

Higher Order Thinking Skills (HOTS) Instrument in Social Studies Learning for Elementary School Students in Grobogan Regency

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Abstract. Learning instruments can support HOTS in social studies learning by implementing problem-based learning instruments. This is due to the fact that learning presenting real problems in daily life will be able to stimulate students to create critical thinking skills, creative, and able to solve problems. This study aimed to describe the implementation of learning that supports HOTS particularly in social studies learning in elementary schools and to describe learning instruments that support HOTS in social studies learning for elementary school students in Grobogan Regency. This study used qualitative descriptive method. Data collection techniques included interviews, observation, and documentation. The results of this research indicated that the learning process so far has not been yet optimally conducted in supporting HOTS students and learning instruments used by teachers were in the form of Syllabus, Lesson Plans, Teaching Materials, and Assessment. Learning instruments that support HOTS focus learning by giving problems and using operational verbs (KKO) on C4 (analysis), C5 (evaluation), and C6 (creation).

Keywords: *learning instruments, HOTS, learning, elementary schools, social studies learning*

1. INTRODUCTION

Indonesian government is nowadays seeking quality improvement to develop human resources through education. In education, the development of science and technology is required in order to realize a rapid impact on human life. Today, science has developed in accordance with the demands of life, in elementary school education in particular. One effort to deal with the demands of the present and the future is to develop skills. The development of skill which is needed especially in elementary school students is called Higher Order Thinking Skills (HOTS).

Higher Order Thinking Skills (HOTS) is a top priority in producing competent graduates, as in accordance with the opinion of Regulation of the Minister of Education and Culture

(hereinafter referred to as *Permendikbud*) Number 20 of 2013 concerning the competency standards of elementary/*Madrasah Ibtidaiyah* (MI) graduates mentions that they have productive and creative thinking and acting skills in the abstract and concrete realm according to those assigned to them [1]. Therefore, learning is directed in forming Higher Order Thinking Skills (HOTS) of students, such as being able to analyze, evaluate, and create through learning that uses a scientific approach formed in integrative thematic learning.

The results of a study conducted by an institution called Partnership for 21st Century Skill indicated that Higher Order Thinking Skills (HOTS) namely critical thinking is one of the essential skills for students in the globalization era that directs students to be able to sort information widely obtained [2]. Therefore, Higher Order Thinking Skills (HOTS) is needed by students, due to complex problems in life which are unstructured, complicated, and new and require thinking skills for more than just applying the materials learned.

Curriculum 2013 expects discovery-based learning, and therefore students actively seek out, develop their own knowledge and draw conclusions from knowledge found with teachers' guidance and instruction in the form of questions that lead [3]. In order to obtain learning which runs smoothly and directed, especially in social studies learning in elementary school learning, learning instruments are required. Learning instruments are messengers from several sources to the recipient of the message [4]. Learning instruments are used as a guide for teachers in carrying out the learning process which is supported by the learning resources such as textbooks, media, models, and other supporting resources conveyed to students as recipients of the material.

Learning instruments will greatly assist teachers in conveying the teaching and learning process in seeking students' knowledge. Learning instruments especially in social studies learning in elementary schools must be able to direct, support, and train students' Higher Order Thinking Skills (HOTS). Learning instruments that can train Higher Order Thinking Skills (HOTS) are conducted by implementing problem-based learning instruments. By applying a problem-based learning instrument, it is expected to be able to train Higher Order Thinking Skills (HOTS) students, especially in social studies learning in elementary schools.

Social studies learning in elementary schools, especially in higher classes such as grade 5 requires learning that can support Higher Order Thinking Skills (HOTS). The materials included in social studies learning especially grade 5 are still not thorough and what is mentioned in the teachers and students handbook is still very limited, so that learning is not conducted thoroughly that students in training Higher Order Thinking Skills (HOTS) have not been optimally achieved. Other supporting books are needed and therefore the materials studied can be thoroughly learned.

