

ABSTRAK

Samuel Tondang, NIM 4182111026 (2018). Pengaruh Model Pembelajaran Search Solve Create and Share (SSCS) Berbantuan Geogebra Terhadap Kemampuan Representasi Matematis Siswa Kelas XI SMA Negeri 6 Medan.

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *Search Solve Create and Share* (SSCS) berbantuan Geogebra terhadap kemampuan representasi matematis siswa Kelas XI SMA Negeri 6 Medan. Jenis penelitian ini adalah penelitian kuasi eksperimen kuantitatif. Subjek penelitian ini adalah siswa kelas XI SMA Negeri 6 Medan dengan menggunakan 1 kelas yang berjumlah 36 orang. Objek penelitian ini adalah kemampuan representasi matematis siswa dengan menggunakan model pembelajaran Search Solve Create and Share (SSCS) Berbantuan Geogebra pada materi trigonometri.

Sebelum uji hipotesis dilakukan, maka data hasil *pretest* dan *posttest* yang sudah didapatkan akan di lakukan uji prasyarat terlebih dahulu. Uji prasyarat yang digunakan adalah uji normalitas dan uji homogenitas. Sesudah uji normalitas dilaksanakan maka didapat jika data berdistribusi normal, pada *pretest* dan *posttest* data berdistribusi normal. Pada uji homogenitas dilakukan didapatkan bahwa data hasil *pretest* dan juga *posttest* kemampuan representasi matematis peserta didik adalah homogen, maka dari itu peneliti melanjutkan dengan uji hipotesis, yaitu Uji-t.

Dari hasil uji hipotesis yang dilakukan menggunakan data *pretest* dan *posttest* kelas eksperimen ini, didapatkan $t_{\text{hitung}} > t_{\text{tabel}}$ atau $10,827 > 1,689$ sehingga H_0 ditolak. Diketahui bahwa nilai $\text{Sig.}(2\text{-tailed})$ sebesar $0,000 < 0,05$ yang berarti bahwa H_0 ditolak dan H_1 diterima. Berdasarkan hasil penelitian dan pembahasan yang dilakukan didapatkan bahwa kemampuan representasi matematis yang paling tinggi adalah representasi teks tertulis. Sehingga dapat disimpulkan bahwa Model pembelajaran *Search Solve Create and Share* berbantuan Geogebra berpengaruh terhadap kemampuan representasi matematis siswa kelas XI SMA Negeri 6 medan.

Kata Kunci :SSCS, Representasi Matematis, Proses Pembelajaran, Geogebra

ABSTRACT

Samuel Tondang, NIM 4182111026 (2018). The Effect of Geogebra Assisted Search Solve Create and Share (SSCS) Learning Model on Mathematical Representation Ability of Class XI Students of SMA Negeri 6 Medan.

This study aims to determine the effect of the Geogebra-assisted Search Solve Create and Share (SSCS) learning model on the mathematical representation ability of Class XI students of SMA Negeri 6 Medan. This type of research is a quantitative quasi-experimental research. The subjects of this study were students of class XI SMA Negeri 6 Medan using 2 classes, each of which amounted to 35 and 36 people. The object of this research is the mathematical representation ability of students in conducting the Geogebra Assisted Search Solve Create and Share (SSCS) learning model on trigonometry material.

Before testing the hypothesis, the data from the pretest and posttest results that have been obtained will be tested for prerequisites first. The prerequisite test used is the normality test and homogeneity test. After the normality test was carried out, it was found that the data were normally distributed, the pretest and posttest data were normally distributed. In the homogeneity test, it was found that the data from the pretest and posttest results of students' mathematical representation abilities were homogeneous, therefore the researcher was able to carry out the hypothesis test, namely the t-test.

From the results of hypothesis testing carried out using pretest and posttest data for this experimental class, it was found that $t_{count} > t_{table}$ or $10,827 > 1,689$ so that H_0 was rejected. It is known that the value of $Sig.(2-tailed)$ is $0.000 < 0.05$, which means that H_0 is rejected and $H1$ is accepted. In connection with the end of the research and discussion carried out, it was found that the highest mathematical representation ability was written text representation. So it can be concluded that the Search Solve Create and Share learning model assisted by Geogebra has an effect on the mathematical representation ability of class XI students of SMA Negeri 6 Medan.

Keywords: SSCS, Mathematical Representation, Learning Process, Geogebra