

ABSTRAK

Cessya Noviandra Br Tarigan, NIM 418213002 (2018), Pengaruh Model Pembelajaran Problem Based Learning Menggunakan Macromedia Flash Terhadap Aktivitas Dan Hasil Belajar Ikatan Kimia Siswa

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran Problem Based Learning (PBL) dengan menggunakan Macromedia Flash terhadap aktivitas dan hasil belajar ikatan kimia siswa. Populasi dalam penelitian ini adalah siswa kelas X IPA SMA Negeri 2 Tebing Tinggi yang berjumlah 7 kelas dengan total 245 siswa yang diambil dengan teknik random sampling diperoleh 2 kelas yaitu eksperimen dan kontrol. Instrumen yang digunakan adalah instrumen tes pilihan berganda sebanyak 20 soal dan non tes berupa lembar observasi aktivitas dan angket. Data yang diperoleh diuji normalitas dan homogenitas untuk mengetahui data kedua sampel berdistribusi normal dan homogen. Kemudian dilakukan uji t (pihak kanan) untuk mengetahui pengaruh model dan media terhadap hasil belajar dan aktivitas dari kedua kelas dan uji t dua pihak untuk mengetahui perbedaan n-gain siswa dengan taraf signifikan 0,05 dan derajat kebebasan (dk) = 70. Berdasarkan hasil pengolahan data yang telah dianalisis terdapat kriteria nilai hasil belajar $t_{hitung} = 4,393$ dan $t_{tabel} = 1,667$, aktivitas diperoleh $t_{hitung} = 4,619$ dan $t_{tabel} = 1,667$ dan uji t-gain diperoleh $t_{hitung} = 3,4782$ dan $t_{tabel} = 1,995$, dimana $t_{hitung} > t_{tabel}$ yang menunjukkan bahwa H_0 ditolak dan H_a diterima sehingga dapat disimpulkan bahwa ada pengaruh model Problem Based Learning menggunakan Macromedia Flash terhadap aktivitas dan hasil belajar ikatan kimia siswa, dimana nilai rata-rata hasil belajar, aktivitas dan n-gain kelas eksperimen lebih baik dibanding kelas kontrol, yaitu hasil belajar sebesar 81,11 dan 72,08; n-gain 0,64 dan 0,56; aktivitas 80,14 dan 72,08 dan nilai respon siswa sebesar 82,34% dengan kategori sangat baik yang berarti bahwa macromedia flash sangat baik dalam meningkatkan hasil belajar dan aktivitas siswa.

Kata Kunci: PBL, Macromedia Flash, Aktivitas, Hasil belajar



ABSTRACT

Cessya Noviandra Br Tarigan, NIM 418213002 (2018), The Effect of Problem Based Learning Learning Model Using Macromedia Flash on Students' Chemistry Bonding Activities and Learning Outcomes

This study aims to determine the effect of Problem Based Learning (PBL) learning model using Macromedia Flash on students' chemical bonding activities and learning outcomes. The population in this study were students of class X IPA SMA Negeri 2 Tebing Tinggi which amounted to 7 classes with a total of 245 students taken by random sampling technique obtained 2 classes namely experimental and control. The instrument used is a multiple choice test instrument with 20 questions and non-test in the form of activity observation sheets and questionnaires. The data obtained were tested for normality and homogeneity to determine the data of the two samples were normally distributed and homogeneous. Then a t-test (right side) was conducted to determine the effect of the model and media on the learning outcomes and activities of the two classes and a two-party t-test to determine the difference in students' n-gain with a significant level of 0.05 and degrees of freedom (dk) = 70. Based on the results of data processing that has been analyzed there are criteria for learning outcomes $t_{count} = 4.393$ and $t_{table} = 1.667$, activity obtained $t_{count} = 4.619$ and $t_{table} = 1.667$ and t-gain test obtained $t_{count} = 3.4782$ and $t_{table} = 1.995$, where $t_{count} > t_{table}$ which indicates that H_0 is rejected and H_a is accepted so that it can be concluded that there is an effect of the Problem Based Learning model using Macromedia Flash on the activities and learning outcomes of students' chemical bonds, where the average value of learning outcomes, activities and n-gain in the experimental class is better than the control class, namely the results study amounted to 81.11 and 72.08; n-gain 0.64 and 0.56; activities of 80.14 and 72.08 and the student response value of 82.34% with a very good category which means that macromedia flash is very good in improving student learning outcomes and activities.

Keywords: PBL, Macromedia Flash, Activities, Learning Outcomes

