ABSTRAK

Nova Uli Br Damanik, 4193331021 (2023). Pengaruh Model Pembelajaran *Project Based Learning* Berbantuan E-modul Terhadap Aktivitas dan Hasil Belajar Siswa Kelas X SMA Pada Larutan Elektrolit dan Nonelektrolit.

Penelitian ini bertujuan untuk mengetahui peningkatan aktivitas, hasil belajar dan korelasi antara aktivitas dengan hasil belajar siswa yang diajarkan dengan model pembelajaran *Project Based Learning* (PjBL) berbantuan e-modul kelas X SMA pada materi larutan elektrolit dan nonelektrolit. Populasi dalam penelitian ini adalah siswa kelas X IPA SMA Negeri Rantauprapat yang berjumlah 6 kelas dengan total 216 siswa yang diambil dengan teknik *random sampling* diperoleh 2 kelas yaitu kelas eksperimen dan kelas kontrol. Penelitian ini menggunakan instrumen tes dan non tes berupa lembar observasi aktivitas belajar siswa yang telah diujicobakan dan telah valid. Data yang diperoleh diuji normalitas dan homogenitas. Berdasarkan hasil pengolahan data yang telah dianalisis terdapat nilai hasil belajar t_{hitung} =9,714 dan t_{tabel} = 1,66, aktivitas diperoleh t_{hitung} = 6,069 dan t_{tabel} = 1,66. Dimana $t_{hitung} > t_{tabel}$ bahwa Ha diterima dan H_0 ditolak sehingga dapat disimpulkan bahwa ada pengaruh model pembelajaran *Project Based Learning* (PjBL) berbantuan e-modul kelas X SMA pada materi larutan elektrolit dan nonelektrolit. Uji korelasi dilakukan untuk mengetahui korelasi signifikan antara aktivitas dengan hasil belajar siswa. Hasil penelitian menunjukkan bahwa $r_{hitung} > r_{tabel}$ (0,929 > 0,329) maka H_0 ditolak. Dengan demikian, terdapat korelasi korelasi signifikan antara aktivitas dengan hasil belajar siswa berbantuan e-modul kelas X SMA pada materi larutan elektrolit dan nonelektrolit.

Kata Kunci : *Project Based Learning. E-modul, Aktivitas Belajar Siswa, Hasil Belajar Siswa, Larutan Elektrolit dan Nonelektrolit.*

ABSTRACT

Nova Uli Br Damanik, 4193331021 (2023). The Effect of Project Based Learning Model Assisted by E-module on Activity and Learning Outcomes of Class X High School Students on Electrolyte and Nonelectrolyte Solutions.

This study aims to determine the activity, learning outcomes and the correlation between activity and learning outcomes of students taught with the Project Based Learning (PjBL) learning model assisted by class X SMA e-modules on the material of electrolyte and non-electrolyte solutions. The population in this study were students of class X IPA SMA Negeri Rantauprapat which amounted to 6 classes with a total of 216 students taken with random sampling technique obtained 2 classes, namely the experimental class and the control class. This study used test and non-test instruments in the form of student learning activity observation sheets that had been tested and were valid. The data obtained were tested for normality and homogeneity. Based on the results of data processing that has been analyzed, there is a value of learning outcomes thitung = 9.714 and ttabel = 1.66, activity obtained thitung = 6.069 and ttabel = 1.66. Where thitung>ttabel that Ha is accepted and H0 is rejected so it can be concluded that there is an effect of the Project Based Learning (PjBL) learning model assisted by class X SMA e-modules on the material of electrolyte and non-electrolyte solutions. The correlation test was conducted to determine the significant correlation between activity and student learning outcomes. The results showed that rcount> rtable (0.929> 0.329) then H0 was rejected. Thus, there is a significant correlation between activity and student learning outcomes assisted by e-modules in class X SMA on the material of electrolyte and non-electrolyte solutions.

Keyword : *Project Based Learning, E-module, Student Learning Activity, Student Learning, Electrolyte and Nonelectrolyte Solutions.*