

ABSTRAK

SRI YUNITA NINGSIH. Peningkatan Kemampuan Pemahaman Konsep dan Koneksi Matematik Siswa Melalui Pendekatan Matematika Realistik di SMP Swasta Tarbiyah Islamiyah. Tesis. Program Pascasarjana Universitas Negeri Medan, 2014.

Penelitian ini bertujuan untuk mengetahui peningkatan kemampuan pemahaman konsep dan koneksi matematik siswa di SMP Swasta Tarbiyah Islamiyah Hamparan Perak pada materi kubus dan balok melalui pendekatan matematika realistik. Untuk mengetahui seberapa besar peningkatan yang diperoleh, siswa diberikan tes kemampuan pemahaman konsep dan koneksi matematik. Peningkatan kemampuan pertama kali dianalisis menggunakan rumus gain ternormalisasi untuk kemudian diolah menggunakan rumus ANAVA dua jalur. Rumus ANAVA dua jalur juga digunakan untuk mengetahui terdapat atau tidaknya interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan pemahaman konsep dan koneksi matematik. Hasil penelitian menunjukkan bahwa (1) peningkatan kemampuan pemahaman konsep dan koneksi matematik siswa yang diajarkan melalui pendekatan matematika realistik lebih tinggi daripada kemampuan pemahaman konsep dan koneksi matematik siswa yang hanya diajarkan melalui pembelajaran biasa, (2) tidak terdapat interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan pemahaman konsep siswa, dan (3) tidak terdapat interaksi antara model pembelajaran dan kemampuan awal matematika siswa terhadap peningkatan kemampuan koneksi matematik siswa.

Kata Kunci : Kemampuan Pemahaman Konsep, Kemampuan Koneksi Matematik, Pendekatan Matematika Realistik (PMR).

ABSTRACT

SRI YUNITA NINGSIH. Improvement Understanding of Concepts and Mathematical Connections Students ability by Using Mathematical Realistic Approach of SMP Swasta Tarbiyah Islamiyah. Thesis. Medan State University Graduate Program, 2014.

This study aims to determine the increase in the understanding of concepts and mathematical connections students ability at SMP Swasta Tarbiyah Islamiyah for the cube and beam through mathematical realistic approach. To find out how much improvement is obtained, students were given a test of understanding of concepts ability and mathematical connections. Increased capabilities were first analyzed by using the normalized gain and processed by using two ways ANOVA formula. Two ways ANOVA formula is also used to determine whether an interaction between learning approach and students ability to increase understanding of concepts skills and mathematical connections. The results showed that (1) an increase in the understanding of concepts and mathematical connections that students taught through mathematical realistic approach higher than understanding of concepts ability and mathematical connections that students are taught only through ordinary learning, (2) there is no interaction between the learning approach and the students ability to the improvement of students 'mathematical understanding of concepts ability , and (3) there is no interaction between the model of learning and early math abilities of students to the improvement of students' mathematical connection capabilities .

Keywords: Understanding of concepts, Mathematical Connection Ability, Mathematical Realistic Approach.