

ANALYSIS OF STUDENT HOTS ABILITY IN ASSESSMENT END OF SEMESTER CLASS V SD MUHAMMADIYAH PURWODADI VIEWED FROM LEARNING STYLES

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Abstract. Enhancing higher order thinking abilities is consistent with the Ministry of Education and Culture's objective of strengthening the 2013 curriculum's curriculum. This study aims to ascertain the outcomes of the analysis of PAS questions and HOTS abilities of fifth grade students at SD Muhammadiyah Purwodadi in terms of learning styles, with 24 research subjects represented by six students in the class, two of whom each have visual, auditory, and kinesthetic learning preferences. The descriptive qualitative method was employed in this study. Implementation begins with the steps of observation, interview, and documentation. The findings demonstrated that class V SD Muhammadiyah Purwodadi science and social studies subjects did not use HOTS-based questions in the PAS questions. There weren't many questions that used the HOTS. On average, there were only one or two HOTS-based questions in the multiple choice category and one or two HOTS questions in the short answer category out of the three themes that were evaluated. Students with auditory learning styles performed better or were able to respond properly to HOTS-based PAS questions than students with visual and kinesthetic learning preferences.

Keywords: end-of-semester evaluation, high order thinking ability, learning style

INTRODUCTION

The process of assuming someone is capable of accomplishing or comprehending something connected to knowledge and physics is known as student ability. According to Robbin (2004: 45), who defines ability as a person's potential for labor, all individual abilities are essentially made up of both intellectual and physical aptitudes. By doing something new or finding a solution to a new challenge, students can hone their skills. Students must fulfill a number of requirements, including keeping up with current innovations in education. One of them is that students are taught by having them work on challenges that require them to use their critical thinking abilities.

High Order Thinking Skills is a thinking process of students at a higher cognitive level that is developed from various cognitive concepts and methods and learning taxonomies such as problem solving methods, learning taxonomy, teaching, and assessment (Saputra, 2016: 91). There are several abilities honed in High Order Thinking Skills such as critical thinking, creative thinking, problem solving abilities, argumentative abilities, and decision making abilities. So that students will be able to develop some of these abilities through questions that are designed with various achievement indicators. With this, students can solve problems in new situations, provide new ideas or ideas easily, and can argue according to their wishes without any restrictions. With this problem solving method can be achieved because students can solve problems and provide solutions by thinking creatively.

High Order Thinking Skills will occur if students can associate old information with new information in solving problems that occur. The purpose of High Order Thinking Skills is to increase students' thinking processes at a higher level than before. So that HOTS has the potential

to improve a broader way of thinking for students in solving problems and generating new ideas. HOTS will also make it easier for students to be able to argue and convey something easily so that students will be more active in learning.

Final assessment is a method used by teachers to determine students' ability to learn through tests at the end of learning. Tests can be carried out orally and in writing according to the teacher's needs to get grades. In the final assessment there are also indicators that must be achieved by students. Therefore, assessment is used as a way to determine student abilities. The final assessment is carried out at the end of learning for one semester by working on questions given by the government to the school. The end of semester assessment aims to test and evaluate student learning outcomes in one semester and measure the level of students' understanding of the material provided by educators.

In carrying out the end-of-semester assessment, the government uses questions based on High Order Thinking Skills to improve abilities, both intellectual and physical abilities. Using the High Order Thinking Skills system in the final semester assessment also serves to determine students' attitudes towards learning. HOTS-based questions will bring up various indicators that are achieved. Assessment can be viewed from several aspects, one of which is the learning style of students in working on the final semester assessment questions.

Learning style is an approach that explains how individuals learn or the ways each person takes to concentrate on the process and master difficult and new information through different perceptions (Ghufron, 2013: 42). With this, educators are required to understand student learning styles in the learning process. Being able to recognize student learning styles can help educators to determine a more effective learning style. By knowing the learning style of educators will be able to determine the learning system that is applied in learning. Educators can prepare the learning environment and teaching materials needed by students. In other words, educators will be assisted in knowing student learning abilities through learning styles. Learning styles are divided into several aspects which were originally introduced by Walter Burke Barbe which were later redeveloped by Neil Fleming, namely the VAK learning style (Visual, Auditory, and kinesthetic). Understanding this learning style is an effort made to help students understand the material optimally.

