

ABSTRAK

Widya Aryani, NIM 4203331028 (2024). Penerapan Model Pembelajaran *Problem Based Learning* (PBL) Berbantuan Media Video *Powtoon* Terhadap Aktivitas dan Hasil Belajar Siswa Pada Materi Sistem Periodik Unsur.

Penelitian ini bertujuan untuk mengetahui penerapan model pembelajaran *Problem Based Learning* (PBL) Berbantuan Media Video *Powtoon* terhadap aktivitas dan hasil belajar siswa pada materi Sistem Periodik Unsur. Desain penelitian ini menggunakan *pretest-posttest control group design*. Populasi dalam penelitian ini adalah seluruh kelas X IPA SMAS Dharmawangsa Medan yang terdiri dari 9 kelas. Sampel dalam penelitian ini adalah 2 kelas yaitu kelas XI MIA 7 sebagai eksperimen dan kelas XI MIA 4 sebagai kelas kontrol. Instrumen yang digunakan dalam penelitian ini adalah instrumen tes berupa soal pilihan berganda dan instrumen non tes berupa observasi aktivitas belajar. Hasil uji t pihak kanan diperoleh bahwa $t_{hitung} > t_{tabel} = 3,6186 > 1,6723$, maka H_a diterima yang berarti hasil belajar siswa yang diajarkan dengan model pembelajaran PBL berbantuan Media Video *Powtoon* lebih tinggi daripada hasil belajar siswa yang diajarkan dengan model pembelajaran PBL berbantuan Media Powerpoint pada materi Sistem Periodik Unsur. Data aktivitas belajar menunjukkan bahwa nilai $t_{hitung} > t_{tabel} = 1,8078 > 1,6723$, maka H_a diterima yang berarti aktivitas belajar siswa yang diajarkan dengan model PBL berbantuan Media Video *Powtoon* lebih tinggi daripada hasil belajar siswa yang diajarkan dengan model pembelajaran PBL berbantuan Media Powerpoint pada materi Sistem Periodik Unsur, dan hasil uji korelasi menunjukkan bahwa nilai $r_{hitung} > r_{tabel} = 0,738 > 0,361$, H_a diterima yang berarti ada korelasi yang signifikan antara aktivitas dengan hasil belajar siswa yang diajarkan dengan model PBL berbantuan Media Video *Powtoon* pada materi Sistem Periodik Unsur dengan koefisien determinasi sebesar 54%.

Kata Kunci: Model *Problem Based Learning*, *Powtoon*, Hasil Belajar, Aktivitas Belajar, Sistem Periodik Unsur.

ABSTRACT

Widya Aryani, NIM 4203331028 (2024). Application of the Problem Based Learning (PBL) Learning Model Assisted by Powtoon Video Media to Student Activities and Learning Outcomes on the Periodic System of Elements material.

This study aims to determine the application of the Problem Based Learning (PBL) learning model Assisted by Powtoon Video Media to student activities and learning outcomes on the Periodic System of Elements material. This research design uses a form of pretest – posttest control group design. The population in this study was the entire class X IPA SMAS Dharmawangsa Medan which consisted of 9 classes. The samples in this study were 2 classes, namely class XI MIA 7 as an experiment and class XI MIA 4 as a control class. The instruments used in this study were test instruments in the form of multiple-choice questions and non-test instruments in the form of observation of learning activities. The results of the right-party t test were obtained that $t_{\text{count}} > t_{\text{table}} = 3.6186 > 1.6723$, then H_a was accepted which means that the learning outcomes of students taught with the PBL learning model assisted by Powtoon Video Media are higher than the learning outcomes of students taught with the PBL assisted by Powerpoint Media on the material of the Periodic System of Elements. Learning activity data shows that the value of $t_{\text{count}} > t_{\text{table}} = 1.8078 > 1.6723$, then H_a is accepted which means that student learning activities taught with the PBL model assisted by Powtoon Video Media are higher than the learning outcomes of students taught with the PBL assisted by Powerpoint Media on the material of the Periodic System of Elements, and the correlation test showed that the value of $r_{\text{calculated}} > r_{\text{table}} = 0.738 > 0.361$, H_a received which means there is a significant correlation between activities and student learning outcomes taught with the PBL model assisted by Powtoon Video Media on the material of the Periodic System of Elements with a coefficient of determination of 54%.

Keywords: Problem Based Learning Model, Powtoon, Learning Outcomes, Learning Activities, Periodic System of Elements.

