

ABSTRAK

Dinda Raditya. 2024. PROFIL KEMAMPUAN LITERASI MATEMATIKA PESERTA DIDIK KELAS VII DALAM MENYELESAIKAN SOAL HIGHER ORDER THINKING PADA MATERI BILANGAN BULAT SETELAH MENERAPKAN PROBLEM BASED LEARNING. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.

Penelitian ini bertujuan untuk mengetahui keterlaksanaan model pembelajaran *Problem Based Learning* dalam meningkatkan kemampuan literasi matematika peserta didik kelas VII pada materi bilangan bulat, serta profil kemampuan literasi matematika peserta didik kelas VII dalam menyelesaikan soal *Higher Order Thinking* (HOT) pada materi bilangan bulat dengan menerapkan *Problem Based Learning*.

Jenis penelitian ini adalah penelitian deskriptif dengan subjek siswa kelas VII A tahun ajaran 2023/2024. Teknik pengumpulan data yang digunakan adalah tes tulis dan wawancara, dengan instrumen berupa soal tes, pedoman wawancara, dan lembar observasi keterlaksanaan pembelajaran. Teknik analisis data yang digunakan dalam penelitian meliputi reduksi data, penyajian data, dan penarikan kesimpulan. Profil kemampuan literasi matematika dilihat berdasarkan 4 indikator kemampuan literasi matematika, yaitu mengidentifikasi dan merumuskan masalah matematika, memilih dan menerapkan konsep matematika yang tepat, memahami dan menafsirkan informasi dari soal, serta menilai kebenaran dan keefektifan solusi yang telah ditemukan.

Berdasarkan data hasil observasi, keterlaksanaan pembelajaran menunjukkan bahwa pembelajaran telah terlaksana dengan sangat baik sesuai langkah-langkah model *Problem Based Learning*, yang memfasilitasi kemampuan literasi matematika dalam menyelesaikan soal *Higher Order Thinking*. Namun, mayoritas peserta didik kelas VII A Tahun Ajaran 2023/2024 masih kesulitan dalam memahami dan menafsirkan informasi dari soal untuk pemecahan masalah pada level kognitif menganalisis (C4) dan mengevaluasi (C5). Meskipun demikian, peserta didik sudah mampu mengidentifikasi dan merumuskan masalah matematika dari konteks operasi hitung bilangan bulat pada masalah penurunan dan kenaikan suhu serta pada masalah poin dalam suatu permainan. Hal ini terlihat dari hasil analisis data mengenai kemampuan literasi matematika dalam menyelesaikan soal *Higher Order Thinking* pada level kognitif menganalisis (C4) dan mengevaluasi (C5).

Kata Kunci: Literasi Matematika, *Higher Order Thinking*, *Problem Based Learning*, Bilangan Bulat

ABSTRACT

Dinda Raditya. 2024. **PROFILE OF MATHEMATICAL LITERACY SKILLS OF GRADE VII STUDENTS IN SOLVING HIGHER ORDER THINKING PROBLEMS ON INTEGER MATERIAL AFTER IMPLEMENTING PROBLEM-BASED LEARNING.** *Mathematics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University.*

This study aims to determine the implementation of the Problem Based Learning learning model in improving the mathematical literacy skills of seventh grade students on whole number material, as well as the profile of the mathematical literacy skills of seventh grade students in solving higher order thinking (HOT) problems on whole number material by applying Problem Based Learning.

This type of research is descriptive research with the subject of class VII A students in the 2023/2024 school year. The data collection techniques used were written tests and interviews, with instruments in the form of test questions, interview guidelines, and learning implementation observation sheets. Data analysis techniques used in the research include data reduction, data presentation, and conclusion drawing. The profile of mathematical literacy skills is seen based on 4 indicators of mathematical literacy skills, namely identifying and formulating mathematical problems, selecting and applying appropriate mathematical concepts, understanding and interpreting information from problems, and assessing the correctness and effectiveness of solutions that have been found.

Based on the observation data, the implementation of learning shows that learning has been very well implemented according to the syntax of the Problem Based Learning model, which facilitates mathematical literacy skills in solving Higher Order Thinking problems. However, the majority of students in class VII A in the 2023/2024 academic year still had difficulty in understanding and interpreting information from problems for problem solving at the cognitive level of analyzing (C4) and evaluating (C5). However, students have been able to identify and formulate mathematical problems from the context of integer arithmetic operations on the problem of decreasing and increasing temperature and on the problem of points in a game. This can be seen from the results of data analysis regarding mathematical literacy skills in solving Higher Order Thinking problems at the cognitive level of analyzing (C4) and evaluating (C5).

Keywords: Math Literacy, Higher Order Thinking, Problem Based Learning, Integers