Visual learning style is a learning style that focuses on vision. In the learning process requires understanding through visuals in understanding new information. There are some students who have the type of having to see directly to understand the material. Furthermore, the auditory learning style is the ability to understand through hearing, meaning that in delivering material the emphasis is on the types of sounds and words that are created must be clear so that students can understand the material. Students can understand the material by listening to stories or explanations given by educators clearly to understand something. Then the kinesthetic learning style is a learning method using movement. This type will absorb and remember information through the movements exhibited by the educator rather than having to listen to material explanations.

Therefore, the purpose of this study was to find out students' abilities in working on end-of-semester assessment questions in terms of learning styles. Because learning styles have several aspects that can be analyzed in students. The ability of each student is different, so it can be analyzed according to aspects of learning styles. The abilities studied are High Order Thinking Skills which have been implemented by several schools. Judging from the school, students have different conditions in their ability to work on HOTS questions in terms of learning styles.

Learning styles greatly affect students' ability to think, especially on the ability to work on HOTS questions so that teachers or educators are expected to understand student learning styles. The teacher must know the learning style of each student in the learning process so that the teacher can provide learning services according to student needs.

Based on the background above, it is necessary to conduct research entitled "Analysis of High Order Thinking Skills (HOTS) Capability of Students in the Final Semester Grade V Assessment at SD Muhammadiyah Purwodadi in terms of Learning Styles".

RESEARCH METHOD

The research method used in this research is descriptive qualitative. Qualitative descriptive research is a report based on a qualitative approach covering pure issues about the program and or experiences of people in the research environment. The purpose of the description is to help the reader find out what is happening in the environment under observation, what are the views of the participants in the research setting, and what events or activities occur in the research setting. Descriptions are written in narrative form to complete the overall picture of what happened in the reported activity or event (Emzir 2012:174).

The method of conducting research in the analysis of students' HOTS abilities in the Fifth Semester Final Assessment of SD Muhammadiyah Purwodadi in terms of Learning Style, through the following stages: 1) Planning Stage, steps carried out in the preparation stage, namely: a) making an application cover letter research program HOTS Ability Analysis of Students in the Final Semester Grade V SD Muhammadiyah Purwodadi Judging from Learning Styles, b) after receiving the application letter, we had a meeting with the Principal of Muhammadiyah Purwodadi Elementary School to socialize the program as well as sign the program application letter. 2) Implementation Stage, the research program HOTS Ability Analysis of Students in the Final Semester Assessment of Class V Muhammadiyah Purwodadi Elementary School in terms of Learning Style starts from the planning stage. The stages of its implementation are as follows: a) the researcher conducts an analysis of how much influence the learning style has on students' HOTS abilities in working on the Final Semester Assessment questions, b) an analysis of the influence of the learning styles carried out by students on learning outcomes. c) final research analysis, the researcher conducted an analysis of the data obtained from the research results. Data collection techniques were carried out as follows: a) observation method, b) interview method, c) questionnaire, and d) documentation method.

RESULT AND ANALYSIS

This research was conducted from July to December 2022. The data and facts obtained by the researchers came from grade V PAS questions and questionnaires related to learning styles to the research focus so that complete and accurate data were obtained, observation activities carried out during the research process, as well as some documentation in the form of pictures. Based on the results of the analysis of PAS IPA & Social Studies Theme 1 Semester 1 Class V SD Muhammadiyah Purwodadi, data were obtained from seven questions for science subjects which were included in the HOTS question category, there was one multiple choice question and one short entry in numbers 24 and 26. Meanwhile, for other subjects Of the six questions included in the HOTS category, there is one multiple choice question at number 31. The results of the analysis of the Science and Social Science PAS questions, Semester 1 Semester 1 Class V, Muhammadiyah Purwodadi Elementary School, obtained data from seven science subject questions which were included in the HOTS question category, there was one multiple choice questions and one short answer at numbers 23 and 27. Meanwhile for Social Sciences, out of the six questions included in the HOTS question category, there is one multiple choice question at number 30 and short answer at number 32. Results of the analysis of PAS IPA & IPS Theme 3 Semester 1 Class V SD Muhammadiyah Purwodadi, obtained data from seven science subject questions which are included in the HOTS question category, there are two questions, both of which are optional questions multiple choice questions on numbers 23 and 25. On the social studies subject, of the six questions included in the HOTS question category, there are two multiple choice questions on numbers 30 and 31, as well as one short entry on number 32.

