

ABSTRAK

Afrina Witaria, NIM. 4193321022 (2025). Pengaruh Model *Problem Based Learning* Berbantuan Media Interaktif Terhadap Hasil Belajar Siswa Pada Materi Suhu dan Kalor.

Penelitian ini bertujuan untuk mengetahui pengaruh model *Problem Based Learning* berbantuan media interaktif terhadap hasil belajar siswa kelas XI SMA. Jenis penelitian ini yaitu quasi experiment yang disajikan dalam desain berupa two group pretest-posttest. Populasi penelitian ini yaitu seluruh siswa kelas XI MIPA di SMA N 1 Rantau Selatan. Pengambilan sampel dilakukan dengan teknik simple random sampling yaitu kelas XI MIPA 1 dan XI MIPA 2 SMA N 1 Rantau Selatan. Kelas XI MIPA 1 sebanyak 36 siswa sebagai kelas eksperimen dengan pembelajaran menggunakan model *Problem Based Learning* berbantuan media interaktif dan kelas XI MIPA 2 sebanyak 36 siswa sebagai kelas kontrol dengan pembelajaran menggunakan model konvensional. Instrumen tes yang digunakan berupa tes hasil belajar dalam bentuk pilihan berganda sebanyak 15 soal dengan ranah kognitif dari C3-C6 yang sudah divalidasi. Data yang diperoleh dari tes yaitu pretest dan posttest akan diuji normalitas dan homogenitasnya. Uji normalitas diuji menggunakan uji *Lilifors* dan homogenitas diuji menggunakan uji *Fisher*. Berdasarkan hasil penelitian diperoleh bahwa nilai rata-rata pretest dan posttest kelas eksperimen adalah 47,66 dan 71,08 sedangkan kelas kontrol adalah 39,61 dan 50,86. Setelah dilakukan uji normalitas dan uji homogenitas, data nilai pretest dan posttest dari kedua kelas dinyatakan berdistribusi normal dan homogen. Berdasarkan uji t diperoleh nilai $t_{hitung} > t_{tabel} = 7,22 > 1,668$ maka dapat disimpulkan bahwa ada pengaruh model *Problem Based Learning* menggunakan media interaktif terhadap hasil belajar siswa pada materi suhu dan kalor di kelas XI SMA.

Kata Kunci: Problem Based Learning, Media Interaktif, Hasil Belajar, Suhu dan Kalor

ABSTRACT

Afrina Witaria, 4193321022 (2025). The Effect of the Problem Based Learning Model Assisted by Interactive Media on Students' Learning Outcomes in the Topic of Temperature and Heat.

This study aims to determine the effect of the Problem-Based Learning (PBL) model assisted by interactive media on the learning outcomes of class XI students in senior high school. This research is a quasi-experimental study presented in a two-group pretest-posttest design. The population consisted of all class XI science students at SMA N 1 Rantau Selatan. The sample was selected using simple random sampling, resulting in class XI MIPA 1 and class XI MIPA 2. Class XI MIPA 1, consisting of 36 students, served as the experimental class and was taught using the Problem-Based Learning model assisted by interactive media. Class XI MIPA 2, also consisting of 36 students, served as the control class and was taught using a conventional learning model. The test instrument used was a multiple-choice test consisting of 15 questions covering cognitive domains from C3 to C6, which had been validated. The data obtained from the pretest and posttest were analyzed for normality and homogeneity. Normality was tested using the Liliefors test, while homogeneity was tested using the Fisher test. The results showed that the average pretest and posttest scores of the experimental class were 47.66 and 71.08, respectively, while those of the control class were 39.61 and 50.86. After conducting normality and homogeneity tests, it was found that the data from both classes were normally distributed and homogeneous. Based on the t-test, the result showed that $t_{count} > t_{table} = 7.22 > 1.668$, indicating a significant effect. Therefore, it can be concluded that the Problem-Based Learning model assisted by interactive media has a significant effect on students' learning outcomes in the topic of temperature and heat in class XI.

Keywords: Problem-Based Learning, Interactive Media, Learning Outcomes, Temperature and Heat