ABSTRAK

Fransiskus Joui P Sinaga, NIM 4193111081 (2023). Perbedaan Keterampilan Berpikir Kritis Matematis Antara Siswa Yang Belajar Melalui Model Thinking Aloud Pair Problem Solving Berbantuan Software Geogebra Dengan Yang Belajar Melalui Model Konvensional Di SMAS Santa Lusia Sei Rotan.

Tujuan yang dimaksudkan dalam penelitian ini adalah mengetahui apakah siswa yang belajar melalui model *thinking aloud pair problem solving* berbantuan software *geogebra* lebih tinggi keterampilan berpikir kritisnya daripada siswa yang belajar melalui model pembelajaran konvensional di SMAS Santa Lusia Sei Rotan. Populasi yang digunakan dalam penelitian ini yaitu siswa kelas XI SMAS Santa Lusia Sei Rotan dan sampel yang diambil sebagai subjeknya adalah siswa kelas XI IPA 1 terdiri dari 28 siswa dan kelas XI IPA 2 terdiri dari 28 siswa. Model pembelajaran *thinking aloud pair problem solving* berbantuan software *geogebra* diajarkan pada kelas XI IPA 1 sedangkan kelas XI IPA 2 diajarkan melalui model pembelajaran konvensional. Penelitian ini berjeniskan *quasi experimental research*.

Instrumen penelitian ini menggunakan *pretest* dan *posttest* dalam bentuk *essay test* dan telah diuji validitas tesnya. Berdasarkan hasil *pretest* disimpulkan bahwasanya kedua data berasal dari populasi siswa yang penyebaran datanya normal dan memiliki varians yang sama (homogens). Pengujian hipotesis berdasarkan data hasil *posttest* yaitu dengan menggunakan uji t diperoleh $t_{hitung}(2,1238) > t_{tabel}(1,6735)$. Dari pengujian yang dilakukan diperoleh bahwasanya H_0 ditolak dan H_1 diterima sehingga kesimpulan terhadap penelitian ini adalah bahwasanya siswa yang dibelajarkan melalui model pembelajaran *thinking aloud pair problem solving* berbantuan *software geogebra* lebih tinggi keterampilan berpikir ktitis matematisnya daripada keterampilan berpikir ktitis matematis siswa yang dibelajarkan melalui model pembelajaran konvensional di kelas XI SMA Swasta Santa Lusia Sei Rotan T.A 2022/2023.

Kata Kunci: Keterampilan Berpikir Kritis Matematis, Konvensional, *Thinking Aloud Pair Problem Solving*

ABSTRACT

Fransiskus Joui P Sinaga, NIM 4193111081 (2023). Differences in Mathematical Critical Thinking Skills Between Students Who Learn Through the Thinking Aloud Pair Problem Solving Model Assisted by Geogebra Software With Those Who Learn Through Conventional Model at SMAS Santa Lusia Sei Rotan.

The intended purpose of this study is to determine whether students who learn through the thinking aloud pair problem solving model assisted by geogebra software have higher critical thinking skills than students who learn through conventional learning models at SMAS Santa Lusia Sei Rotan. The population used in this study were XI grade students of SMAS Santa Lusia Sei Rotan, and the samples taken as subjects were XI IPA 1 class, consisting of 28 students, and XI IPA 2 class, consisting of 28 students. The thinking aloud pair problem solving learning model assisted by geogebra software was taught to class XI IPA 1, while class XI IPA 2 was taught through a conventional learning model. This research is a *quasi-experimental research*.

This research instrument uses a pretest and posttest in the form of an essay test and has been tested for validity. Based on the pretest results, it was concluded that both data came from a population of students whose data distribution was normal and had the same variance (homogeneity). Hypothesis testing based on posttest result data is done by using the *t* test obtained t_{hitung} (2,1238) $>$ t_{tabel} (1,6735). From the tests carried out, it is obtained that H_0 is rejected and H_1 is accepted, so the conclusion of this study is that students who are taught through the thinking aloud pair problem solving learning model assisted by geogebra software have higher mathematical thinking skills than the mathematical thinking skills of students who are taught through conventional learning models in class XI SMA Swasta Santa Lusia Sei Rotan T.A. 2022/2023.

Keywords: Mathematical Critical Thinking Skills, Conventional, *Thinking Aloud Pair Problem Solving*.