

ABSTRAK

Glory Natalia Siahaan. NIM 5213131004: Pengaruh Model Pembelajaran *Project Based Learning* Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Instalasi Penerangan Listrik Kelas XI TITL di SMK S Sinar Husni 2 TR Labuhan Deli. Skripsi. Fakultas Teknik. Universitas Negeri Medan 2025.

Penelitian ini bertujuan untuk: 1) Mengetahui hasil belajar siswa dengan menggunakan model pembelajaran *Project Based Learning* pada mata Pelajaran instalasi penerangan listrik kelas XI TITL di SMK S Sinar Husni 2 TR Labuhan Deli. 2) Mengetahui hasil belajar siswa dengan menggunakan model pembelajaran konvensional pada mata Pelajaran instalasi penerangan listrik kelas XI TITL di SMK S Sinar Husni 2 TR Labuhan Deli. 3) Membandingkan apakah hasil belajar model pembelajaran *Project Based Learning* lebih tinggi dari pada hasil belajar dari model pembelajaran konvensional. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis penelitian *Quasi Experimental Design*, yaitu *pretest-posttest control group design*. Sampel penelitian terdiri dari dua kelas yaitu kelas XI TITL 1 sebagai kelas eksperimen dan kelas XI TITL 2 sebagai kelas kontrol, masing-masing berjumlah 30 siswa. Teknik pengumpulan data berupa tes pretest dan posttest untuk mengukur hasil belajar kognitif. Analisis data dilakukan dengan Uji-T untuk mengetahui perbedaan hasil belajar antara kedua kelompok. Hasil penelitian menunjukkan bahwa rata-rata nilai posttest kelas eksperimen adalah 86,00, sedangkan kelas kontrol 79,20. Hasil Uji-T menunjukkan nilai signifikansi $T_{hitung} \geq T_{tabel}$ yaitu $3,167 \geq 1,671$ sehingga H_0 ditolak dan H_a diterima. Hal ini menunjukkan bahwa terdapat peningkatan antara hasil belajar siswa yang diajar dengan model *Project Based Learning* dengan siswa yang diajar menggunakan model konvensional dan hasil belajar yng di ajarkan dengan menggunakan model PjBL lebih tinggi daripada model pembelajaran konvensional.

Dengan demikian dapat disimpulkan bahwa model pembelajaran *Project Based Learning* memberikan pengaruh positif dan lebih efektif dalam meningkatkan hasil belajar instalasi penerangan listrik pada siswa kelas XI TITL di SMK S Sinar Husni 2 TR Labuhan Deli Tahun Ajaran 2025/2026.

Kunci Kunci: *Project Based Learning, Pembelajaran Konvensional, Hasil Belajar.*

ABSTRACT

Glory Natalia Siahaan. NIM 5213131004: The Effect of Project Based Learning Model on Student Learning Outcomes in Electrical Lighting Installation Subject for Grade XI TITL at SMK S Sinar Husni 2 TR Labuhan Deli. Thesis. Faculty of Engineering. State University of Medan 2025.

This study aims to: 1) Determine the learning outcomes of students using the Project Based Learning learning model in the subject of electrical lighting installation for class XI TITL at SMK S Sinar Husni 2 TR Labuhan Deli. 2) Determine the learning outcomes of students using the conventional learning model in the subject of electrical lighting installation for class XI TITL at SMK S Sinar Husni 2 TR Labuhan Deli. 3) Compare whether the learning outcomes of the Project Based Learning learning model are higher than the learning outcomes of the conventional learning model. This study uses a quantitative approach with a Quasi Experimental Design research type, namely pretest-posttest control group design, namely a pretest-posttest control group design. The research sample consisted of two classes, namely class XI TITL 1 as the experimental class and class XI TITL 2 as the control class, each consisting of 30 students. Data collection techniques used pretest and posttest to measure cognitive learning outcomes. Data analysis was carried out using the T-Test to determine differences in learning outcomes between the two groups. The results showed that the average posttest score of the experimental class was 86.00, while the control class was 79.20. The T-Test results showed a significance value of $T_{count} \geq T_{table}$, namely $3.167 \geq 1.671$ so that H_0 was rejected and H_a was accepted. This shows that there is an increase between the learning outcomes of students taught with the Project Based Learning model and students taught using the conventional model and the learning outcomes taught using the PjBL model are higher than the conventional learning model.

Thus, it can be concluded that the Project-Based Learning model has a positive influence and is more effective in improving learning outcomes in electrical lighting installation in class XI TITL students at SMK S Sinar Husni 2 TR Labuhan Deli for the 2025/2026 Academic Year.

Keywords: *Project-Based Learning, Conventional Learning, Learning Outcomes.*