

ABSTRAK

Artha Dahliana Sihombing, NIM 4213141011 (2021). Perbandingan Hasil Belajar Siswa Pada Materi Virus dengan Menggunakan model *Problem Based Learning* dan *Discovery Learning* di kelas x sma negeri 1 Percut Sei Tuan.

Penelitian ini bertujuan untuk mengetahui perbandingan hasil belajar siswa antara penggunaan model *Problem Based Learning* (PBL) dan model *Discovery Learning* pada materi virus di kelas X SMA Negeri 1 Percut Sei Tuan. Penelitian ini merupakan jenis penelitian *quasi eksperiment* dengan desain *pre-test post-test non-equivalent group design*. Penelitian dilaksanakan pada bulan Februari sampai Oktober 2025 di SMA Negeri 1 Percut Sei Tuan. Populasi dalam penelitian ini adalah seluruh siswa kelas X SMA Negeri 1 Percut Sei Tuan, dengan sampel penelitian terdiri atas dua kelas eksperimen. Kelas eksperimen 1 menggunakan model *Problem Based Learning* (PBL), sedangkan kelas eksperimen 2 menggunakan model *Discovery Learning*. Pengumpulan data dilakukan melalui tes *pretest* dan *posttest* untuk mengukur hasil belajar siswa. Data yang diperoleh dianalisis menggunakan uji prasyarat berupa uji normalitas dan uji homogenitas, kemudian dilanjutkan dengan uji *Independent Sample T-Test* menggunakan SPSS untuk mengetahui peningkatan hasil belajar siswa. Hasil analisis menunjukkan bahwa data berdistribusi normal dan homogen. Hasil uji *Independent Sample T-Test* menunjukkan nilai Sig. (2-tailed) < 0,05, yang berarti terdapat perbedaan hasil belajar yang signifikan antara kedua kelompok. Rata-rata nilai *posttest* siswa pada kelas eksperimen 1 yang menggunakan model *Problem Based Learning* sebesar 81, sedangkan rata-rata nilai *posttest* siswa pada kelas eksperimen 2 yang menggunakan model *Discovery Learning* sebesar 78. Berdasarkan hasil tersebut, dapat disimpulkan bahwa model *Problem Based Learning* lebih efektif dibandingkan model *Discovery Learning* dalam meningkatkan hasil belajar siswa pada materi virus serta mampu mendorong keaktifan, motivasi, dan keterampilan berpikir kritis siswa dalam pembelajaran biologi.

Kata kunci : *Problem Based Learning, Discovery Learning, hasil belajar, biologi, virus, siswa SMA*

ABSTRACT

Artha Dahliana Sihombing, NIM 4213141011 (2021). Comparison of Student Learning Outcomes on Viruses Using Problem-Based Learning and Discovery Learning Models in Grade X of SMA Negeri 1 Percut Sei Tuan.

This study aims to compare students' learning outcomes between the use of the Problem Based Learning (PBL) model and the Discovery Learning model on virus material in Grade X at SMA Negeri 1 Percut Sei Tuan. This research employed a quasi-experimental method with a pre-test post-test non-equivalent group design. The study was conducted from February to October 2025 at SMA Negeri 1 Percut Sei Tuan. The population of this study consisted of all Grade X students, with the sample comprising two experimental classes. Experimental Class 1 was taught using the Problem Based Learning (PBL) model, while Experimental Class 2 was taught using the Discovery Learning model. Data were collected through pre-test and post-test instruments to measure students' learning outcomes. The data were analyzed using prerequisite tests, including normality and homogeneity tests, followed by an Independent Sample T-Test using SPSS to determine differences in learning outcomes between the two groups. The results of the analysis indicated that the data were normally distributed and homogeneous. The Independent Sample T-Test results showed that the Sig. (2-tailed) value was less than 0.05, indicating a statistically significant difference in learning outcomes between the two groups. The average post-test score of students in Experimental Class 1 taught using the Problem Based Learning model was 81, while the average post-test score of students in Experimental Class 2 taught using the Discovery Learning model was 78. Based on these findings, it can be concluded that the Problem Based Learning model is more effective than the Discovery Learning model in improving students' learning outcomes on virus material and is also able to enhance students' activeness, motivation, and critical thinking skills in biology learning.

Keywords: Problem Based Learning, Discovery Learning, learning outcomes, biology, virus, senior high school students