

ABSTRAK

Amanda Zefanya Situmeang, NIM 4203331008 (2024). Perbedaan Model *Problem Based Learning* (PBL) Dan *Discovery Learning* (DL) Terhadap Hasil belajar dan Motivasi belajar Peserta didik Pada Materi Ikatan Kimia di SMA.

Penelitian ini bertujuan untuk mengetahui perbedaan model *Problem Based Learning* (PBL) dan *Discovery Learning* (DL) terhadap hasil belajar dan motivasi belajar peserta didik pada materi Ikatan kimia di SMA, serta korelasi antara hasil belajar dan motivasi belajar. Populasi penelitian adalah seluruh siswa kelas X SMAN 11 MEDAN. Sampel dalam penelitian ini terdiri dari 2 kelas, yaitu kelas eksperimen I (X-3) dengan menggunakan model *Problem Based Learning* dan kelas eksperimen II (X-7) dengan model *Discovery Learning*. Instrumen yang digunakan dalam penelitian ini adalah instrumen tes dan non tes. Data hasil belajar siswa terlebih dahulu diuji normalitas dan homogenitasnya, dimana hasil yang didapat kedua dari sampel tersebut berdistribusi normal dan homogen. Uji hipotesis dilakukan dengan menggunakan uji Independent sampel t-test, hasil penelitian ini menunjukkan pada hipotesis I dihasilkan nilai sig sebesar 0,038 pada taraf signifikan 5% ($\alpha = 0,05$). Karena nilai Sig. < ($\alpha = 0,05$) maka H_a diterima dengan nilai rata-rata *post-test* kelas eksperimen I sebesar 74,83 dan kelas eksperimen II sebesar 79,67. Dengan demikian, terdapat perbedaan hasil belajar siswa yang dibelajarkan menggunakan model *Problem Based Learning* dan *Discovery Learning*. Sedangkan hipotesis II diperoleh nilai sig sebesar 0,038 pada taraf signifikan 5% Sig. < ($\alpha = 0,05$) maka H_a diterima dengan nilai rata-rata motivasi belajar siswa kelas eksperimen I sebesar 67,67 dan kelas eksperimen II sebesar 72,5. Dengan demikian, menunjukkan bahwa adanya perbedaan motivasi belajar yang dibelajarkan menggunakan model *Problem Based Learning* dan *Discovery Learning*. Dengan demikian, menunjukkan adanya perbedaan motivasi belajar siswa yang dibelajarkan dengan model *Problem Based Learning* dan *Discovery Learning*. Untuk hipotesis III diperoleh nilai Sig. sebesar 0,000 pada taraf signifikan 5% untuk kelas eksperimen I dan II. dengan nilai rata-rata hasil belajar dan motivasi belajar siswa kelas eksperimen I sebesar 74,83 dan 67,67 selanjutnya untuk kelas eksperimen II diperoleh nilai rata-rata hasil belajar dan motivasi belajar siswa sebesar 79,67 dan 72,5. Dengan demikian, hasilnya menunjukkan adanya korelasi antara motivasi belajar siswa dan hasil belajar siswa yang dibelajarkan menggunakan model *Problem Based Learning* dan *Discovery Learning*.

Kata Kunci : Hasil Belajar, Motivasi Belajar, *Problem Based Learning*, *Discovery Learning*, Ikatan Kimia

ABSTRACT

Amanda Zefanya Situmeang, NIM 4203331008 (2024). Differences between Problem Based Learning (PBL) and Discovery Learning (DL) Models on Learning Outcomes and Students Learning Motivation on Chemical Bonding Material in High School.

This research aims to determine the differences between Problem Based Learning (PBL) and *Discovery Learning* (DL) models on learning outcomes and students' learning motivation on Chemical Bonds material in high school, as well as the correlation between learning outcomes and learning motivation. The research population was all class X students of SMAN 11 MEDAN. The sample in this research consisted of 2 classes, namely experimental class I (X-3) using the Problem Based Learning model and experimental class II (X-7) using the *Discovery Learning* model. The instruments used in this research were test and non-test instruments. The student learning outcomes data were first tested for normality and homogeneity, where the results obtained from both samples were normally distributed and homogeneous. Hypothesis testing was carried out using the independent sample t-test, the results of this research showed that hypothesis I produced a sig value of 0.038 at a significance level of 5% ($\alpha = 0.05$). Because the Sig value. $< (\alpha = 0.05)$ then H_a is accepted with an average post-test score for experimental class I of 74.83 and experimental class II of 79.67. Thus, there are differences in student learning outcomes taught using the Problem Based Learning and *Discovery Learning* models. Meanwhile, hypothesis II obtained a sig value of 0.038 at a significance level of 5% Sig. $< (\alpha = 0.05)$ then H_a is accepted with an average value of learning motivation for experimental class I students of 67.67 and experimental class II of 72.5. Thus, it shows that there are differences in learning motivation when taught using the Problem Based Learning and *Discovery Learning* models. Thus, it shows that there are differences in students' learning motivation who are taught using the Problem Based Learning and *Discovery Learning* models. For hypothesis III, the Sig value is obtained. of 0.000 at the 5% significance level for experimental classes I and II. with the average value of learning outcomes and learning motivation for experimental class I students being 74.83 and 67.67, then for experimental class II the average value of learning outcomes and student motivation was 79.67 and 72.5. Thus, the results show that there is a correlation between student learning motivation and student learning outcomes taught using the Problem Based Learning and *Discovery Learning* models.

Keywords: Learning Outcomes, Learning Motivation, Problem Based Learning, Discovery Learning, Chemical Bonds