

Improving Teacher Ability in Preparing HOTS Questions Through Workshop Activities at Kebonharjo Public Elementary School Kapanewon Samigaluh Kulon Progo for the 2021/2022 Academic Year

Wakijem^{1,*}

¹SD Negeri Kebonharjo Kapanewon Samigaluh Kulon Progo

*Corresponding author: wakijem95@gmail.com

Received: October 1, 2022; Accepted: October 8, 2022; Published: October 11, 2022

ABSTRACT: The purpose of this research is to see the teacher's ability in preparing HOTS questions during the workshop and also to see the ability of the presenters in delivering material with the theme of HOTS-based question preparation at SD Negeri Kabonharjo Samigaluh. The research method used is School Action Research. The research was carried out in two cycles, each cycle consisting of planning, implementing actions, observing, and reflecting. The subjects of this study were teachers at SD Negeri Kabonharjo, Samigaluh in the 2021/2022 academic year. The results showed that the ability of teachers in preparing HOTS-based questions increased from each cycle (I and II), this indicates that workshop activities have great benefits in terms of improving the ability of teachers in preparing questions. Furthermore, the ability of the presenters in presenting the material for the preparation of Higher Order Thinking Skills (HOTS) questions also increased every cycle, meaning that the presenters had good abilities in delivering material in workshop activities.

Keywords: teacher, cycle, questions, meeting, Workshop

INTRODUCTION

Teachers are an important key to the success of improving the quality of education. One of the characteristics of good quality education is the creation of a good learning process, starting from planning, implementation, and evaluation. In line with this, the teacher's ability to make tools to evaluate students is needed, one of which is questions or tests [1]. A test is a form of evaluation tool to measure how far the teaching objectives have been achieved, so it means an evaluation of learning outcomes. A good test must meet several requirements, namely; must be efficient, must be standard, have norms, be objective, valid (valid), and reliable (reliable) [2]. Meanwhile, according to Arikunto [3] A good test must have the following conditions: 1) must be efficient (parsimony), 2) must be standardized, 3) have norms, 4) be objective, 5) be valid (valid), and 6) reliable (reliable). . Questions or tests are one component of learning to measure student success in the learning process [4].

Based on Bloom's Taxonomy that students are only used to working on test instruments in the category of low-level thinking. Teachers should be accustomed to making test instruments at the cognitive level of analyzing, evaluating, and creating [5]. Questions with indicators of analyzing, evaluating, and creating are questions that are included in the Higher Order Thinking Skill (HOTS) criteria, which are rarely found in supporting books. [6]. **TABLE 1** below is a grouping of knowledge dimensions described by Anderson & Krathwohl [7].

TABLE 1 Grouping of Knowledge Dimensions

Category	Bloom's Taxonomy	Information
Low Order Thinking Skills (LOTS)	Knowing	<ul style="list-style-type: none"> calling Verbs: remember, register, repeat, imitate.
	Applying	<ul style="list-style-type: none"> Using information on a different domain
Medium Order Thinking Skill (MOTS)	Understanding	<ul style="list-style-type: none"> Verbs: use, demonstrate, illustrate, operate. Explain ideas/concepts.

Category	Bloom's Taxonomy	Information
Higher Order Thinking Skill (HOTS)		<ul style="list-style-type: none"> Verbs: explain, classify, accept, report.
	Analyzing	<ul style="list-style-type: none"> specifying aspects/elements
	Evaluating	<ul style="list-style-type: none"> Verbs: compare, examine, criticize, test make your own decisions. Verbs: evaluate, judge, refute, decide, choose, support.
	Creating	<ul style="list-style-type: none"> create your ideas/ideas. Verbs: construct, design, create, develop, write, formulate.

Source: Anderson & Krathwohl [7]

Higher Order Thinking Skill (HOTS) is the skill of connecting ideas and facts, analyzing, explaining, hypothesizing, synthesizing, or arriving at the stage of concluding to solve problems [4]. At the HOTS level, students are not only required to memorize the concepts given, but students can apply these concepts to solve the problems presented [8]. Higher Order Thinking Skill (HOTS) is also a thinking activity that requires a transfer between concepts, information processing, linking different kinds of information, utilizing information for problem-solving, and critically reviewing information [9].

Government Regulation number 19 of 2005 as amended by Government Regulation Number 32 of 2013 relating to assessment standards implies that teachers are expected to develop assessment mechanisms, procedures, and instruments for students. In Permendikbud number 23 of 2016 concerning assessment standards, it is explained that educational assessment standards are criteria regarding the scope, objectives, benefits, mechanisms, principles, procedures, and instruments for assessing student learning outcomes that are used as the basis for primary and secondary education. For this reason, in carrying out the assessment, the principles of assessment must be considered. Given this, the teacher's ability to prepare varied assessment questions is very much needed, especially HOTS-based questions. With an assessment using HOTS questions, students will get used to being able to think critically and creatively.

