

ABSTRAK

Dicky Ardian. Peningkatan Kemampuan Komunikasi Matematis dan Kreativitas Matematis Siswa Kelas VIII MTs Al-Washliyah 2 Kisaran Melalui Implementasi Model Pembelajaran Problem Based Learning. Tesis. Medan. Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan. 2019.

Penelitian ini bertujuan untuk : 1) Untuk mendeskripsikan kemampuan komunikasi matematik siswa yang memperoleh pembelajaran model *problem based learning* dan siswa yang memperoleh pembelajaran konvensional; 2) Untuk mendeskripsikan kemampuan kreativitas matematik siswa yang memperoleh model *problem based learning* dan siswa yang memperoleh pembelajaran konvensional; 3) Mendeskripsikan interaksi antara kemampuan awal matematika dengan pembelajaran terhadap peningkatan kemampuan komunikasi matematiksiswa ; dan 4) Mendeskripsikan interaksi antara kemampuan awal matematika dengan pembelajaran terhadap peningkatan kemampuan kreativitas matematik siswa. Penelitian ini merupakan penelitian kuasi eksperimen. Populasi penelitian ini adalah siswa MTs Al-Washliyah 2 Kisaran dan sampel dalam penelitian adalah siswa kelas VIII MTs Al-Washliyah 2 Kisaran. Analisis statistik data dilakukan dengan analisi svarians 2 jalur (ANAVA 2 Jalur). Hasil penelitian menunjukkan bahwa : 1) Peningkatan kemampuan komunikasi matematis siswa yang diajarkan dengan pembelajaran *problem based learning* lebih tinggi secara signifikan dibandingkan dengan siswa yang diajarkan dengan pembelajaran konvensional ; 2) Peningkatan kemampuan kreativitas matematis siswa yang diajarkan dengan pembelajaran *problem based learning* lebih tinggi secara signifikan dibandingkan dengan siswa yang diajarkan dengan pembelajaran konvensional ; 3) Terdapat interaksi antara kemampuan awal matematika dan model pembelajaran terhadap peningkatan kemampuan komunikasi matematis siswa; dan 4) Terdapat interaksi antara kemampuan awal matematika dan model pembelajaran terhadap peningkatan kemampuan kreativitas matematis siswa.

Kata Kunci: Kemampuan Komunikasi Matematis, Kreativitas Matematis, Problem Based Learning.

ABSTRACT

Dicky Ardian. Improvement of Mathematical Communication Skills and Mathematical Creativity of Grade VIII Students of MTs Al-Washliyah 2 Range through Implementation of Problem Based Learning Learning Model. Thesis. Medan. Postgraduate Mathematics Education Program State University of Medan. 2018.

This study aims to: 1) To describe the mathematical communication skills of students who gain learning model of problem based learning and students who obtain conventional learning; 2) To describe the ability of mathematical creativity of students who get problem based learning model and students who obtain conventional learning; 3) Describe the interaction between the early ability of mathematics with learning to improve students' mathematical communication skills; and 4) Describe the interaction between the early ability of mathematics with learning to improve students' mathematical creativity. This research is a quasiexperimental research. The population of this study were students of MTs Al-Washliyah 2 Kisaran and the sample in the study were students of class VIII MTs Al-Washliyah 2 Kisaran. Statistical analysis of data was done by analysis of 2-way variance (ANAVA 2 Path). The results showed that: 1) Improvement of students' mathematical communication skills taught by learning of problem based learning was significantly higher compared to students taught by conventional learning; 2) Improvement of students' mathematical creativity skills taught by learning of problem based learning is significantly higher compared to students taught by conventional learning; 3) There is no interaction between early ability of mathematics and learning model to improve students' mathematical communication ability; and 4) There is no interaction between the early ability of mathematics and the learning model to improve students' mathematical creativity abilities.

Keywords: Mathematical Communication Skill, Mathematical Creativity, Problem Based Learning.

