ABSTRAK

Tara, NIM 4203111097 (2024). Penerapan Model Pembelajaran *Problem Based Learning* (PBL) Berbantuan Video Animasi untuk Meningkatkan Kemampuan Pemahaman Konsep Matematis Siswa pada Materi Dimensi Tiga.

Penelitian ini mengkaji apakah penerapan model pembelajaran *Problem Based Learning* (PBL) berbantuan video animasi dapat meningkatkan pemahahaman konsep matematis siswa pada materi dimensi tiga di kelas XII IPA-3 SMA Negeri 1 Silima Pungga – Pungga. Siswa kelas XII IPA – 3 sebanyak 32 siswa subjek dari penelitian ini dan kemampuan pemahaman konsep matematis pada materi dimensi tiga dengan menerapkan model pembelajaran *Problem Based Learning* (PBL) berbantuan video animasi merupakan objek dari penelitian ini. Teknik pengumpulan data yang digunakan adalah tes dan non tes berupa tes kemampuan literasi matematis dan observasi. Penelitian ini merupakan Penelitian Tindakan Kelas (PTK) yang dilaksanakan sebanyak 2 siklus. Hasil analisis data diperoleh pada siklus 1 nilai rata- rata kemampuan pemahaman konsep matematis adalah 70,208 dengan 14 siswa (43,75%) yang tuntas lalu meningkat pada siklus 2 diperoleh rata- rata 85, 2501 dengan 28 siswa (87,5%) yang tuntas. Serta aktivitas siswa dilihat dari hasil observasi juga meningkat, yang mana pada presentasi aktivitas siswa pada siklus 1 mencapai 56, 11% dengan kategori cukup aktif, dan pada siklus 2 mencapai 76, 17% dengan kategori aktif. Maka, dari hasil tersebut diperoleh hasil tes kemampuan pemahaman konsep matematis siswa meningkat di setiap siklusnya, minimal 85% siswa dikelas mencapai skor kemampuan literasi matematis ≥ 75. Jadi, dapat disimpulkan bahwa dengan menerapkan model pembelajaran *Problem Based Learning* (PBL) berbantuan video animasi dapat meningkatkan pemahaman konsep matematis siswa pada materi dimensi tiga di kelas XII IPA- 3 SMA Negeri 1 Silima Pungga – Pungga

Kata kunci : Kemampuan pemahaman konsep matematis, model pembelajaran *Problem Based Learning* (PBL), Video animasi

ABSTRACT

Tara, NIM 4203111097 (2024). Application of Problem Based Learning Model Assisted by Animated Videos to Improve Students Ability to Understand Mathematical Concepts in Three Dimensional Material.

This research aims to determine whether the application of the Problem Based Learning (PBL) learning model assisted by animated videos can improve students' understanding of mathematical concepts in three-dimensional material in class XII IPA-3 SMA Negeri 1 Silima Pungga - Pungga. There are 32 students in class XII IPA - 3 who are the subjects of this research and their ability to understand mathematical concepts in three-dimensional material by applying the Problem Based Learning (PBL) learning model assisted by animated videos is the object of this research. The data collection techniques used were tests and non-tests in the form of mathematical literacy ability tests and observation. This research is Classroom Action Research (PTK) which was carried out in 2 cycles. The results of data analysis obtained in cycle 1, the average value of understanding mathematical concepts was 70.208 with 14 students (43.75%) who completed it and then increased in cycle 2, the average was 85.2501 with 28 students (87.5%) which is complete. And student activity as seen from the results of observations also increased, where in the presentation of student activity in cycle 1 it reached 56.11% in the quite active category, and in cycle 2 it reached 76.17% in the active category. So, from these results, the test results show that students' ability to understand mathematical concepts increases in each cycle, at least 85% of students in the class achieve a mathematical literacy ability score of ≥ 75. So, it can be concluded that by implementing the Problem Based Learning (PBL) learning model assisted by animated videos, it is possible to improve students' understanding of mathematical concepts in three-dimensional material in class XII IPA-3 SMA Negeri 1 Silima Pungga - Pungga