ABSTRAK

Aprida Valentina Hutagalung: Penerapan Model Pembelajaran Open Ended Pada Mata Pelajaran Dasar-dasar Teknik Ketenagalistrikan di SMK Negeri 5 Medan. Skripsi. Fakultas Teknik. Universitas Negeri Medan. 2023

Skripsi ini bertujuan untuk mengetahui (1). hasil belajar siswa yang diajar dengan model pembelajaran *Open Ended* Dasar-dasar Teknik Ketenagalistrikan. (2) hasil belajar siswa yang diajar dengan model pembelajaran *Cooperative Learning* pada mata pelajaran Dasar-dasar Teknik Ketenagalistrikan (3) hasil belajar siswa yang diajar dengan menggunakan model pembelajaran *Open Ended* lebih tinggi pada mata pelajaran Dasar-dasar Teknik Ketenagalistrikan.

Penelitian yang digunakan adalah desain eksperimen dimana melibatkan dua kelompok, yaitu kelas eksperimen dan kelas kontrol. Teknik analisis data dalam penelitian ini adalah, nilai rata-rata, standar deviasi dan varians, uji normalitas, uji homogenitas, serta uji t.

Hasil penelitian ini menunjukan bahwa jika $t_{hitung} > t_{tabel}$ didapatkah sebesar 1,692 dan data tabel diketahui 1,672. Maka, kriteria pengujian data diperoleh $t_{hitung} > t_{tabel}$ yaitu 1,692 >1,672 artinya H_a diterima yang berarti adanya pengaruh model pembelajaran *Open Ended* terhadap hasil belajar siswa pada mata pelajaran Dasar-dasar Teknik Ketenagalistrikan kelas X TITL pada kompetensi dasar menentukan Alat-alat Tangan dan Alat Kelistrikan. Dan dapat disimpulkan penerapan model pembelajaran *Open Ended* memberikan pengaruh yang berbeda secara signifikan terhadap hasil belajar siswa kelas X TITL SMK N 5 Medan. Model pembelajaran *Open Ended* lebih efektif dibandingkan dengan model pembelajaran *Cooperative Learning,*

Kata kunci: *Cooperative Learning, Dasar-dasar Teknik Ketenagalistrikan, Hasil belajar, Open Ended.*

ABSTRACT

Aprida Valentina Hutagalung: Application of the Open Ended Learning Model in the Basics of Electrical Engineering Subject at SMK Negeri 5 Medan. Thesis. Faculty of Engineering. Medan State University. 2023

This thesis aims to find out (1). student learning outcomes taught using the Open Ended learning model of Basics of Electrical Engineering. (2) the learning outcomes of students taught using the Cooperative Learning model in the Basics of Electrical Engineering subject (3) the learning outcomes of students taught using the Open Ended learning model are higher in the Basics of Electrical Engineering subject.

The research used was an experimental design involving two groups, namely the experimental class and the control class. The data analysis techniques in this research are average value, standard deviation and variance, normality test, homogeneity test, and t test.

The results of this research show that if tcount > ttable it is found to be 1.692 and the table data is known to be 1.672. So, the data testing criteria obtained are tcount > ttable, namely 1.692 > 1.672, meaning that Ha is accepted, which means that there is an influence of the Open Ended learning model on student learning outcomes in the Basics of Electrical Engineering class X TITL on the basic competency of determining Hand Tools and Electrical Equipment. . And it can be concluded that the application of the Open Ended learning model has a significantly different influence on the learning outcomes of class X TITL students at SMK N 5 Medan. The Open Ended learning model is more effective compared to the Cooperative Learning model,

***Keywords**: Cooperative Learning, Basics of Electrical Engineering, Learning outcomes, Open Ended.*