Based on observations, it shows that there are teachers at SD Negeri Kebonharjo who can carry out assessments by the principles of proper assessment. In carrying out the assessment, teachers often pay less attention to the assessment procedure, in preparing questions, and also pay less attention to the rules of writing questions. Most teachers only rely on questions from student worksheets or questions taken from the internet without paying attention to whether the questions are by the competencies and learning objectives that have been determined by the teacher. The questions chosen are also less varied so the results of the assessment are not able to describe the competencies that have been mastered by students as a whole. As many as 6 teachers at SD Negeri Kebonharjo, 2 people have compiled their questions, while 4 people still rely on questions from student worksheets or those from the internet. However, in general, all teachers still have problems in preparing questions, especially HOTS-based questions.

To overcome these problems, teachers need training and mentoring activities to improve the ability of teachers in schools in preparing HOTS questions. Guidance activities that are considered effective are workshops. Therefore, researchers are interested in researching improving the ability of teachers in preparing HOTS questions through workshop activities. The purpose of this research is to see the teacher's ability in preparing HOTS questions during workshop activities and also to see the ability of the presenters in delivering material with the theme of preparing HOTS-based questions at SD Negeri Kabonharjo Samigaluh.

RESEARCH METHODS

This research is a School Action Research conducted at SDN Kebonharjo, Samigaluh, Kulon Progo, Yogyakarta. This research was conducted from January 2022 to March 2022. The subjects of this study were Class Teachers and Mapel teachers at SD Negeri Kebonharjo Samigaluh with a total of 7 teachers consisting of 3 males and 4 females. The object to be examined in this research is the

ability to compose HOTS questions for teachers through workshop activities. While the framework of thinking of this research is presented in **FIGURE 1**.

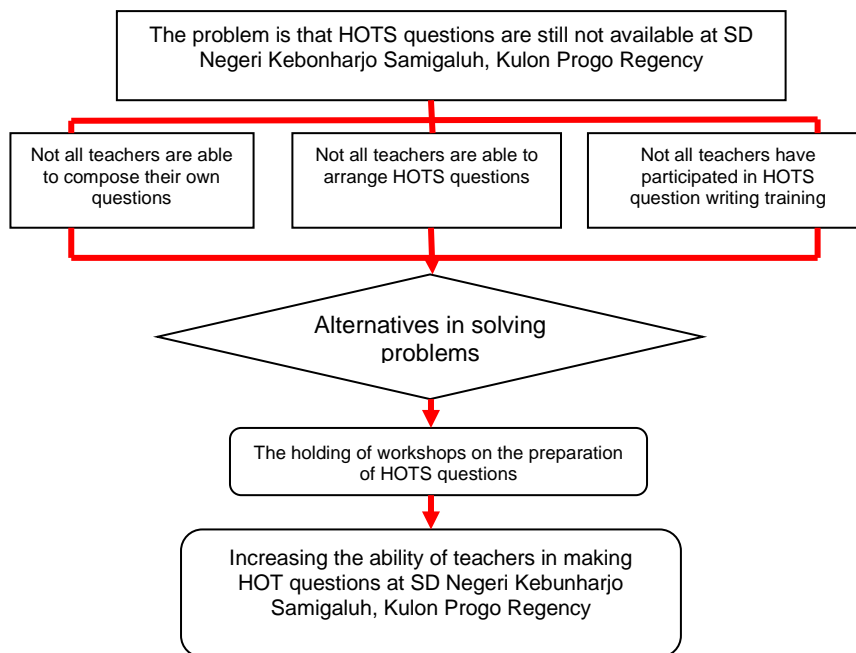


FIGURE 1. Research framework

RESEARCH RESULTS AND DISCUSSION

One of the determinants of the success of the teaching and learning process in schools is the ability of teachers to manage to learn. The management of learning referred to in this study is the management of learning that involves the teacher in preparing questions as part of the learning process. This means that learning is ultimately carried out with a quality assessment that is compiled based on the material, not just copying it from other sources and not making it yourself. This has happened so far, teachers at SD Negeri Kebonharjo, Samigaluh, still use questions that are made together through the Teacher Working Group and even through the internet, this is proven after preliminary research observations, and the results show that the teacher's ability to formulate questions is especially related to HOTS questions. still very lacking and far from perfection.

