

## ABSTRAK

Elysa Syafaat: *Perbedaan Hasil Belajar Siswa Kelas X TBSM Pada Mata Pelajaran Dasar Teknik Otomotif Elemen Gambar Teknik Yang Pembelajarannya Menggunakan Model Problem Based Learning dan Model Discovery Learning di SMKS Imelda Medan.* Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2023.

Penelitian ini bertujuan: 1) Mendeskripsikan hasil belajar Dasar Teknik Otomotif Elemen Gambar Teknik yang pembelajarannya menggunakan model *Problem Based Learning* pada kelas X TBSM di SMKS Imelda Medan. 2) Mendeskripsikan hasil belajar Dasar Teknik Otomotif Elemen Gambar Teknik yang pembelajarannya menggunakan model *Discovery Learning* pada kelas X TBSM di SMKS Imelda Medan. 3) Mendeskripsikan perbedaan hasil belajar siswa pada mata pelajaran Dasar Teknik Otomotif Elemen Gambar Teknik yang pembelajarannya menggunakan model *Problem Based Learning* dan model *Discovery Learning* pada kelas X TBSM di SMKS Imelda Medan. Penelitian ini dilaksanakan di SMKS Imelda Medan Jl. Bilal No. 52, Pulo Brayan Darat I, Kec. Medan Timur, Kota Medan Prov. Sumatera Utara. Populasi dalam penelitian ini adalah kelas X TBSM yang berjumlah 60 siswa, sedangkan sampel dalam penelitian ini terdiri dari 2 kelas yaitu kelas X TBSM 1 yang berjumlah 30 siswa dan kelas X TBSM 2 berjumlah 30 siswa. Teknik pengambilan sampel adalah *total sampling*. Hasil belajar siswa pada kelas X TBSM 1 sebelum diberikan perlakuan rata-rata pre-tes 56.78 dan setelah diberikan perlakuan dengan menggunakan model *Problem Based Learning* diperoleh rata-rata pos-tes 81.56 sedangkan hasil belajar siswa pada kelas X TBSM 2 sebelum diberikan perlakuan rata-rata pre-tes 46.11 dan setelah diberikan model *Discovery Learning* diperoleh rata-rata pos-tes 72.33. Hasil perhitungan uji t pos-tes diperoleh nilai  $t_{hitung}$  sebesar 3.703 dan  $t_{tabel}$  sebesar 2.002 pada taraf  $\alpha = 0.05$  sehingga diperoleh ( $3.703 > 2.002$ ), sehingga  $H_0$  ditolak dan  $H_a$  diterima, ini menunjukkan bahwa hasil belajar yang pembelajarannya menggunakan model *Problem Based Learning* lebih tinggi dibandingkan hasil belajar siswa yang pembelajarannya menggunakan model *Discovery Learning*.

Kata Kunci : *Problem Based Learning, Discovery Learning, Hasil Belajar, Model Pembelajaran, dan Gambar Teknik*

## ABSTRACT

Elysa Syafaat: *Differences in Class Student X TBSM Learning Outcomes in Basic Automotive Engineering Subjects, Elements of Technical Drawing, Where Learning Using the Problem Based Learning Model and the Discovery Learning Model at Imelda Vocational School, Medan State University. Thesis. Faculty of Engineering. 2023.*

This research aims to: 1) Describe the learning outcomes of Basic Automotive Engineering Elements of Technical Drawing where learning uses the Problem Based Learning model in class X TBSM at SMKS Imelda Medan. 2) Describe the learning outcomes of Basic Automotive Engineering Elements of Technical Drawing, where learning uses the Discovery Learning model in class X TBSM at SMKS Imelda Medan. 3) Describe the differences in student learning outcomes in the Basic Automotive Engineering Subject Technical Drawing Elements whose learning uses the Problem Based Learning model and the Discovery Learning model in class X TBSM at SMKS Imelda Medan. This research was carried out at SMKS Imelda Medan Jl. Bilal No. 52, Pulo Brayan Darat I, Kec. East Medan, Medan City, Prov. North Sumatra. The population in this study was the class X TBSM, totalling 60 students, while the sample in this study consisted of 2 classes, namely X TBSM 1, totalling 30 students and X TBSM 2 totalling 30 students. The sampling technique is total sample technique. Student learning outcomes in X TBSM 1 before being given treatment on the pre-test average was 56.78 and after being given treatment using the Problem Based Learning model, the post-test average was 81,56, while student learning outcomes in class X TBSM 2 before being given treatment on the pre-test average was 46.11 and after being given the Discovery Learning model, the post-test average was 72.33. The results of t test for post test at  $\alpha = 0.05$  obtained a  $t_{\text{count}}$  value of 3.703 and a  $t_{\text{table}}$  of 2.002 so that it was obtained ( $3.703 > 2.002$ ), so that  $H_0$  was rejected and  $H_a$  was accepted, this shows that the learning outcomes of learning using the Problem Based Learning model are higher than the learning outcomes of students whose learning uses the Discovery Learning model.

**Keywords** : Problem Based Learning, Discovery Learning, Learning Outcomes, Learning Model, and Technical Drawing