

ABSTRAK

Winda D E Simbolon, NIM 4203331031 (2024). Pengaruh Media Pembelajaran Berbasis *Problem Based Learning* Dan Motivasi Terhadap Hasil Belajar Siswa Pada Materi Sistem Periodik Unsur Sma Kelas X

Penelitian ini bertujuan untuk mengetahui apakah ada perbedaan hasil belajar siswa yang diajarkan dengan *powtoon* berbasis PBL dengan canva berbasis PBL, mengetahui apakah ada perbedaan hasil belajar siswa dengan motivasi belajar yang bervariasi pada materi Sistem Periodik Unsur, dan melihat apakah ada interaksi antara media dan motivasi belajar terhadap hasil belajar peserta didik. Penelitian ini menggunakan metode eksperimen semu dengan desain factorial 2x2, populasi dalam adalah seluruh peserta didik kelas X di SMA N 14 Medan. Sampel diambil secara random cluster sampling sebanyak 2 kelas dengan jumlah sampel 48 orang. Uji hipotesis dilakukan dengan ANOVA dua jalur pada taraf $F_{\alpha(0,05)}$. Untuk media pembelajaran *powtoon* berbasis PBL dan Canva berbasis PBL harga $F_{hitung} 45,77 > F_{tabel} 4,06$ yang artinya H_a diterima, ada perbedaan hasil belajar yang diajarkan dengan *powtoon* berbasis PBL dengan canva berbasis PBL pada materi Sistem Periodik Unsur. Pada motivasi belajar yang diperoleh dari media *powtoon* berbasis PBL dan canva berbasis PBL $F_{hitung} 42,38 > F_{tabel} 4,06$ yang artinya H_a diterima, ada perbedaan hasil belajar siswa dengan motivasi belajar bervariasi pada sistem periodik unsur. Selanjutnya untuk interaksi antara media dengan motivasi belajar diperoleh $F_{hitung} 4,709 > F_{tabel} 4,06$ yang artinya, ada interaksi antara media pembelajaran dengan motivasi belajar siswa pada materi sistem periodik unsur.

Kata kunci: Media pembelajaran *Powtoon* dan Canva Berbasis PBL, Motivasi Belajar, Hasil Belajar, dan Sistem Periodik Unsur.

ABSTRACT

Winda D E Simbolon, NIM 4203331031 (2024). The Effect of *Learning Media Based on Problem Based Learning* and Motivation on Student Learning Outcomes on the Material of the Periodic System of Elements of Senior High School Class X.

This study aims to determine whether there are differences in learning outcomes of students taught with PBL-based *powtoon* with PBL-based canva, determine whether there are differences in learning outcomes of students with varied learning motivation on Periodic System of Elements material, and see if there is an interaction between media and learning motivation on student learning outcomes. This study used a pseudo-experimental method with a 2x2 factorial design, the population in was all X grade students at SMA N 14 Medan. The sample was taken by random cluster sampling as many as 2 classes with a total sample of 48 people. Hypothesis testing was carried out with two-way ANOVA at the level of $F_{\alpha}(0,05)$. For PBL-based *powtoon* learning media and PBL-based Canva, the price of $F_{count} 45.77 > F_{tabel} 4.06$ which means H_a is accepted, there are differences in learning outcomes taught with PBL-based *powtoon* with PBL-based canva on Periodic System of Elements material. On learning motivation obtained from PBL-based *powtoon* media and PBL-based canva $F_{hitung} 42.38 > F_{tabel} 4.06$ which means H_a is accepted, there are differences in student learning outcomes with varied learning motivation on the elemental periodic system. Furthermore, for the interaction between media and learning motivation, $F_{hitung} 4.709 > F_{tabel} 4.06$ is obtained, which means that there is an interaction between learning media and student learning motivation on the material of the periodic system of elements.

Keywords: PBL-based *Powtoon* and Canva learning media, Learning Motivation, Learning Outcomes, and Periodic System of Elements.