Based on the explanation above, in order to implement Curriculum 2013, learning instruments that become guidelines for teachers in carrying out the learning process are necessary. Therefore, it is necessary to develop problem-based learning instruments in order to train students' Higher Order Thinking Skills (HOTS). This learning instrument is expected to facilitate teachers in carrying out the learning process, especially in social studies learning and therefore learning objectives can be achieved well and smoothly.

2. METHOD

This study used descriptive qualitative method. Qualitative descriptive method is a research procedure that produces descriptive data in the form of written or verbal words from the respondent or the person whose behavior is observed [5]. This study aimed to describe various things related to learning instruments supporting Higher Order Thinking Skills

(HOTS) in social studies learning for students in elementary schools. Data were collected through observation, interviews, and documentation. Data sources were determined intentionally. This study involved teachers as the main source of research.

3. RESULTS AND DISCUSSIONS

3.1 RESULTS

3.1.1 Learning conditions at public schools in Grobogan Regency

Based on the results of observations and interviews of fifth grade teachers in 5 elementary schools in Grobogan Regency, among others: 1) SDN 3 Nambuhan, SDN 9 Purwodadi, and SDN 1 Kedungrejo in Purwodadi Subdistrict; 2) SDN 3 Tunggak in Toroh Subdistrict; and 3) SDN 1 Monggot in Geyer Subdistrict, it was found that there were several facts in the field.

First, the teacher still underwent problems with the lack of understanding related to the development of learning instruments that support students' Higher Order Thinking Skills (HOTS). Teachers still often used operational verbs (KKO) at the cognitive level of C1 (remembering), C2 (understanding), and C3 (applying). Therefore, the Higher Order Thinking Skills (HOTS) training of students was not carried out optimally.

Second, the teacher did not master the varied learning models and was not able to arouse the enthusiasm and activity of students, because the teacher only focused on the teachers and students handbook. This affected the process of students' Higher Order Thinking Skills (HOTS) training. In addition, learning that can train Higher Order Thinking Skills (HOTS) of elementary school students, especially in grade 5, is the one that presents problems related to everyday life so that students will be trained to think critically, creatively, and be able to solve problems given.

3.1.2 Learning instruments used by elementary school teachers in Grobogan Regency

Based on the results of observations and documentation of the learning instruments used by grade V teachers in 5 elementary schools in Grobogan Regency, among others: 1) SDN 3 Nambuhan, SDN 9 Purwodadi, and SDN 1 Kedungrejo in Purwodadi Regency; 2) SDN 3 Tunggak in Toroh Subdistrict; and 3) SDN 1 Monggot in Geyer Subdistrict, it was ascertained that there were several facts, including learning instruments commonly used by teachers such as Syllabus, Lesson Plans, Teaching Materials, and Assessment. The purpose of designing learning instruments (Syllabus and Lesson Plans) is to describe the procedure in regulating learning to achieve a basic competency set in achieving competence [6]. Learning instruments commonly used by teachers do not support Higher Order Thinking Skills (HOTS). This could be evidenced from the competency indicators mentioned in Syllabus and Lesson Plans which are still in the realm of C1 (remembering), C2 (understanding), and C3 (applying). For example, in grade 5 in theme 7 (Events in Life), sub-theme 1 (Colonialization Events) especially in social studies, the competency indicator used by the average teacher was still in the realm of C1 (remembering), C2 (understanding), and C3 (applying). This greatly affected the learning process, because students were not required to practice Higher Order Thinking Skills (HOTS)

