts, solve problems to conclude a problem by involving the surrounding environment close to students. Thus, students will better understand learning and avoid boredom (Kristyowati & Purwanto, 2019: Oktaviani, R., & Atmojo, S. E. 2021).

The learning process using the surrounding environment approach as a learning resource is a learning process that can create a playful and creative student learning atmosphere, generate interest in learning, and develop thinking skills that can provide space for students to experience, try, feel and discover for themselves (Heraningsih 2013; Atmojo, S. E. 2016). According to Ikhsan et al. (2019), the environmental approach can support students to develop skills and ethics to understand the relationship between the environment and humans. Through direct experience, it is hoped that student development will occur as a whole (cognitive, affective and psychomotor aspects of children can develop in a balanced way) (Sanjaya, 2013: Iskhamdhanah, B., Pujiastuti, P., Atmojo, S. E., & Trihastuti, M. 2021).

With an environmental approach, students can utilize the environment as a learning resource. According to Uno and Mohammad in Hidayah (2019), the concept of learning by using the environment provides a huge opportunity for students to improve their learning outcomes. Therefore, teachers need to make maximum learning plans.

METHOD

The research method used is descriptive qualitative, with data collection techniques through observation, interviews, questionnaires, and documentation studies. The data collected were analyzed by data selection techniques, tabulation, calculating alternative answers and then describing and analyzing the data.

The research is an activity to review the implementation of HOTS learning based on an environmental approach carried out for nine months, starting from planning to preparing reports. The targets in this study were teachers (high-class clusters) and elementary school students in Kertak Hanyar District, Banjar Regency.

The initial activity was carried out with unstructured observations and interviews with flood-affected students conducted by a research team collaborating with volunteers to see how they responded to the ongoing flood disaster. Then the next activity was interviews with several teachers related to planning, the learning process, assessment, evaluation tools used, and the learning tools they have prepared, whether they are following HOTS learning based on an environment-based approach or not. Furthermore, questionnaires were distributed to teachers (as many as 41 respondents were involved) in Kertak Hanyar District, Banjar Regency to determine the extent of their knowledge, planning, implementation, assessment, and preparation of evaluation tools in the implementation of HOTS learning based on an environmental approach.

RESULTS AND DISCUSSION

This study uses four indicators consisting of 1) HOTS learning planning based on the environmental approach. 2) Implementation of HOTS learning based on an environmental approach. 3) Assessment of HOTS learning based on an environmental approach. 4) The ability of evaluation tools to analyze the causes of environmental changes.

From the field activities, the following results were obtained:

1. HOTS learning planning based on an environmental approach

In this stage, there are 9 question items given. Based on the results in the field, the data shows 42% is in the range of 25% P <50% with the category of almost half of the total respondents answered in the direction of disagree. This means that the teacher's ability to make HOTS learning plans based on an environmental approach has not been fully implemented. In the development of learning tools that are used. sometimes some include an environment-based approach, but when the implementation is not used, or vice versa, the development of learning tools does not include an environment-based approach but when the implementation of the learning process uses an environment-based approach.

The development of learning plans is very necessary before implementing learning activities. According to Samosir (2020), it is very important to prepare a learning implementation plan before learning is carried out to run well. Further, Kiswara et al. (2019) added that since the introduction of the 2013 curriculum, HOTS learning has also begun to be applied.

2. Implementation of HOTS Learning Based on Environmental Approach

In this stage, there are 14 question items given. Based on the results in the field, the data shows 43% is in the range of 25% P <50% with the category of almost half the total respondents answered in the direction of disagree. This shows that some teachers still do not understand how to implement HOTS-based learning, so it can be categorized that teachers in SDN in Kertak Hanyar District have not fully implemented HOTS learning.

HOTS learning must be readjusted with students' learning abilities at school because HOTS learning influences students. Samosir et al. (2020) stated that the application of HOTS learning in schools has a major influence on students, where HOTS learning requires students to think critically, creatively, and solve existing problems.

