# ABSTRAK

**Christian MD Simbolon, NIM 4193121031 (2023). Pengaruh Model *Problem Based Learning* Terhadap Hasil Belajar Siswa Pada Materi Usaha dan Energi Kelas X di SMA Negeri 11 Medan.**

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran problem based learning terhadap hasil belajar fisika siswa SMA. Penelitian ini termasuk jenis penelitian quasi experiment design dengan bentuk desain nonequivalent control group design dengan dua kelas yaitu kelas eksperimen dan kelas kontrol. Populasi penelitian ini terdisi dari 7 kelas dan pengambilan sampel dilakukan dengan cara cluster random sampling. Kelas X MIA 3 sebagai kelas eksperimen dan kelas X MIA 5 sebagai kelas kontrol yang masing-masing berjumlah 30 orang siswa. Instrumen yang digunakan dalam penelitian ini adalah tes hasil belajar dalam bentuk tes essay sebanyak 10 soal. Analisis data dilakukan dengan uji t. Hasil penelitian diperoleh bahwa nilai rata-rata pretest dan postest di kelas eksperimen masing-masing adalah 28.50 dan 76,33 sedangkan nilai rata-rata pretest dan postest di kelas kontrol masing-masing adalah 28,26 dan 66,50. Analisis data menggunakan uji t diperoleh kesimpulan bahwa ada pengaruh model pembelajaran problem based learning terhadap hasil belajar fisika siswa SMA.

**Kata Kunci**: problem based learning, hasil belajar.

# ABSTRACT

**Christian MD Simbolon, NIM 4193121031 (2023). The Effect Of The _Problem Based Learning_ Model on Student Learning Outcomes on Class X Work and Energy Materials at Public Senior High School 11 Medan.**

This study aims to determine the effect of the problem based learning model on high school students' physics learning outcomes. This research is a type of quasi-experimental design research with the nonequivalent control group design with two designclasses, namely the experimental class and the control class. The population of this study consisted of 7 classes and the sample was taken using cluster random sampling. Class X MIA 3 is the experimental class and class X MIA 5 is the control class, each consisting of 30 students. The instrument used in this study was a learning achievement test in the form of an essay test with 10 questions. Data analysis was performed by t-test. The results showed that the pretest and posttest average scores in the experimental class were 28.50 and 76.33, respectively, while the pretest and posttest average scores in the control class were 28.26 and 66.50, respectively. Data analysis using the t-test concluded that there was an influence of the problem-based learning model on the physics learning outcomes of high school students.

**Keywords**: problem based learning, learning outcomes