

ABSTRAK

ANISA SEPTIAWATI. Pengaruh Penerapan Model Pembelajaran CORE (*Connecting, Organizing, Reflecting, Extending*) terhadap Kemampuan Koneksi Matematis Siswa di SMP Negeri 229 Jakarta. Skripsi. Jakarta: Program Studi Pendidikan Matematika, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Jakarta, 2019.

Penelitian ini bertujuan untuk mengetahui apakah terdapat pengaruh signifikan penerapan model pembelajaran CORE (*Connecting, Organizing, Reflecting, Extending*) terhadap kemampuan koneksi matematis siswa. Penelitian ini dilakukan pada siswa di SMP Negeri 229 Jakarta semester genap tahun ajaran 2018/2019 pada materi Perbandingan.

Metode penelitian yang digunakan adalah *quasi experiment* (eksperimen semu). Pengambilan sampel menggunakan teknik *simple random sampling*. Teknik *simple random sampling* dilakukan dengan memilih secara acak dua dari empat kelas berdistribusi normal, homogen, dan memiliki kesamaan rata-rata untuk dijadikan sebagai kelas eksperimen (model pembelajaran CORE (*Connecting, Organizing, Reflecting, Extending*)) dan kelas kontrol (model pembelajaran konvensional). Instrumen penelitian yang digunakan adalah tes kemampuan koneksi matematis pada materi Perbandingan sebanyak 4 soal uraian. Sebelum digunakan, instrumen tersebut telah melalui uji validitas isi, validitas konstruk, dan validitas empiris. Perhitungan reliabilitas dilakukan menggunakan rumus *Alpha Cronbach* dan diperoleh koefisien reliabilitas sebesar $r_{11} = 0,798$ yang termasuk dalam kategori tinggi.

Berdasarkan perhitungan data hasil penelitian, data kedua kelas berasal dari populasi berdistribusi normal dan memiliki varians yang sama atau homogen. Oleh karena itu, pengujian hipotesis statistik dilakukan menggunakan statistik uji-*t* dengan varians yang sama. Berdasarkan hasil pengujian hipotesis diperoleh nilai $t_{hitung} = 7,209 > t_{tabel} = 1,668$, maka tolak H_0 pada taraf signifikansi $\alpha = 0,05$. Dapat disimpulkan bahwa terdapat pengaruh signifikan model pembelajaran CORE (*Connecting, Organizing, Reflecting, Extending*) terhadap kemampuan koneksi matematis siswa di SMP Negeri 229 Jakarta pada taraf signifikansi $\alpha = 0,05$.

Kata Kunci : Model Pembelajaran CORE (*Connecting, Organizing, Reflecting, Extending*), Kemampuan Koneksi Matematis

ABSTRACT

ANISA SEPTIAWATI. The Effect of The Application of CORE (*Connecting, Organizing, Reflecting, Extending*) Learning Model on Students' Mathematical Connection Skills in SMP Negeri 229 Jakarta. Thesis . Jakarta: Study Program of Mathematics Education, Faculty of Mathematics and Sciences, State University of Jakarta, 2019.

This research aims at investigating the significant effect of the application of CORE (*connecting, organizing, reflecting, extending*) learning model on students' mathematical connection skills. The population of this study was the seventh grade students of SMP Negeri 229 Jakarta in second semester of 2018/2019 academic year on Ratio and Proportion chapter.

This research applied quasi experimental design. The sample was withdrawn using simple random sampling technique. Simple random sampling technique was done by randomly picked two out of four classes which has normal distribution, homogen, and equal average in order to become the experiment class (CORE learning model) and the control class (conventional learning model). The instrument of this research is the mathematical connection skills test on Ratio and Proportion chapter consist of four problems. Before being used, the instrument has passed the test of content validity, construct validity, and empirical validity. The reliability calculation was done using the *Alpha Cronbach* formula and the result of the reliability coefficient is $r_{11} = 0,798$ which classified as high category.

Based on the calculation of this research's data, the data of the two classes came from a normal distributed population and has equal variance or homogen. Therefore, the test of the statistical hypotheses was done using t-test with equal variance. Based on the result of the hypotheses test, the value of $t_{count} = 7,209 > t_{table} = 1,668$, therefore reject the H_0 on significant degree of $\alpha = 0,05$. Based on the findings, the writer concluded that there is a significant effect of the application of CORE (*Connecting, Organizing, Reflecting, Extending*) learning model on students' mathematical connection skills in SMP Negeri 229 Jakarta on significant degree of $\alpha = 0,05$

Keywords : CORE (*Connecting, Organizing, Reflecting, Extending*) Learning Model, Mathematical Connection Skills