

## ABSTRAK

**Astri Ningsih, NIM 4202131008 (2024). Penerapan Model Pembelajaran *Problem Based Learning* (PBL) Berbantuan Media *Macromedia Flash* Terhadap Aktivitas Belajar dan Hasil Belajar Siswa SMA Pada Materi Laju Reaksi.**

Penelitian ini bertujuan untuk mengetahui penerapan model pembelajaran *Problem Based Learning* (PBL) berbantuan media *Macromedia Flash* terhadap Aktivitas dan Hasil Belajar Siswa SMA Pada Materi Laju Reaksi. Populasi penelitian ini adalah seluruh kelas XI MIA MAS Al-Asy'ariyah Medan Krio yang terdiri dari 4 kelas. Sampel penelitian ini adalah 2 kelas yang diperoleh menggunakan teknik *random sampling*. Desain penelitian ini menggunakan *pretest-posttest control group desain*. Instrumen penelitian yang digunakan berupa instrument tes dan non-tes. Uji hipotesis yang digunakan yaitu uji t pihak kanan. Hasil perhitungan data aktivitas belajar diperoleh  $t_{hitung} 2,36 > t_{tabel} 1,70$ , maka Ha diterima dan Ho ditolak yang berarti Aktivitas belajar siswa yang diajarkan dengan model pembelajaran PBL berbantuan media *Macromedia Flash* lebih tinggi daripada aktivitas belajar siswa yang diajarkan dengan model pembelajaran PBL berbantuan media PPT. Data hasil belajar siswa menunjukkan bahwa  $t_{hitung} 4,43 > t_{tabel} 1,70$ , maka Ho ditolak dan Ha diterima yang berarti Hasil belajar siswa yang diajarkan dengan model pembelajaran PBL berbantuan media *Macromedia Flash* lebih tinggi daripada hasil belajar siswa yang diajarkan dengan model pembelajaran PBL berbantuan media PPT, dan berdasarkan uji korelasi didapatkan ada korelasi yang signifikan antara aktivitas dan hasil belajar siswa yang diajarkan dengan model *Problem Based Learning* (PBL) berbantuan media *Macromedia Flash* pada materi Laju Reaksi dengan kontribusi aktivitas belajar sebesar 64%.

**Kata Kunci :** *Model Problem Based Learning* (PBL), *Macromedia Flash*, Hasil Belajar, Aktivitas Belajar, Laju Reaksi.

## **ABSTRACT**

**Astri Ningsih, NIM 4202131008 (2024). Application of the Problem Based Learning (PBL) Learning Model Assisted by Macromedia Flash Media on Learning Activities and Learning Outcomes of High School Students on Reaction Rate Material.**

This research aims to determine the application of the Problem Based Learning (PBL) learning model assisted by Macromedia Flash media on the activities and learning outcomes of high school students on reaction rate material. The population of this study was all class XI MIA MAS Al-Asy'ariyah Medan Krio which consisted of 4 classes. The samples for this research were 2 classes obtained using random sampling techniques. This research design uses a pretest-posttest control group design. The research instruments used are test and non-test instruments. The hypothesis test used is the right-sided t test. The results of calculating learning activity data obtained  $t_{count} 2.36 > t_{table} 1.70$ , then  $H_a$  was accepted and  $H_0$  was rejected, which means that student learning activities taught using the PBL learning model assisted by Macromedia Flash media were higher than student learning activities taught using the PBL learning model assisted PPT media. Data on student learning outcomes shows that  $t_{count} 4.43 > t_{table} 1.70$ , then  $H_0$  is rejected and  $H_a$  is accepted, which means that the learning outcomes of students taught using the PBL learning model assisted by Macromedia Flash media are higher than the learning outcomes of students taught using the PBL learning model assisted PPT media, and based on the correlation test, it was found that there was a significant correlation between activities and student learning outcomes taught using the Problem Based Learning (PBL) model assisted by Macromedia Flash media on Reaction Rate material with a learning activity contribution of 64%.

**Keywords:** Problem Based Learning (PBL) Model, Macromedia Flash, Learning Outcomes, Learning Activities, Reaction Rate.