

ABSTRAK

Arvin Rigan Sitorus, NIM 4213141033 (2025). Pengaruh Model Pembelajaran *Problem Based Learning* terhadap Hasil Belajar dan Kemampuan Berpikir Kritis Siswa pada Materi Keanekaragaman Hayati di Kelas X SMAN 1 Percut Sei Tuan.

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *Problem Based Learning* terhadap hasil belajar dan kemampuan berpikir kritis siswa pada materi Keanekaragaman Hayati di kelas X SMAN 1 Percut Sei Tuan. Penelitian ini menggunakan metode eksperimen semu (*quasi experiment*) dengan desain *One-Group Pretest–Posttest Design*. Populasi dalam penelitian ini adalah seluruh siswa kelas X SMAN 1 Percut Sei Tuan, dan sampel penelitian ditetapkan pada kelas X-3 dengan jumlah 35 siswa. Teknik pengumpulan data dilakukan melalui tes hasil belajar (pretest dan posttest) untuk mengukur peningkatan hasil belajar, serta lembar observasi untuk menilai kemampuan berpikir kritis siswa selama proses pembelajaran. Hasil penelitian menunjukkan bahwa rata-rata nilai pretest sebesar 29,33 meningkat menjadi 81,99 pada posttest, yang berarti terjadi peningkatan hasil belajar yang signifikan setelah penerapan model *Problem Based Learning*. Selain itu, kemampuan berpikir kritis siswa juga meningkat dengan rata-rata skor 65,71 yang termasuk dalam kategori baik. Berdasarkan hasil uji hipotesis menggunakan *Dependent T-test*, diperoleh nilai signifikansi (*Sig. 2-tailed*) sebesar $0,000 < 0,05$, sehingga H_a diterima dan H_0 ditolak. Dengan demikian, dapat disimpulkan bahwa penerapan model pembelajaran *Problem Based Learning* berpengaruh signifikan terhadap hasil belajar dan kemampuan berpikir kritis siswa pada materi Keanekaragaman Hayati di kelas X SMAN 1 Percut Sei Tuan.

Kata Kunci: *Problem Based Learning*, hasil belajar, kemampuan berpikir kritis, keanekaragaman hayati

ABSTRACT

Arvin Rigan Sitorus, NIM 4213141033 (2025). The Effect of the Problem Based Learning Model on Students' Learning Outcomes and Critical Thinking Skills in the Topic of Biodiversity among Tenth-Grade Students of SMAN 1 Percut Sei Tuan.

This study aims to determine the effect of the Problem Based Learning model on students' learning outcomes and critical thinking skills in the subject of Biodiversity in Class X at SMAN 1 Percut Sei Tuan. This research uses a quasi-experimental method with a One-Group Pretest–Posttest Design. The population in this study is all Class X students at SMAN 1 Percut Sei Tuan, and the research sample was determined to be Class X-3 with a total of 35 students. Data were collected through learning achievement tests (pretest and posttest) to measure students' learning outcomes and observation sheets to assess students' critical thinking skills during the learning process. The results showed that the average pretest score was 29.33, which increased to 81.99 in the posttest, indicating a significant improvement after implementing the Problem Based Learning model. Furthermore, students' critical thinking skills also improved with an average score of 65.71, categorized as good. Based on the hypothesis test using the Dependent T-test, the significance value (Sig. 2-tailed) was $0.000 < 0.05$, indicating that H_a was accepted and H_o was rejected. Therefore, it can be concluded that the implementation of the Problem Based Learning model has a significant effect on students' learning outcomes and critical thinking skills in the Biodiversity topic among tenth-grade students of SMAN 1 Percut Sei Tuan.

Keywords: Problem Based Learning, learning outcomes, critical thinking skills, biodiversity