

ABSTRAK

Dianne Amor Kusuma (2018). Peningkatan Koneksi dan Disposisi Matematis Siswa Menggunakan Pembelajaran Kontekstual Berbasis *Ethnomathematics* dengan Penerapan *Mozart Effect* (Studi eksperimen terhadap siswa Sekolah Menengah Pertama).

Penelitian ini dilatarbelakangi oleh kondisi siswa Sekolah Menengah Pertama (SMP) di daerah pertanian Kabupaten Bandung yang menunjukkan hasil belajar sejumlah siswa dalam mata pelajaran matematika masih rendah dan siswa kurang termotivasi untuk mempelajari matematika. Rendahnya hasil belajar siswa disebabkan kemampuan siswa dalam matematika berbeda-beda dan siswa belum dapat memahami hubungan internal dan eksternal matematika, sehingga penelitian ini bertujuan untuk mengetahui perbedaan peningkatan kemampuan koneksi dan disposisi matematis siswa antara yang memperoleh pembelajaran kontekstual berbasis *ethnomathematics* dengan penerapan *Mozart effect* (PEM), dengan siswa yang memperoleh pembelajaran langsung (PL). Penelitian ini menggunakan desain *quasi experimental non equivalent control group* pada siswa kelas 7 SMPN 1 Bojongsoang Kabupaten Bandung. Hasil penelitian memperlihatkan bahwa: (1) Terdapat perbedaan antara kemampuan koneksi matematis siswa SMP yang memperoleh PEM dengan siswa yang memperoleh PL; (2) Terdapat perbedaan antara disposisi koneksi matematis siswa SMP yang memperoleh pembelajaran kontekstual berbasis *ethnomathematics* dengan penerapan *Mozart effect* dengan siswa yang memperoleh pembelajaran langsung; (3) Tidak terdapat pengaruh interaksi antara penggunaan PEM dan kelompok daerah asal terhadap kemampuan koneksi matematis siswa SMP; (4) Tidak terdapat pengaruh interaksi antara penggunaan PEM dan kelompok mata pencaharian orangtua terhadap kemampuan koneksi matematis siswa SMP; (5) Tidak terdapat pengaruh interaksi antara penggunaan PEM dan kelompok penggunaan teknologi dalam mencari informasi terhadap kemampuan koneksi matematis siswa SMP; (6) Tidak terdapat pengaruh interaksi antara penggunaan PEM dan kelompok daerah asal terhadap disposisi koneksi matematis siswa SMP; (7) Tidak terdapat pengaruh interaksi antara penggunaan PEM dan ke lompok mata pencaharian orangtua terhadap disposisi koneksi matematis siswa SMP; (8) Terdapat pengaruh interaksi antara penggunaan PEM dan kelompok penggunaan teknologi dalam mencari informasi terhadap disposisi koneksi matematis siswa SMP; dan (9) Siswa memperlihatkan sikap positif terhadap PEM.

Kata Kunci: koneksi matematis, disposisi matematis, pembelajaran kontekstual, *ethnomathematics*, *Mozart effect*.

ABSTRACT

Dianne Amor Kusuma (2018). Improvement of Mathematical Connection and Mathematical Disposition of Students Using Contextual Learning Based on Ethnomathematics with Implementation of Mozart Effect (Experimental Study of Junior High School Students).

This research is driven by the condition of junior high school students in agricultural area of Kabupaten Bandung which shows the learning result of a number of students in mathematics subject are still low and students less motivated to learn mathematics. The low learning outcomes of students are caused by their abilities in mathematics which are different and they have not been able to understand about internal and external relations of mathematics, until the research aims to find the differences in mathematical connection and mathematical disposition of students between those who obtained contextual learning based on ethnomathematics with implementation of Mozart effect (EME), with students who received direct instruction (DI). This research uses quasi experimental non equivalent control group design in the seventh grade students of SMPN 1 Bojongsoang Kabupaten Bandung. The results show that: (1) There is a difference between the mathematical connection ability of junior high school students who acquired EME with those who acquired DI; (2) There is a difference between the disposition of mathematical connection of junior high school students who acquired EME with those who acquired DI; (3) There is no interaction effect between the usage of EME and place of origin group on mathematical connection ability of junior high school students; (4) There is no interaction effect between the usage of EME and group of parents' job on mathematical connection ability of junior high school students; (5) There is no interaction effect between the usage of EME and group of the usage of technology in finding information on mathematical connection ability of junior high school students; (6) There is no interaction effect between the usage of EME and place of origin group on disposition of mathematical connection of junior high school students; (7) There is no interaction effect between the usage of EME and group of parents' job on disposition of mathematical connection of junior high school students; (8) There is interaction effect between the usage of EME and group of the usage of technology in seeking information on disposition of mathematical connection of junior high school students; and (9) The students show positive attitude toward EME.

Key Words: mathematical connection, mathematical disposition, contextual learning, ethnomathematics, Mozart effect.