

## ABSTRAK

**Gery Fernando Sinukaban: Penerapan Model Pembelajaran Berbasis Masalah (Problem Based Learning) untuk Meningkatkan Prestasi Belajar Siswa pada Elemen Teknik Pemesinan Bubut Kelas XI Teknik Pemesinan SMK Swasta PAB 1 Helvetia Tahun Ajaran 2025/2026.**

Masalah dalam penelitian ini adalah rendahnya prestasi belajar siswa kelas XI Teknik Pemesinan di SMK Swasta PAB 1 Helvetia pada mata pelajaran Elemen Teknik Pemesinan Bubut. Rendahnya hasil belajar ini disebabkan oleh kurangnya penerapan model pembelajaran yang mampu menumbuhkan keaktifan, kemandirian, serta kemampuan siswa dalam memecahkan masalah. Penelitian ini bertujuan untuk mengetahui peningkatan prestasi belajar siswa melalui penerapan model pembelajaran Problem Based Learning (PBL). Jenis penelitian ini adalah Penelitian Tindakan Kelas (PTK) yang dilaksanakan dalam dua siklus. Setiap siklus terdiri dari empat tahap, yaitu: perencanaan, pelaksanaan tindakan, observasi, dan refleksi. Subjek penelitian adalah siswa kelas XI Teknik Pemesinan SMK Swasta PAB 1 Helvetia dengan jumlah siswa 30 orang. Teknik pengumpulan data menggunakan tes hasil belajar, lembar observasi, dan wawancara. Hasil penelitian menunjukkan bahwa penerapan model pembelajaran Problem Based Learning dapat meningkatkan prestasi belajar siswa. Pada siklus I, nilai rata-rata siswa mencapai 64,06 dengan ketuntasan klasikal sebesar 64%. Setelah dilakukan perbaikan pada siklus II, nilai rata-rata meningkat menjadi 81,3 dengan ketuntasan klasikal 81%. Hal ini membuktikan bahwa penerapan Problem Based Learning mampu meningkatkan pemahaman dan keterampilan siswa dalam pembelajaran pemesinan bubut. Dengan demikian, dapat disimpulkan bahwa penerapan model pembelajaran Problem Based Learning efektif digunakan untuk meningkatkan prestasi belajar siswa pada Elemen Teknik Pemesinan Bubut kelas XI di SMK Swasta PAB 1 Helvetia.

**Kata Kunci: Problem Based Learning, Prestasi Belajar, Teknik Pemesinan Bubut**

## ***ABSTRACT***

**Gery Fernando Sinukaban: The Implementation of Problem Based Learning (PBL) Model to Improve Student Learning Achievement in the Lathe Machining Elements of Grade XI Mechanical Engineering Department at SMK Swasta PAB 1 Helvetia Academic Year 2025/2026.**

The problem in this study is the low learning achievement of Grade XI Mechanical Engineering students at SMK Swasta PAB 1 Helvetia in the subject of Lathe Machining Elements. The low achievement was caused by the lack of learning models that encourage activeness, independence, and problem-solving skills of the students. This study aims to determine the improvement of students' learning achievement through the implementation of Problem Based Learning (PBL) model. This research is a Classroom Action Research (CAR) conducted in two cycles. Each cycle consists of four stages: planning, action, observation, and reflection. The research subjects were 30 students of Grade XI Mechanical Engineering at SMK Swasta PAB 1 Helvetia. Data collection techniques used were learning achievement tests, observation sheets, and interviews. The results showed that the implementation of Problem Based Learning model could improve students' learning achievement. In the first cycle, the average score of students reached 64,06 with a classical mastery level of 64%. After improvements in the second cycle, the average score increased to 81.3 with a classical mastery level of 81%. This proves that the implementation of Problem Based Learning model is effective in enhancing students' understanding and skills in lathe machining learning. Thus, it can be concluded that the implementation of Problem Based Learning model is effective in improving the learning achievement of students in the Lathe Machining Elements of Grade XI at SMK Swasta PAB 1 Helvetia.

**Keywords: Problem Based Learning, Learning Achievement, Lathe Machining**