

**Besteman Lahagu, NIM 4193121038 (2023), Pengaruh Model Pembelajaran Berbasis Masalah Berbantuan Video Animasi Terhadap Hasil Belajar Siswa Pada Materi Pokok Usaha Dan Energi di Kelas X Semester II SMA Negeri 11 Medan T.P. 2022/2023**

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran berbasis masalah berbantuan video animasi terhadap hasil belajar siswa pada materi pokok usaha dan energi. Jenis penelitian ini adalah *quasi eksperimen* (eksperimen semu) dengan desain *two group pretes postes design*. Populasi penelitian adalah seluruh siswa kelas X MIPA SMA Negeri 11 Medan T.P. 2022/2023 yang terdiri dari 7 kelas. Teknik pengambilan sampel dilakukan dengan cara *purpose sampling* terpilih kelas X MIPA 4 sebagai kelas eksperimen dan kelas X MIPA 1 sebagai kelas kontrol. Instrumen yang digunakan adalah tes hasil belajar berbentuk pilihan berganda sebanyak 20 soal dan lembar observasi aktivitas siswa. Hasil penelitian diperoleh nilai rata-rata pretes kelas eksperimen dan kelas kontrol masing-masing 36,83 dan 33,83. Hasil pengujian hipotesis diperoleh  $t_{hitung} < t_{tabel}$  yaitu  $1,4191 < 2,002$  pada taraf signifikan  $\alpha = 0,05$  dan  $dk = 58$ , dinyatakan  $H_0$  diterima atau kedua kelas memiliki kemampuan awal yang sama. Diberi perlakuan, diperoleh nilai rata-rata postes kelas eksperimen dengan pembelajaran berbasis masalah 76,8 dan kelas kontrol dengan pembelajaran konvensional 56. Hasil pengujian hipotesis diperoleh  $t_{hitung} (6,35) > t_{tabel} (1,671)$  pada taraf signifikan  $\alpha = 0,05$ , dinyatakan bahwa  $H_a$  diterima berarti ada pengaruh yang signifikan terhadap hasil belajar siswa setelah diberikan perlakuan model pembelajaran berbasis masalah berbantuan video animasi pada materi usaha dan energi di kelas X SMA Negeri 11 Medan.

**Kata Kunci:** Pembelajaran Berbasis Masalah, Hasil Belajar.

**Besteman Lahagu, NIM 4193121038 (2023), “The Effect Of Problem-Based Learning Model Assisted By Animated Videos On Student Learning Outcomes In The Subject Matter Of Work And Energy for Class X SMA Negeri 11 Medan T.P. 2022/2023”**

**ABSTRACT**

This study aims to determine the effect of problem-based learning model assisted by animated videos on student learning outcomes in the subject matter of work and energy. This type of research is quasi-experimental with a two-group pretest-posttest design. The research population was all students of class X MIPA SMA Negeri 11 Medan T.P. 2022/2023 which consists of 7 classes. The sampling were taken by purposive sampling, the classes taken were class X MIPA 4 as the experimental class and class X MIPA 1 as the control class. The instrument used was a multiple-choice test of learning outcomes in the form of 20 questions and student activity observation sheets. The results showed that the average pretest scores for the experimental class and the control class were 36.83 and 33.83, respectively. The results of testing the hypothesis obtained  $t_{\text{count}} < t_{\text{table}}$ , namely  $1.4191 < 2.002$  at the  $\alpha$  significance level = 0.05 and  $dk = 58$ , otherwise  $H_0$  is accepted or both classes have the same initial abilities. After implementation, the average post-test score obtained for the experimental class with problem-based learning was 76.8 and the control class with conventional learning was 56. The results of testing the hypothesis obtained  $t_{\text{count}} (6.35) > t_{\text{table}} (1.671)$  at the  $\alpha$  significance level = 0.05, it was stated that  $H_a$  was accepted meaning there was a significant effect on student learning outcomes after being given the implementation of problem-based learning model assisted by animated videos on the subject matter of work and energy in class X SMA Negeri 11 Medan.

Keywords: Problem Based Learning, Learning Outcomes.