

ABSTRAK

Sonia Arga Novita Mangunsong (4183311055). Pengaruh Model Pembelajaran *Problem Based Learning* dan *Discovery Learning* Berbantuan Aplikasi *GeoGebra* Terhadap Hasil Belajar Siswa Kelas VII SMP

Penelitian ini bertujuan untuk mengetahui (1) ada perbedaan hasil belajar siswa yang diajarkan melalui model *Problem Based Learning* dan *Discovery Learning* dengan berbantuan aplikasi *GeoGebra* (2) proses jawaban siswa. Populasi dalam penelitian ini adalah seluruh kelas VII SMP Negeri 1 Tigalingga T.A 2021/2022. Pengambilan sampel dilakukan secara acak (random sampling) dengan mengambil secara acak dari 9 kelas. Penelitian ini menggunakan instrument dalam bentuk essay yaitu *posttest* sebanyak 4 soal yang digunakan untuk mengetahui hasil belajar siswa. Sebelum melakukan uji hipotesis, terlebih dahulu dilakukan uji homogenitas dan normalitas. Dari analisis data yang dilakukan, diperoleh nilai rata-rata kelas *Problem Based Learning* sebesar 79,68 dan nilai rata-rata kelas *Discovery Learning* sebesar 74,02. Uji hipotesis dalam penelitian ini menggunakan uji *t*. Hasil uji *t* diperoleh nilai *sig 2-tailed* 0,031. Oleh karena nilai $\text{sig} < 0,05$, artinya H_0 ditolak, H_a diterima maka dapat disimpulkan bahwa terdapat perbedaan antara hasil belajar siswa kelas VII SMP Negeri 1 Tigalingga yang diajarkan dengan model pembelajaran *problem based learning* dan *discovery learning* dengan berbantuan aplikasi *geogebra*.

Kata Kunci : *Problem Based Learning, Discovery Learning, GeoGebra*



ABSTRACT

Sonia Arga Novita Mangunsong (4183311055). The Influence of Problem Based Learning and Discovery Learning Models Assisted by GeoGebra Applications on the Learning Outcomes of Class VII Junior High School Students

This study aims to find out (1) there are differences in student learning outcomes taught through Problem Based Learning and Discovery Learning models with the help of the GeoGebra application (2) the student's answer process. The population in this study were all seventh graders of SMP Negeri 1 Tigalingga T.A 2021/2022. Sampling was done randomly (random sampling) by taking randomly from 9 classes. This study uses an instrument in the form of an essay, namely posttest as many as 4 questions which are used to determine student learning outcomes. Before testing the hypothesis, the homogeneity and normality tests were first carried out. From the data analysis, the average value of the Problem Based Learning class was 79.68 and the average value of the Discovery Learning class was 74.02. Test the hypothesis in this study using the t test. The results of the t test obtained a 2-tailed sig value of 0.031. Because the value of $\text{sig} < 0.05$, meaning that H_0 is rejected, H_a is accepted, it can be concluded that there is a difference between the learning outcomes of class VII students of SMP Negeri 1 Tigalingga who are taught with problem based learning and discovery learning with the help of geogebra applications.

Keywords : *Problem Based Learning, Discovery Learning, GeoGebra*

