ABSTRAK

Penelitian ini dilaksanakan bertujuan untuk mengetahui perbedaan peningkatan kemampuan pemahaman matematis dan kemampuan representasi matematis siswa, sebagai akibat dari penerapan pendekatan pembelajaran kontekstual berbasis *soft skills* dan pembelajaran konvensional. Subjek dalam penelitian ini adalah siswa kelas VIII SMP dari tiga SMP di Kota Ternate yang tergolong dalam kategori klaster sekolah tinggi, sedang, dan rendah. Pada masing-masing sekolah dipilih secara acak dua kelas, satu kelas sebagai kelas eksperimen yang mendapat pembelajaran kontekstual berbasis *soft skills* dan satu kelas lagi sebagai kelas kontrol yang mendapat pembelajaran konvensional. Instrumen yang digunakan meliputi tes kemampuan awal matematis, tes kemampuan pemahaman matematis, tes kemampuan representasi matematis, pedoman observasi dan wawancara. Hasil analisis data menunjukkan bahwa, peningkatan kemampuan pemahaman matematis dan kemampuan representasi matematis siswa yang memperoleh pendekatan pembelajaran kontekstual berbasis *soft skills* lebih tinggi daripada siswa yang memperoleh pembelajaran konvensional. Kecenderungan ada interaksi antara pembelajaran dengan klaster sekolah terhadap peningkatan kemampuan pemahaman matematis dan kecenderungan tidak ada interaksi antara pembelajaran dengan klaster sekolah terhadap peningkatan kemampuan representasi matematis siswa. Kecenderungan tidak ada interaksi antara pembelajaran dan kemampuan awal matematis terhadap peningkatan kemampuan pemahaman matematis dan kemampuan representasi matematis siswa. Terdapat asosiasi antara peningkatan kemampuan pemahaman matematis dan peningkatan kemampuan representasi siswa.

Kata Kunci: Kemampuan Pemahaman Matematis, Kemampuan Representasi Matematis, Pembelajaran Kontekstual, *Soft Skills*.

ABSTRACT

The aim of this study is to find out the enhancement of students' mathematical comprehension ability and students' mathematical representation ability as the result of the application of contextual learning based on soft skills approach and conventional learning. The subject in this study is grade VIII students of Junior High School from three Junior High Schools in Ternate City which are categorized in high, medium and low school clusters. In each school, two classes are selected in random, in which one class is assigned as an experiment class which get contextual learning based on soft skills, and another class is assigned as a control class which get conventional learning. Instruments which are used comprise test of initial mathematical ability, test of mathematical comprehension ability, test of mathematical representation ability, observation guidance and interview. The result of data analysis shows that the enhancement of mathematical understanding ability and mathematical representation ability of students who get contextual learning based on soft skills is higher than students who get conventional learning. There is interaction between learning and school cluster toward the enhancement of mathematical comprehension ability and there is tendency that there is no interaction between learning and school cluster toward the enhancement of students' mathematical representation ability. There is no interaction between learning and initial mathematical ability to ward the enhancement of students' mathematical comprehension ability and mathematical representation ability. There is association between the enhancement of students' mathematical comprehension ability and the enhancement of students' representation ability.

Keywords: Mathematical Understanding Ability, Mathematical Representation Ability, Contextual Learning, Soft Skills