Abstrak

Andriani Br Tarigan, NIM (4203311054) (2024). Analisis Kemampuan Koneksi Matematika Melalui Pembelajaran Creative Problem Solving Berbantuan Software Autograph Di Kelas VII SMP.

Tujuan pembelajaran matematika untuk meningkatkan satu dari beberapa kemampuan matematika yakni kemampuan koneksi matematika sesuai dengan standar isi NCTM. Namun, kemampuan koneksi matematis siswa tetap perlu ditingkatkan seperti telihat dari survei PISA tahun 2018. Melalui observasi awal dan tes diagnostik, siswa kelas VII-10 SMP NEGERI 35 MEDAN memperoleh rata-rata nilai tes sebesar 41,4 pada skala 100. Penelitian ini bertujuan untuk mengetahui kemampuan koneksi matematika siswa yang diajarkan dengan menggunakan model pembelajaran *Creative Problem Solving* berbantuan Autograph lebih baik daripada kemampuan koneksi matematika tanpa model pembelajaran *Creative Problem Solving* berbantuan Autograph di kelas VII SMP dan menganalisis kemampuan koneksi matematis siswa yang diajarkan menggunakan Creative Problem. Metode Quasi Eksperiment dilakukan pada dua kelas yaitu kelas eksperimen dengan menggunakan pendekatan pembelajaran Creative Problem Solving berbantuan Autograph dan kelas kontrol menggunakan pembelajaran konvensional. Instrumen yang digunakan adalah tes kemampuan koneksi matematis berupa soal esai. Data dianalisis menggunakan uji-t untuk melihat perbedaan rata-rata kemampuan koneksi matematis antara kedua kelas. Temuan penelitian menunjukkan perbedaan besar dalam kemampuan koneksi matematis kelompok eksperimen dan kelompok kontrol. Pada kelas eksperimen siswa menunjukkan peningkatan keterampilan koneksi matematis yang unggul dengan skor rata-rata 82,03, sedangkan kelas kontrol memperoleh rata-rata 71,45. Ini membuktikan bahwa penerapan model pembelajaran Creative Problem Solving berbantuan Autograph dapat menjadi salah satu alternatif peningkatan kemampuan koneksi matematis siswa tingkat SMP.

Kata Kunci : Kemampuan Koneksi Matematika, Model *Creative Problem Solving*, Software Autograph

Abstract

Andriani Br Tarigan, NIM (4203311054) (2024). Analysis of Mathematical Connection Ability Through Creative Problem Solving Assisted by Autograph Software in Grade VII SMP.

The aim of learning mathematics is to improve one of several mathematical abilities, namely the ability to make mathematical connections according to NCTM content standards. However, students' mathematical connection abilities still need to be improved as seen from the 2018 PISA survey. Through initial observations and diagnostic tests, students in class VII-10 of SMP NEGERI 35 MEDAN obtained an average test score of 41.4 on a scale of 100. This research aims to to find out the mathematical connection abilities of students taught using the Creative Problem Solving learning model assisted by Autograph are better than the mathematical connection abilities without the Creative Problem Solving learning model assisted by Autograph in class VII SMP and to analyze the mathematical connection abilities of students taught using Creative Problems. The Quasi Experimental method was carried out in two classes, namely the experimental class using the Creative Problem Solving learning approach assisted by Autograph and the control class using conventional learning. The instrument used is a mathematical connection ability test in the form of essay questions. Data were analyzed using the t-test to see the average difference in mathematical connection abilities between the two classes. The research findings showed a large difference in the mathematical connection abilities of the experimental group and the control group. In the experimental class students showed superior improvement in mathematical connection skills with an average score of 82.03, while the control class obtained an average of 71.45. This proves that the application of the Creative Problem Solving learning model assisted by Autograph can be an alternative to improving the mathematical connection abilities of junior high school students.

Keywords: Mathematical Connection Ability, Creative Problem Solving Model, Autograph Software