Based on the questionnaire that was distributed to fifth grade students at SD Muhammadiyah Purwodadi, the researchers took two samples each from the three learning style categories namely visual, auditory, and kinesthetic with the results :

Table 1. Analysis of Learning Styles

No.	Name	Learning Styles	Description
1.	Rayya Audina Mumtaazah	Visual	Evidenced by the students' answers to the questionnaire out of 10 statements, students chose 6 visual learning style statements, 2 auditory learning style statements, and 2 kinesthetic learning styles.
2.	Ranu Alifea	Visual	Evidenced by the students' answers to the questionnaire out of 10 statements, students chose 8 visual learning style statements and 2 kinesthetic learning styles.
3.	Hilal Abiyu Jamail	Auditory	Evidenced by the students' answers to the questionnaire out of 10 statements, students chose 6 statements of auditory learning styles, 2 visual learning styles, and 2 kinesthetic learning styles.
4.	Raihana Azka Fathinah	Auditory	Evidenced by the students' answers to the questionnaire out of 10 statements, students chose 7 auditory learning style statements, 2 visual learning styles, and 1 kinesthetic learning style.
5.	Arina Sulfia	Kinesthetic	Evidenced by the students' answers to the questionnaire out of 10 statements, students chose 4 kinesthetic learning style statements, 3 auditory learning styles, and 3 visual learning styles.
6.	Muhammad Raffi A	Kinesthetic	Evidenced by the students' answers to the questionnaire out of 10 statements, students chose 4 kinesthetic learning style statements, 3 visual learning styles, and 3 auditory learning styles.

Students with a visual learning style are more dominant in activities that emphasize visualization and writing. The visual learning style is tidier and pays more attention to writing. This learning style dislikes noise and lots of indoor activities because it can have difficulty concentrating. Students with a visual learning style put more problems in writing and are detailed in compiling the parts. Unlike the auditory learning style.

Students with an auditory learning style tend to listen and read aloud more, but have no difficulty in giving directions verbally. It is easier for students to memorize something than to understand something. In addition, speak using many expressions. Auditory learning style does not like sound in the room because it interferes with learning concentration. In solving problems, the auditory learning style prefers to tell stories about these problems. This is in stark contrast to the kinesthetic learning style.

Students with a kinesthetic learning style prefer direct activities and try to practice what they learn. When asked to give directions, the kinesthetic learning style must point or move its body. When concentrating, the kinesthetic learning style has difficulty if you have to sit still for a certain period of time. In solving problems, he likes to use his whole body or move objects to solve them.

CONCLUSION

There are 12 questions with the HOTS category from 3 themes in science and social studies, 11 questions are included in the analysis indicator or C4 and one question with an evaluation indicator or C5. There were questions in the HOTS category for Science & Social Studies subjects on themes 1, 2, and 3. The number of questions in the HOTS category for Science subjects were four multiple choice questions and two short answer questions, while the number of questions in the HOTS category for Social Sciences subjects were three multiple choice questions and three short answer questions. Students with a visual learning style are more inclined to activities that emphasize the senses of sight and writing. This is not much different from students who have a kinesthetic learning style. The difference is only in the emphasis on the activity. Kinesthetic learning style places more emphasis on movement activities. Whereas for students with an auditory learning style, they put more emphasis on the activity of the sense of hearing. Of the three learning styles, the highest scores were obtained by students with auditory learning styles.

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