The interview results also show that it is difficult to implement HOTS-based learning because there are still many teachers who do not understand how to teach. Yayuk, Deviana & Sulistyani (2019) states that in practice in the field, HOTS learning is not easy for teachers to implement. There are still many teachers who are still very confused about the application of HOTS learning. Thus, teachers must understand more about HOTS-based learning because if they do not understand the concept, they will certainly not be able to apply HOTS-based learning.

3. HOTS Learning Assessment Based on Environmental Approach

In this stage, there are 5 question items given. Based on the results in the field, the data shows 42% is in the range of 25% P <50% with the category of almost half of the total respondents answered in the direction of disagree. This means that teachers have not fully implemented the HOTS nuanced assessment in SDN throughout Kertak Hanyar District.

According to Kristanto (2020), teachers have an important role in training students to have higher-order thinking skills which are the demands of the 2013 curriculum. According to (Dinni 2018; Atmojo, S. E., & Kurniawati, W. 2018), a person is said to solve a problem if he can examine a problem and use his knowledge in new situations. By applying HOTS learning, students can train students to solve the problems they face wisely and wisely. Therefore, teachers must create and understand how to make HOTS-based questions.

4. The ability of the evaluation tool in analyzing the causes of environmental change

InAt this stage, there are 12 question items given. Based on the results in the field, the data shows that 40% are in the range of 25% P <50%, with the category of almost half of the total respondents answering in the direction of disagreeing. This shows that learning outcomes have not described the HOTS-based environmental approach on student learning outcomes.

From the first to the last aspect, there is an attachment where the lesson plan must be clear about the learning objectives, how the learning process is, and how the learning assessment is used because the three are very closely related. This relationship plays an important role in improving the quality of learning. According to Yayuk, Deviana & Sulistyani (2019), the relationship between the three components can be seen from the following aspects:

1. The relationship between learning objectives and the learning process

The steps of learning activities as outlined in the lesson plan must be following the learning objectives to be achieved. Likewise, it is developed into a learning process activity based on the learning objectives. The components of learning objectives and assessments have a two-way sign which means they are interrelated and connected.

- 2. Relationship of learning objectives with evaluation and assessment Learning objectives are used as the basis for carrying out evaluations and From assessments. the learning objectives that have been set, the appropriate type of assessment can be determined, both test and non-test assessments. Likewise, evaluation and assessment must be developed based on learning objectives. The assessment process can see student achievement in achieving learning objectives. It can be concluded that the learning objectives and evaluation and assessment have an interrelated relationship.
- 3. The relationship between the learning process and the evaluation and assessment of the learning process inseparable from the assessment. A learning process in it contains learning activities that lead to learning assessments. The assessment made by the teacher must refer to the learning process carried out. For example, if the learning process focuses on the psychomotor domain, then the assessment must assess student skills.

CONCLUSION

From the results of this study, it can be concluded that the implementation of environmental approach-based HOTS learning in elementary schools throughout Banjar Regency, especially Kertak Hanyar District, High-Class Groups, has not been fully implemented, this is because some teachers experience limitations in developing HOTS learning devices based environmental approaches on and experience obstacles sometimes in implementing HOTS learning based on an

environmental approach. There is also a problem in managing the HOTS form of assessment because not all students can construct, understand, and apply their critical thinking skills. The evaluation tools designed need to be tailored to the needs of students.

Based on the results of this study, the researcher wishes to conduct training activities to develop the ability of teachers to plan, implement, and conduct environmental-based HOTS learning assessments, so that the obstacles found during the research can be overcome.

ACKNOWLEDGEMENT

We want to thank those who have helped a lot in implementing this activity, such as Lambung Mangkurat University and SDN Kertak Hanyar District (High-Class Group) Banjar Regency, who have given research permission to our team, teachers who have been willing to become respondents in the research. The volunteers and we are willing to be involved in this activity.

