

## ABSTRAK

Bayu Samudera. NIM : 5133122003. *Perbedaan Model Pembelajaran Discovery Learning dengan Problem Based Learning terhadap Hasil Belajar Teknologi Dasar Otomotif pada Siswa Kelas X SMK Negeri 1 Pulau Rakyat Tahun Ajaran 2019/2020.* Skripsi. Fakultas Teknik Universitas Negeri Medan 2020.

Penelitian ini dilakukan untuk mengetahui pengaruh perbedaan model pembelajaran *Discovery Learning* dengan *Problem Based Learning* terhadap hasil belajar teknologi dasar otomotif kompetensi dasar dasar-dasar elektronika siswa kelas X TKR di SMK Negeri 1 Pulau Rakyat T.A. 2019/2020. Metode penelitian ini adalah metode quasi eksperimen. Populasi dalam penelitian ini adalah siswa kelas X TKR SMK Negeri 1 Pulau Rakyat dengan jumlah sampel 2 kelas yaitu kelas eksperimen 1 dengan model pembelajaran *Discovery Learning* dan kelas eksperimen 2 dengan model pembelajaran *Problem Based Learning*. Instrumen penelitian menggunakan tes pilihan ganda sebanyak 26 soal dengan 5 alternatif pilihan jawaban. Teknik analisis data melalui uji normalitas dengan menggunakan *Liliefors* dan uji homogenitas dengan menggunakan *Fischer*. Analisis data tersebut dilanjutkan dengan uji t, diperoleh hasil pada ranah kognitif  $t_{hitung} = 4,33$ , sedangkan nilai  $t_{tabel} = 2,00$  sehingga dapat disimpulkan  $t_{hitung} > t_{tabel}$ , maka dengan ini  $H_0$  ditolak. Hal ini menunjukkan bahwa terdapat perbedaan model pembelajaran *Discovery Learning* dengan *Problem Based Learning* terhadap hasil belajar teknologi dasar otomotif.

Kata Kunci : *Discovery Learning, Problem Based Learning, Teknologi Dasar Otomotif, Dasar-Dasar Elektronika*

## ABSTRACT

Bayu Samudera. NIM : 5133122003. *The Difference between Discovery Learning and Problem Based Learning Models on Learning Results of Automotive Basic Technology in Class X Students of state vocational high school 1 Pulau Rakyat Academic Year 2019/2020.* Thesis. Faculty of Engineering, State University of Medan 2020.

This study was conducted to determine the effect of differences of Discovery Learning and Problem Based Learning models on learning results of automotive basic technology with basic competence is electronics basics in class X of light vehicle engineering major in state vocational high school 1 pulau rakyat academic year 2019/2020. This research method is a quasi-experimental method. The population in this study are students of class X of light vehicle engineering major in state vocational high school 1 Pulau Rakyat with 2 classes of sample size, namely experimental class 1 with Discovery Learning and experimental class 2 with Problem Based Learning. The research instrument uses multiple choice tests of 26 questions with 5 alternative answer choices. Data analysis techniques are normality testing using Liliefors and homogeneity testing using Fischer. With data analysis is t test, the results obtained in the cognitive domain  $t_{count} = 4.33$ , while the value of  $t_{table} = 2.00$  so that it can be concluded  $t_{count} > t_{table}$ , then with this  $H_0$  is rejected. This shows there are differences in Discovery Learning and Problem Based Learning models on learning results of automotive basic technology.

Keywords: Discovery Learning, Problem Based Learning, Basic Automotive Technology, Fundamentals of Electronics