

ABSTRAK

Birhop Simanjuntak, NIM. 5213121007, Penerapan Pembelajaran Berbasis Projek Untuk Meningkatkan Hasil Belajar Dan Keterampilan Pengelasan SMAW Pada Siswa Kelas Xi Jurusan Teknik Pengelasan SMK Negeri 4 Medan. Skripsi, Jurusan Pendidikan Teknik Mesin, Fakultas Teknik, Universitas Negeri Medan.

Penelitian ini bertujuan untuk meningkatkan hasil belajar dan keterampilan siswa pada mata pelajaran Pengelasan *SMAW* di kelas XI Teknik Pengelasan SMK Negeri 4 Medan Tahun Ajaran 2025/2026. Penelitian ini menggunakan metode Penelitian Tindakan Kelas (PTK) yang dilaksanakan dalam dua siklus, dengan subjek sebanyak 32 orang dari kelas XI TPL 1. Model pembelajaran yang diterapkan adalah *Project Based Learning* (PjBL). Hasil penelitian menunjukkan adanya peningkatan hasil belajar siswa. Pada siklus I, rata-rata nilai siswa sebesar 70 dengan persentase ketuntasan 59,37%. Setelah dilakukan perbaikan pada siklus II, rata-rata nilai meningkat menjadi 84 dengan tingkat ketuntasan 87,5%. Dengan demikian, Penerapan pembelajaran *Project Based Learning* terbukti dapat meningkatkan hasil belajar siswa dalam mata pelajaran Pengelasan *SMAW*.

Kata Kunci: Hasil belajar, *Project Based Learning*, Pengelasan *SMAW*, Penelitian Tindakan Kelas

ABSTRACT

Birhop Simanjuntak, NIM. 5213121007, *Application of Project-Based Learning to Improve Learning Outcomes and Practical Skills of SMAW Welding in Grade XI Students of the Department of Welding Engineering SMK Negeri 4 Medan. Thesis, Department of Mechanical Engineering Education, Faculty of Engineering, State University of Medan.*

This research aims to improve students' learning outcomes and practical skills in the subject of SMAW Welding in grade XI Welding Engineering SMK Negeri 4 Medan Academic Year 2025/2026. This study uses the Classroom Action Research (PTK) method which is carried out in two cycles, with 32 subjects from class XI TPL 1. The learning model applied is Project Based Learning (PjBL). The results of the study show that there is an increase in student learning outcomes. In the first cycle, the average student score was 70 with a completion percentage of 59.37%. After improvements were made in cycle II, the average score increased to 84 with a completeness rate of 87.5%. Thus, the application of Project Based Learning learning has been proven to improve student learning outcomes in SMAW Welding subjects.

Keywords: *Learning outcomes, Project Based Learning, SMAW Welding, Classroom Action Research.*