

ABSTRAK

Beatrix Samosir, NIM. 4203121055. Pengaruh Model *Discovery Learning* Berbantuan PhET terhadap Hasil Belajar Siswa pada Materi Listrik Dinamis.

Penelitian ini bertujuan untuk mengetahui pengaruh model *discovery learning* berbantuan PhET terhadap hasil belajar fisika siswa SMA. Jenis penelitian ini adalah *quasi experiment*. Populasi penelitian ini seluruh siswa kelas XII MIPA SMA Swasta Eria Medan. Sampel penelitian ditentukan dengan teknik *simple random sampling* dan diberikan perlakuan berbeda. Kelas XII MIPA 1 sebagai kelas eksperimen dengan model *discovery learning* berbantuan PhET dan kelas XII MIPA 2 sebagai kelas kontrol dengan pembelajaran konvensional. Instrumen yang digunakan berupa tes hasil belajar dalam bentuk pilihan berganda sebanyak 20 soal. Hasil penelitian diperoleh bahwa nilai rata-rata *pretest* dan *posttest* kelas eksperimen adalah 43 dan 80 sedangkan kelas kontrol adalah 40 dan 73. Berdasarkan hasil uji t diperoleh kesimpulan bahwa ada pengaruh yang signifikan model *discovery learning* berbantuan PhET terhadap hasil belajar siswa pada materi listrik dinamis di kelas XII semester I SMA Swasta Eria Medan T.P 2024/2025.

Kata Kunci: *Discovery Learning*, *PhET*, Listrik Dinamis, Hasil Belajar

ABSTRACT

Beatrix Samosir, NIM. 4203121055. The Effect of the PhET-Assisted Discovery Learning Model on Student Learning Outcomes in Dynamic Electricity Material.

This study aims to determine the effect of discovery learning model assisted by PhET on physics learning outcomes of high school students. This type of research is a quasi experiment. The population of this study were all students of class XII MIPA SMA Swasta Eria Medan. The research sample was determined by simple random sampling technique and given different treatments. Class XII MIPA 1 as an experimental class with discovery learning model assisted by PhET and class XII MIPA 2 as a control class with conventional learning. The instrument used was a learning outcome test in the form of multiple choice of 20 questions. The results showed that the average pretest and posttest scores of the experimental class were 43 and 80 while the control class was 40 and 73. Based on the results of the t test, it was concluded that there was a significant effect of the discovery learning model assisted by PhET on student learning outcomes in dynamic electricity material in class XII semester I SMA Swasta Eria Medan T.P 2024/2025.

Keywords: *Discovery Learning, PhET, Dynamic Electricity, Learning Outcomes*

