

## ABSTRAK

**FIRDA INDRIAN GALINGGING. Efektivitas Penggunaan Model Pembelajaran *Problem Based Learning* Terhadap Hasil Belajar Siswa Pada Materi Sistem Koordinasi Manusia di SMA Negeri 1 Sidikalang. Skripsi, Medan: Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Medan, Juli 2023.**

Penelitian ini bertujuan untuk mengetahui efektivitas model pembelajaran *Problem Based Learning*, pada materi sistem koordinasi manusia dalam sub materi sistem saraf manusia, kelas XI SMAN 1 Sidikalang Tahun pelajaran 2022/2023. Jenis penelitian ini adalah pre-experimental designs dengan model penelitian *one group pretest posttest*. Subjek penelitian adalah 35 orang siswa/i kelas XI MIA 3 di SMA Negeri 1 Sidikalang adapun sample diambil dengan *random sampling*. Instrumen penelitian yang digunakan adalah soal yang sudah valid dan bersifat reliabel. Hasil yang didapatkan,  $t_{hitung} = 15,48$  dan  $t_{tabel} = 2,03$ . Karena  $t_{hitung} > t_{tabel}$  yakni  $15,48 > 2,03$ , maka disimpulkan bahwa bahwa model pembelajaran *problem based learning* efektif digunakan pada pembelajaran biologi khususnya materi sistem koordinasi manusia dengan kriteria efektivitas yang diperoleh pada penelitian adalah tinggi, karena jumlah siswa yang mencapai skor  $\geq 80$  dalam skala 100 (80-100) sebanyak 26 orang.

Kata kunci : *Problem Based Learning*, Hasil belajar



## ABSTRACT

**FIRDA INDRIAN GALINGGING.** *The Effectiveness of the Problem Based Learning Learning Model on Student Learning Outcomes in the Human Coordination System Material at SMA Negeri 1 Sidikalang. Thesis, Medan: Faculty of Mathematics and Natural Sciences, State University of Medan, July 2023.*

*This study aims to determine the effectiveness of the Problem Based Learning learning model in the sub-material of the nervous system for class XI SMAN 1 Sidikalang in the 2022/2023 academic year. This type of research is a pre-experimental design with a one group pretest post test research model. The research subjects were 35 students of class XI MIA 3 at SMA Negeri 1 Sidikalang this sample was taken by random sampling method. The research instrument used is valid and reliable questions. Based on the results , $t_{count} = 15,48$  and  $t_{tabel} = 2,03 = 15.48$ . Because  $t_{coun} > t_{tabel}$  is  $15.48 > 2.03$ , it is concluded that the problem-based learning model is effectively used in science learning, especially material for human coordination systems with the effectiveness criteria obtained in research is high, because the number of students who achieve scores  $\geq 80$  on a scale of 100 (80-100) as many as 26 people.*

*Keywords:* Problem Based Learning, Learning outcome

