

ABSTRAK

Friandi Halomoan Siagian, NIM 52111131003 (2021), Pengaruh Model Pembelajaran *Problem Based Learning* (PBL) Terhadap Hasil Belajar Siswa pada Mata Pelajaran Dasar-Dasar Teknik Ketenagalistrikan (DDTK) di SMKS Sinar Husni 2 TR Labuhan Deli.

Penelitian ini bertujuan untuk mengetahui pengaruh penerapan model pembelajaran *Problem Based Learning* (PBL) berbantuan *E-Learning* terhadap hasil belajar siswa pada mata pelajaran Dasar-Dasar Teknik Ketenagalistrikan (DDTK) di SMKS Sinar Husni 2 TR Labuhan Deli. Penelitian ini menggunakan pendekatan kuantitatif dengan jenis quasi eksperimen dan desain Pretest-Posttest Control Group Design. Populasi sekaligus sampel penelitian adalah seluruh siswa kelas X Teknik Instalasi Tenaga Listrik yang berjumlah 60 siswa, terdiri atas kelas X TITL 1 sebagai kelas eksperimen dan kelas X TITL 2 sebagai kelas kontrol. Kelas eksperimen diberi perlakuan menggunakan model pembelajaran PBL berbantuan *E-Learning*, sedangkan kelas kontrol menggunakan model pembelajaran ekspositori. Instrumen penelitian berupa tes hasil belajar ranah kognitif yang diberikan melalui pretest dan posttest. Data dianalisis menggunakan uji-t (independent sample t-test). Hasil penelitian menunjukkan bahwa nilai rata-rata posttest kelas eksperimen sebesar 82,93, lebih tinggi dibandingkan kelas kontrol sebesar 76,10. Hasil uji-t menunjukkan nilai signifikansi (2-tailed) sebesar $0,002 < 0,05$ dengan nilai thitung = 3,205 > ttabel = 2,002, sehingga hipotesis alternatif diterima. Dengan demikian, dapat disimpulkan bahwa model pembelajaran *Problem Based Learning* (PBL) berbantuan *E-Learning* berpengaruh signifikan terhadap hasil belajar siswa pada mata pelajaran Dasar-Dasar Teknik Ketenagalistrikan di SMKS Sinar Husni 2 TR Labuhan Deli.

Kata kunci: Hasil Belajar, *Problem Based Learning* (PBL), Google Sites, Ekspositori.

ABSTRACT

Friandi Halomoan Siagian, NIM 52111131003 (2021), *The Effect of the Problem Based Learning (PBL) Model on Students' Learning Outcomes in the Subject of Basic Electrical Engineering (DDTK) at SMKS Sinar Husni 2 TR Labuhan Deli.*

This study aims to determine the effect of the *Problem Based Learning* (PBL) model assisted by *E-Learning* on students' learning outcomes in the Basic Electrical Engineering (DDTK) subject at SMKS Sinar Husni 2 TR Labuhan Deli. This research employed a quantitative approach using a quasi-experimental method with a Pretest-Posttest Control Group Design. The population as well as the sample consisted of all 60 students of Grade X Electrical Power Installation Engineering, with class X TITL 1 as the experimental group and class X TITL 2 as the control group. The experimental group was taught using the PBL model assisted by *E-Learning*, while the control group was taught using the expository learning model. The research instrument was a cognitive learning achievement test administered through pretest and posttest. Data were analyzed using an independent sample t-test. The results showed that the average posttest score of the experimental group was 82.93, which was higher than that of the control group at 76.10. The t-test analysis indicated a significance value (2-tailed) of $0.002 < 0.05$ with $t_{\text{count}} = 3.205 > t_{\text{table}} = 2.002$, indicating that the alternative hypothesis was accepted. Therefore, it can be concluded that the *Problem Based Learning* (PBL) model assisted by *E-Learning* has a significant effect on students' learning outcomes in the Basic Electrical Engineering subject at SMKS Sinar Husni 2 TR Labuhan Deli.

Keywords: *Learning Outcomes, Problem-Based Learning (PBL), Google Sites, Expository Model*