3.2 DISCUSSIONS

3.2.1 Teachers in carrying out the learning process

Teachers still underwent problems with the lack of understanding related to the development of learning instruments that train students' Higher Order Thinking Skills (HOTS). Teachers frequently applied operational verbs (KKO) at the cognitive level C1 (remembering), C2 (understanding), and C3 (applying). HOTS is the ability to think that not

only requires the ability to rejoin, but also other higher abilities including the ability to analyze (C4), evaluate (C5), and create (C6) [7]. Training students' abilities was conducted so that students would be able to have Higher Level Thinking Skills by means of learning that implements operational verbs (KKO) in C4 (analysis), C5 (evaluation), and C6 (creation) and learning that presents problems was implemented so students would be able to solve the problem. Students can analyze and evaluate their own thought processes and make conclusions from knowledge that has been found by doing guidance and paying attention to instructions from teachers or friends in the form of questions that lead [8]. The learning that presents problems will make students actively involved in the process of solving problems, because students will be trained to think critically, creatively in solving these problems.

The teacher also did not master the varied learning models and was not able to arouse students' enthusiasm and activeness, because the teacher only focused on the teachers and students handbook. This is very important in training students' Higher Order Thinking Skills (HOTS). Teachers can apply varied models that can train students' Higher Order Thinking Skills (HOTS). One way for teachers to practice Higher Order Thinking Skills (HOTS) is to solve a problem. Problem solving requires knowledge to learn to solve problems, resulting in the ability to combine several rules into solving principles [9]. In addition, learning that can train students' Higher Order Thinking Skills (HOTS) in elementary schools especially in social studies in grade 5 can use learning that presents problems related to everyday life so students will be trained to think critically, creatively, and be able to solve problems which are given.

Learning in training Higher Order Thinking Skills (HOTS) is by presenting problems, so that students are trained to think critically, be creative in solving problems. Higher Order Thinking Skills (HOTS) is a process of students' thinking in higher cognitive levels developed from various concepts and cognitive methods and taxonomy of learning, such as problem solving methods, bloom taxonomy, and taxonomy of learning, teaching, and assessment [10]. These Higher Order Thinking Skills (HOTS) include problem solving skills, creative thinking skills, critical thinking, argumentation skills, and decision making skills. There are aspects that show Higher Order Thinking Skills (HOTS), among others: critical thinking skills and creative thinking skills [11]. It is explained that through HOTS assessment experience work, students have the ability to think critically and creatively better [12].

3.2.2 Learning instruments

Learning instruments are things that must be monitored so that the implementation of learning is more directed towards achieving the expected competencies [13]. Based on these statements, it can be concluded that learning instruments are needed so that learning is better directed. Learning instruments include Syllabus, Lesson Plans, Teaching Materials, and Assessment. The explanation of each learning instrument with criteria and that supports Higher Order Thinking Skills (HOTS) is mentioned as follows:

3.2.2.1 Syllabus

The syllabus is a learning plan in a particular subject and/or group/theme that includes core competencies (KI), basic competencies (KD), subject matter/learning, learning activities, indicators of competencies achievement for assessment, time allocation and learning resources [14]. Syllabus components that support Higher Order Thinking Skills (HOTS) involve competency achievement indicators which include operational verbs (KKO) in the taxonomy of the domain of C4 (analysis), C5 (evaluation), and C6 (creation), and learning activities include activities that train students to have Higher Order Thinking Skills (HOTS) such as learning by giving problems.

3.2.2.2 Lesson Plans (RPP)

Lesson Plans (RPP) is a plan that describes the procedures and learning organization to achieve a basic competency set out in the content standard and described in the syllabus [15]. When the learning process takes place, lesson plans are very much needed, because Lesson Plans contain the learning steps. Through these learning steps the teacher can have directed learning process and the learning indicators can be achieved well. Lesson Plans is a description of the syllabus which is the teacher's main guideline in carrying out the learning process. Lesson Plans components include subject identity, KI, KD, indicators of achievement of competencies, learning objectives, teaching materials, time allocation, learning methods, learning activities, assessment of learning outcomes, and learning resources. The Lesson Plans components that supports Higher Order Thinking Skills (HOTS) such as indicators and learning activities include operational verbs (KKO) in the C4 (analysis), C5 (evaluation), and C6 (creation) domains. The learning model used is like a problem-based learning model, problem solving, etc. Usually it applies learning models such as problem based learning models, problem solving learning models, etc.

