ABSTRAK

Maruli Febriansyah Sihombing: *PENERAPAN MODEL PEMBELAJARAN PROJECT BASED LEARNING (PjBL) UNTUK MENINGKATKAN KEAKTIFAN DAN HASIL BELAJAR GAMBAR TEKNIK PADA SISWA KELAS X TEKNIK PENGELASAN DI SMK NEGERI 13 MEDAN*. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2026

Penelitian Tindakan Kelas (PTK) ini bertujuan untuk meningkatkan keaktifan dan hasil belajar peserta didik pada elemen Gambar Teknik. Penelitian dilakukan dengan menerapkan model *Project Based Learning* (PjBL) di kelas XI Teknik Pengelasan SMK Negeri 13 Medan, yang melibatkan 30 siswa sebagai subjek. Metode pengumpulan data menggunakan observasi untuk mengukur keaktifan dan tes hasil belajar berbentuk 30 soal pilihan ganda, yang kemudian dianalisis secara kuantitatif dengan menghitung persentase ketuntasan dan uji N-Gain. Hasil penelitian menunjukkan bahwa penerapan PjBL berhasil meningkatkan keaktifan belajar siswa secara signifikan. Pada kondisi awal (pra-siklus), keaktifan hanya 54,49% (kategori tidak aktif). Setelah diterapkan PjBL di Siklus I, angkanya naik menjadi 70%, namun belum memenuhi indikator keberhasilan minimal 75%. Melalui perbaikan di Siklus II, keaktifan melonjak menjadi 87,44% dan berhasil mencapai kategori sangat aktif. Di sisi hasil belajar, ketuntasan klasikal juga mengalami peningkatan. Awalnya hanya 13,33% siswa yang tuntas. Angka ini meningkat menjadi 53,33% pada Siklus I, dan akhirnya mencapai 83,33% pada Siklus II, sehingga melebihi indikator keberhasilan. Uji N-Gain mengkonfirmasi peningkatan kualitas pemahaman dari kategori sedang (0,56) di Siklus I menjadi tinggi (0,73) di Siklus II. Berdasarkan temuan ini, disimpulkan bahwa model Project Based Learning efektif dalam meningkatkan baik keaktifan maupun hasil belajar siswa pada elemen Gambar Teknik. Oleh karena itu, PjBL sangat direkomendasikan sebagai sebuah model pembelajaran inovatif dan berpusat pada peserta didik di lingkungan pendidikan vokasi.

Kata kunci : Project Based Learning, keaktifan belajar, hasil belajar, gambar teknik, PTK.

ABSTRACT

Maruli Febriansyah Sihombing: THE IMPLEMENTATION OF THE PROJECT-BASED LEARNING (PjBL) MODEL TO IMPROVE STUDENTS' ACTIVENESS AND LEARNING OUTCOMES IN TECHNICAL DRAWING FOR GRADE X WELDING ENGINEERING STUDENTS AT SMK NEGERI 13 MEDAN. *Undergraduate Thesis. Faculty of Engineering, Universitas Negeri Medan. 2026.*

This Classroom Action Research (CAR) aims to improve students' activeness and learning outcomes in the Technical Drawing element. The study was conducted by implementing the Project-Based Learning (PjBL) model in Grade X Welding Engineering at SMK Negeri 13 Medan, involving 30 students as research subjects. Data were collected through observation to measure activeness and a learning achievement test consisting of 30 multiple-choice questions, which were then quantitatively analyzed using mastery percentage and the N-Gain test. The results show that the implementation of PjBL significantly improved students' learning activeness. In the initial condition (pre-cycle), activeness was 54.49% (categorized as inactive). After implementing PjBL in Cycle I, the percentage increased to 70%, although it had not yet met the minimum success indicator of 75%. Through improvements in Cycle II, students' activeness rose sharply to 87.44%, reaching the "very active" category. In terms of learning outcomes, classical mastery also increased. Initially, only 13.33% of students achieved mastery. This figure increased to 53.33% in Cycle I and finally reached 83.33% in Cycle II, surpassing the success indicator. The N-Gain test confirmed the improvement in understanding, rising from the medium category (0.56) in Cycle I to the high category (0.73) in Cycle II. Based on these findings, it is concluded that the Project-Based Learning model is effective in improving both students' activeness and learning outcomes in the Technical Drawing element. Therefore, PjBL is highly recommended as an innovative and student-centered learning model for vocational education settings.

Keywords : Project-Based Learning, learning activeness, learning outcomes, technical drawing, Classroom Action Research.