PEMBELAJARAN DENGAN *SCIENTIFIC APPROACH* BERBANTUAN *SOFTWARE* CINDERELLA UNTUK MENINGKATKAN KEMAMPUAN ANALOGI DAN GENERALISASI MATEMATIS SERTA KEMANDIRIAN BELAJAR PADA SISWA SMP

Riki Effendi (1302258)

ABSTRAK

Penelitian ini dilatarbelakangi oleh permasalahan masih belum maksimalnya pelaksanaan pendekatan saintifik pada Kurikulum 2013 serta rendahnya kemampuan analogi, generalisasi matematis dan kemandirian belajar siswa dalam pembelajaran. Tujuan penelitian ini adalah untuk mengkaji peningkatan kemampuan analogi, generalisasi matematis dan kemandirian belajar siswa yang memperoleh pembelajaran *Scientific Approach* berbantuan software Cinderellata serta ada atau tidaknya asosiasi antara kemampuan-kemampuan tersebut. Desain penelitian ini adalah kuasi eksperimen bentuk *nonequivalent control group design* serta *cross-sectional design* dengan populasi seluruh siswa kelas VIII SMPN 1 kota Cimahi. Instrumen yang digunakan terdiri dari tes kemampuan analogi matematis, tes kemampuan generalisasi matematis, skala kemandirian belajar siswa dan lembar observasi. Hasil penelitian menunjukkan bahwa, (1) Peningkatan kemampuan analogi dan generalisasi matematis siswa yang memperoleh pembelajaran *Scientific Approach* berbantuan *software* Cinderella lebih baik daripada siswa yang memperoleh pembelajaran konvensional; (2) Peningkatan kemandirian belajar siswa yang memperoleh pembelajaran *Scientific Approach* berbantuan *software* Cinderella tidak berbeda secara signifikan dengan siswa yang memperoleh pembelajaran konvensional; (3) Terdapat asosiasi antara setiap variabel terikat yaitu antara kemampuan analogi dan generalisasi, kemampuan analogi dan kemandirian belajar, serta kemampuan generalisasi dan kemandirian belajar matematis siswa yang memperoleh pembelajaran *Scientific Approach* berbantuan *software* Cinderella;

Kata Kunci: Pembelajaran *Scientific Approach* berbantuan *software* Cinderellata, kemampuan analogi matematis, kemampuan generalisasi matematis, kemandirian belajar siswa

LEARNING WITH SCIENTIFIC APPROACH AIDED SOFTWARE CINDERELLA TO INCREASE MATHEMATICAL ANALOGY ABILITY MATHEMATICAL GENERALIZATION ABILITY AND STUDENT'S SELF-REGULATED LEARNING IN JUNIOR HIGH SCHOOL

Riki Effendi (1302258)

ABSTRACT

This research is motivated by the problem are still not maximal implementation of the scientific approach to the curriculum 2013 and the lack of mathematical analogies ability, mathematical generalization ability and student's self-regulated learning. The aims of this research are to examine the enhancement the student's mathematical analogy ability, mathematical generalization ability and self-regulated learning who gotten scientific approach aided software cinderella learning and association between each other. This research was quasi experimental with nonequivalent control group design and the cross-sectional design. The population in this research were all students at class VIII in one of the junior high school in Cimahi. The instrument used to collect the data consist of the mathematical analogy ability test, mathematical generalization ability test, self-regulated learning scale and observation sheet. The results showed that (1) The enhancement the student's mathematical analogy ability and mathematical generalization ability who gotten scientific approach aided software cinderella learning better than students who gotten conventional learning; (2) The enhancement the student's self regulated learning who gotten scientific approach aided software cinderella learning was not significantly different with students who gotten conventional learning; (3) There are association between student's mathematical analogy ability and student's mathematical generalization ability, mathematical analogy ability and student's self regulated learning, student's mathematical generalization ability and student's self regulated learning.

Keyword : Scientific Approach aided Software Cinderella learning, mathematical analogy ability, mathematical generalization ability, self-regulated learning.