3.2.2.3 Teaching Materials

One of the efforts of teachers to improve the quality of the learning process is using appropriate teaching materials [16]. Teaching materials are all materials that are systematically arranged which show the full figure of competencies that will be mastered by students and used in the learning process with the aim of planning and reviewing the implementation of learning [17]. Competencies that will be mastered by students include knowledge, skills and attitudes, and therefore teaching materials are needed to be developed.

Teaching materials are a set of materials systematically arranged, both written and not in order to create an environment or atmosphere that allows students to learn [18]. Teaching materials can involve active students and teachers as facilitators, because with teaching materials students can learn independently and be trained to think in solving problems. Teaching materials are needed that make it easier for students to understand the concepts of the materials. It can be achieved by means of teaching materials equipped with pictures and illustrations that can guide students to understand the concept [6].

Teaching materials that contain a problem are needed in order to create students who are able to solve the problem. Therefore, students are trained to think high. Teaching materials that are able to train Higher Order Thinking Skills (HOTS) of students include teaching materials which contain questions containing operational verbs (KKO) in the C4 (analysis), C5 (evaluation), and C6 (creation) domains. For example, in the realm of C4 (analysis), the questions can be in the form of giving a story in which it contains a problem, then students are asked to analyze the matter of the story. The C5 domain (evaluation) is in the form of giving a question by presenting a picture and a story where students are asked to rate the picture and story. The C6 domain (creation) is in the form of giving questions with students being asked to complete an assignment in the form of a summary or concept map of the materials previously given. HOTS focuses on developing students' skills to be able to analyze effectively, evaluate by drawing inference from existing information, and making (synthesizing) something new [19].

3.2.2.4 Assessment

Permendikbud Number 23 of 2016 Chapter I concerning Educational Assessment Standards mentions that assessment is the process of collecting and processing information to measure students' learning outcomes [20]. Improving the quality of education taken through improving the quality of learning and the quality of the assessment system is an assessment method. A good learning system will produce good quality of learning, and the quality of learning can be seen from the results of the assessment [21]. This assessment aims to determine students' understanding after the end of learning. For example, in grade V of theme 7, sub-theme 1, after implementing 6 learning lessons, at the end of the 6th lesson the teacher evaluates. This aims to determine the extent to which students understand through learning 1-6. This assessment is in the form of cognitive questions found in the taxonomies of the domain of C4 (analysis), C5 (evaluation), and C6 (creation). This assessment contains questions that are able to train students' Higher Order Thinking Skills (HOTS).

4. CONCLUSION

Based on the results of the above study through interviews, observation, and documentation, it can be concluded that in the implementation of the learning process the teacher has still applied learning in the realm of C1 (remembering), C2 (understanding), and C3 (applying) to the Operational Word (KKO) in Bloom's Taxonomy. There needs to be a renewal in the implementation of learning by applying learning in the realm of C4 (analysis), C5 (evaluation), and C6 (creation) in the Operational Word (KKO) in Bloom's Taxonomy. Therefore, students will be trained and have Higher Order Thinking Skills (HOTS). Besides, the learning instruments that support and guide the teacher so far still used the realms of C1 (remembering), C2 (understanding), and C3 (applying) in Operational Verbs (KKO) in Bloom's Taxonomy. It can be seen in the indicators of achievement of competencies made by the teacher. There needs to be a renewal, so that teachers can use and apply Operational Verbs (KKO) in Bloom's Taxonomy in the fields of C4 (analysis), C5 (evaluation), and C6 (creation). Thus, students will be trained and have Higher Order Thinking Skills (HOTS). Learning instruments created and used by teachers were in the form of Syllabus, Lesson Plans, Teaching Materials, and Assessment. In addition, learning which was able to train Higher Order Thinking Skills (HOTS) included learning models such as problem solving, problem based learning etc.

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