TABLE 2. Observations of Participants in the Workshop on Preparation of Cycle I and II HOTS Questions at SD Negeri Kebonharjo Kapenewon Samogaluh

No.	Aspect	Average Number of Cycles I		Average Number of Cycle II	
		1 st Meeting	2 nd Meeting	1 st Meeting	2 nd Meeting
A	Theory	2.60	3.19	3.38	3.71
B	Construction	2.60	3.31	3.49	3.63
C	Language	2.81	3.38	3.57	3.76
Total Earnings Score		37.00	43.00	48.43	51.71
Total Score Average		2.64	3.28	3.46	3.69
Percentage (%)		66.07	81.89	86.48	92.35

Based on **TABLE 2**, shows that each cycle has increased scores, both from meeting 1 to meeting 2. This means that this workshop activity can improve the ability of participants in preparing HOTS-based practice questions. This research is also in line with research conducted by Mujiyem [10] and Suhardjanto [11] which stated that workshop activities could improve participants' ability in preparing HOTS-based practice questions. In the material aspect (cycle I) which was delivered during

the workshop, it showed that there was an increase of 22.69%. While in the second cycle the increase was obtained by 9.76%. This increase was also followed in each aspect as presented in **TABLE 3**.

TABLE 3. Increasing the ability of participants to take part in the workshop

Aspect	Cycle I	Cycle II
	1 st Meeting to 2 nd Meeting	1 st Meeting to 2 nd Meeting
	(%)	(%)
Theory	22.69	9.76
Construction	27.31	4.01
Language	20.28	5.32

Based on **TABLE 4**, shows that the ability of the presenters in delivering material at the workshop has increased in each cycle. The increase in the ability of the presenters from the first meeting (cycle I) to the second meeting (cycle II) there was consistent increase. It can be said that the presenters have good abilities in terms of delivering material when viewed from three aspects of the assessment, namely the preparation stage, the activity implementation stage, and the closing activity stage.

TABLE 4. The ability of the presenters in the implementation of the Workshop on the preparation of HOTS questions

No.	Aspect	Average Number of Cycles I		Average Number of Cycle II	
		1 st Meeting	2 nd Meeting	1 st Meeting	2 nd Meeting
1	Preparation phase	2.86	3.24	3.48	3.76
2	Activity Implementation Stage	2.45	3.22	3.51	3.76
3	Closing Activities	2.57	3.21	3.43	3.64
Total Earnings Score		30.86	38.71	41.86	44.86
Total Score Average		2.57	3.23	3.49	3.74
Percentage (%)		64.29	80.65	87.20	93.45

CONCLUSION

The ability of teachers in preparing HOTS-based questions has increased from each cycle (I and II), this shows that workshop activities have great benefits in terms of improving the ability of teachers in preparing questions. Furthermore, the ability of the presenters in presenting the material for the preparation of Higher Order Thinking Skills (HOTS) questions also increased every cycle, meaning that the presenters had good abilities in delivering material in workshop activities.

REFERENCES

1. N. Herawati, Primary: Jurnal Pendidikan Guru Sekolah Dasar, 10, 3, 1689-1694 (2021)
2. K. Abdul, AL-Ta'dib, 8, 2, 70-81 (2015)
3. A. Suharsimi, Dsar-Dasar Evaluasi Pendidikan, (Bumi Aksara, Jakarta, 2003)
4. N. Yuliandini, G. Hamdu and R. Respati, PEDADIDAKTIKA: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar, 6, 1, 37-46 (2019)
5. A. Risdiana, M. Erna and B. Holiwarni, Jurnal Inovasi Pendidikan Kimia, 16, 2, 111-117 (2022)
6. N. Wahyuningtyas and N. Ratnawati, Jurnal Praksis dan Dedikasi Sosial, 1, 2, 73-79 (2018)
7. L. Aderson and D. Krathwohl, A Taxonomy of Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives, (Longman, New Jersey, 2001)
8. K. Litna, N. Mertasari and G. Sudhirta, 11, 1, 10-20 (2021)
9. I. Widana, Modul Penyusunan Soal HOTS, (Direktorat Pembinaan Sma Direktorat Jenderal Pendidikan Dasar Dan Menengah Departemen Pendidikan Dan Kebudayaan, Jakarta, 2017)idana IW (2017) Modul Penyusunan Soal HOTS
10. M Mujiyem, Jurnal Sosialita, 11, 1, 45-56 (2019)
11. Suhardjanto, Jurnal Ilmiah Pro Guru, 4, 4, 506-514 (2018)