REFERENCES

- Astawan, I. G., Anggreni, N. M. D., Atmojo, S. E., & Ardiansyah, A. (2021). Improving Thinking Skills (HOTS) Through The Trikaya Parisudha Learning Model. International Journal of Elementary Education, 5(4).
- Atmojo, S. E. (2016). Pengembangan Perangkat Pembelajaran IPA Bervisi SETS Dengan Metode Discovery Learning Untuk Menanamkan Nilai Bagi Siswa sekolah Dasar. Premiere Educandum: Jurnal Pendidikan Dasar dan Pembelajaran, 5(01).
- Atmojo, S. E., & Kurniawati, W. (2018).
 Thematic Learning Model of Science, Environment, Technology and society in Improving Elementary Students' Science Literacy. JPI (Jurnal Pendidikan Indonesia), 7(1), 59-69.
- Barrat, C. (2014). Higher-Order Thinking And Assessment. International

Seminar on current issues in Primary Education. PGSD Study Program, Muhammadiyah University of Makassar.

- Dinni, HN (2018). HOTS (High Order Thinking Skills) is related to mathematical literacy skills. In PRISMA, Proceedings of the National Mathematics Seminar.
- Fanani, A. & Kusmaharti, D. (2018). Development of HOTS-based learning (higher-order thinking skills) in fifth-grade elementary schools. Journal of Basic Education, 9(1), 1-11.
- Haig, Y. (2014). Higher-Order Thinking And Assessment. International Seminar on current issues in Primary Education: PGSD Study Program, University of Muhammadiyah Makassar.
- Heraningsih, D. (2013). Application of an Environmental Approach to Improve Student Learning Outcomes in Natural Resources and Environmental Science Subjects (Doctoral dissertation, Universitas Pendidikan Indonesia).
- Hidayah, N., Mahluddin, M. & Siregar, N. (2019). Efforts to Increase Students' Motivation through Management of the Learning Environment in Thematic Learning in Class V Madrasah Ibtidaiyah Negeri 4 Muaro Jambi (Doctoral dissertation, UIN Sulthan Thaha Saifuddin).
- Ikhsan. F., A., Kurnianto, F., A., Apriyanto.B., Nurdin, E., A., & Puji, R., P., N.(2019). The Research-BasedLearning Approach EnvironmentalEducation. IOP Publishing, 1.
- Iskhamdhanah, B., Pujiastuti, P., Atmojo, S.
 E., & Trihastuti, M. (2021).
 Analysis on Significances of SETS-Based Science Teaching Material for PSET Students in Online Learning. Jurnal Iqra': Kajian Ilmu Pendidikan, 6(2), 261-271.
- Jannah, F. (2015). Implementation of Contextual Learning Models in

Improving the Quality of the Learning Process in Elementary Schools. -1(2), 19-24.

- Kiswara, AB, Murwaningsih, T., & Susantiningrum. (2019). Analysis of the Application of Hots-Based Learning the Automation in Expertise Program for State Vocational High Schools in Surakarta City. Journal of Office Administration Information and Communication.
- Kristanto, PD, & Setiawan, PG (2020). Development of HOTS (Higher Order Thinking Skills) Questions Related to the Rural Context. PRISMA, Proceedings of the National Mathematics Seminar.
- Kristyowati, R., & Purwanto, A. (2019). Learning scientific literacy through the use of the environment. Scholars: Journal of Education and Culture, 9(2), 183-191.
- Mirna. (2019). Optimizing R. the Participation of Muhammadiyah in Environmental Protection and Management in the Banggai Regency. Environmental Law Development, 4, 62.
- Oktaviani, R., & Atmojo, S. E. (2021). Pengembangan Media CD Pembelajaran Interaktif Materi Perkembangbiakkan Tumbuhan Umbi pada Siswa Kelas III SD. Kognisi: Jurnal Penelitian Pendidikan Sekolah Dasar, 1(1).
- Samosir, WL, Kuntarto, E., & Alirmansyah. (2020). Teacher Ability to Implement Higher Order thinking Skills Learning in Elementary School. Journal of Basic Education Research.
- Sanjaya, W. 2013. Educational Process Standard Oriented Learning Strategy. Jakarta: Kencana Prenada Media.
- Sofia, FA (2019). Implementation of HOTS in the 2013 curriculum. INVENTA: Journal of Elementary School Teacher Education, 3(1), 1-9.

Yayuk, E., Deviana, T., & Sulistyani, N. (2019). Teacher Ability in Implementation of Learning and Assessment of Hots in Grade 4 Students of Indonesian School Bangkok Thailand. Journal of Learning Innovation.