

ABSTRAK

Agatha Lintang Antika Ika Putri. 211414007. Penerapan Pembelajaran Problem Based Learning Untuk Menumbuhkan Pemahaman Konsep dan Problem Solving Kelas VIII A SMP N 1 Pandak Bantul.

Tujuan penelitian ini untuk: (1) Mengetahui kemampuan awal peserta didik mengenai pemahaman konsep dan *problem solving* materi SPLDV; dan (2) Mengetahui kemampuan akhir peserta didik mengenai pemahaman konsep dan *problem solving* SPLDV setelah penerapan pembelajaran PBL. Jenis penelitian ini adalah deskriptif dengan data kuantitatif dan kualitatif. Data kuantitatif diperoleh melalui tes sedangkan data kualitatif diperoleh melalui wawancara dan observasi keterlaksanaan PBL. Subjek penelitian ini adalah 27 peserta didik kelas VIII A. Objek penelitian ini adalah kemampuan pemahaman konsep dan *problem solving* materi SPLDV. Penelitian diawali dengan observasi pembelajaran dan wawancara guru, dilanjutkan penyusunan modul ajar berbasis PBL, serta validasi dan revisi instrumen tes. Peneliti melaksanakan tes awal, pembelajaran PBL dengan 2 kali pertemuan, tes akhir, dan wawancara. Data tes awal dan tes akhir dianalisis berdasarkan rubrik penilaian yang tersedia. Data wawancara dianalisis berdasarkan pola yang tersedia. Terpilih 8 subjek wawancara berdasarkan pola tertentu untuk mengklarifikasi jawaban tes.

Hasil penelitian ini menunjukkan: (1) Pada kemampuan awal, tidak ada (0%) peserta didik yang mencapai ketuntasan pemahaman konsep dan hanya 2 peserta didik (7%) yang mencapai ketuntasan *problem solving*. Kesulitan terbesar terlihat pada indikator menyatakan ulang konsep SPLDV dan penyelesaian SPLDV (K1), mengklasifikasikan unsur-unsur SPLDV (K2), dan mengoreksi kembali nilai x dan y (P4) ditunjukkan dengan 0% peserta didik yang mencapai indikator tersebut; (2) Setelah penerapan PBL, jumlah peserta didik yang mencapai ketuntasan pemahaman konsep sebanyak 19 atau 70% dan yang mencapai ketuntasan *problem solving* sebanyak 24 atau 89%. Indikator yang sebelumnya menjadi kesulitan terbesar pada tes awal menunjukkan peningkatan yaitu menyatakan ulang konsep SPLDV (77%) dan penyelesaian SPLDV (56%), mengklasifikasikan unsur-unsur SPLDV (26%), dan mengoreksi kembali nilai x dan y (63%). Walaupun terjadi peningkatan skor, tetapi secara mutu masih belum optimal karena telah dikonfirmasi dalam wawancara yang menunjukkan 6 dari 8 subjek wawancara terkonfirmasi tidak dapat memisalkan variabel dan 2 dari 8 subjek wawancara masih mengandalkan penghafalan pada indikator K1.

Kata Kunci: SPLDV, *Problem-Based Learning*, pemahaman konsep; *problem solving*

ABSTRACT

Agatha Lintang Antika Ika Putri. 211414007. *Implementation of Problem Based Learning to Develop Concept Understanding and Problem Solving in Class VIII A of SMP N 1 Pandak Bantul.*

This study aims to: (1) identify students' initial abilities in conceptual understanding and problem-solving skills related to the System of Linear Equations in Two Variables; (2) assess students' final abilities in conceptual understanding and problem-solving after the implementation of PBL. This study is descriptive in nature, utilizing both quantitative and qualitative data. Quantitative data were obtained through tests, while qualitative data were collected through interviews and observations of the PBL implementation. The subjects of this research were 27 students of Class VIII A, and the object of the research was students' conceptual understanding and problem-solving abilities in SPLDV. The research began with classroom observations and teacher interviews, followed by the development of PBL-based teaching modules, and the validation and revision of test instruments. The researcher conducted a pre-test, implemented PBL over two sessions, administered a post-test, and conducted interviews. Pre-test and post-test data were analyzed using an established scoring rubric. Interview data were analyzed based on identified patterns. A total of 8 interview subjects were selected based on specific patterns to clarify their answers.

The results of the study indicate that: (1) in the initial assessment, none (0%) of the students achieved the minimum mastery in conceptual understanding, and only 2 students (7%) reached mastery in problem solving. The most significant difficulties were found in the indicators of restating the concept and solving SPLDV (K1), classifying SPLDV elements (K2), and rechecking the values of x and y (P4), as shown by the 0% achievement in these indicators; (2) after the implementation of PBL, 19 students (70%) reached mastery in conceptual understanding and 24 students (89%) in problem solving. The indicators that were previously the most challenging showed improvement, such as restating the SPLDV concept (77%) and solving SPLDV (56%), classifying SPLDV elements (26%), and rechecking x and y values (63%). Although the score improvement is evident, the quality of understanding is still not optimal, as confirmed through interviews where 6 out of 8 students were unable to properly define variables, and 2 out of 8 students relied on memorization for indicator K1.

Keywords: *SPLDV, Problem-Based Learning, conceptual understanding, problem-solving*