

## ABSTRAK

**Barus, Ika Andayani.** Peningkatan Kemampuan Komunikasi dan Disposisi Matematis Siswa SMP Negeri 3 Satu Atap Kuala melalui Pendekatan Realistik Berbasis Budaya Karo. Tesis. Medan: Program Studi Pendidikan Matematika Pasca sarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk mengetahui: (1) Apakah peningkatan kemampuan komunikasi dan disposisi matematis siswa yang diajarkan dengan pendekatan realistik berbasis budaya karo lebih tinggi daripada kemampuan komunikasi matematis siswa yang memperoleh pembelajaran konvensional?, (2) Apakah terdapat interaksi antara pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan kemampuan komunikasi dan disposisi matematis siswa?, (3) Bagaimana proses penyelesaian soal-soal komunikasi matematis pada pendekatan realistik berbasis budaya karo dan pembelajaran konvensional? Penelitian ini merupakan penelitian kuasi eksperimen. Populasi penelitian ini adalah seluruh siswa kelas VII SMP Negeri 3 Satu Atap Kuala, dengan sampel dua kelas berjumlah 64 siswa melalui teknik *random sampling*. Data dalam penelitian ini dianalisis dengan menggunakan analisis statistik deskriptif dan statistik inferensial yaitu ANAVA dua jalur. Berdasarkan hasil penelitian, diketahui bahwa: (1) kemampuan komunikasi dan disposisi matematis siswa yang diajar melalui Pendekatan Realistik Berbasis Budaya Karo lebih tinggi dari pada siswa yang diajar melalui pembelajaran konvensional, (2) tidak terdapat interaksi antara pembelajaran (Pendekatan Realistik Berbasis Budaya Karo dan pembelajaran konvensional) dengan KAM terhadap peningkatan kemampuan komunikasi matematis dan disposisi, (3) Proses jawaban siswa dalam menyelesaikan soal-soal komunikasi matematis pada Pendekatan Realistik Berbasis Budaya Karo lebih baik dibandingkan dengan pembelajaran konvensional.

**Kata Kunci:** Pendekatan Realistik, Budaya Karo, Kemampuan awal matematika, Kemampuan komunikasi matematis, Disposisi matematis, Proses jawaban siswa dalam menyelesaikan soal matematika

## ABSTRACT

**Barus, Ika Andayani. Improving Students' Mathematical Communication and Disposition Ability of SMP Negeri 3 Satu Atap Kuala by using Realistic Approach Based on Karo Culture.** Thesis. Medan: Mathematic Education of Postgraduate Program of State University of Medan. 2016.

This research aimed to describe: (1) Is the improvement of students' mathematical communication and dispositions ability taught by realistic approach based on Karo culture higher than students' mathematical communication ability taught by conventional learning?, (2) Is there any interaction between learning and students' mathematic basic ability to the improvement of students' mathematical communication and dispositions?. (3) How are the processes of resolving mathematical communication problems in realistic approach based Karo culture and conventional learning? This study was a quasi-experimental research. The population was all students of class VII SMP Negeri 3 Satu Atap Kuala, by taking samples of two classes totaling 64 students by using random sampling technique. The data were analyzed using descriptive statistics analysis and inferential statistics that are Two Ways ANAVA. Based on the research, it was found that: (1) Students' mathematical communication and dispositions ability who were taught by using Realistic approach based on Karo Culture is higher than students taught by using conventional learning, (2) there were no interactions between learning (Realistic approach based on Karo Culture and conventional learning) with KAM in improving students' mathematical communication and dispositions, (3) Students' process in answering the mathematical communication's questions in Realistic Approach Based on Karo Culture was better than conventional learning.

**Keywords:** Realistic Approach, Karo Culture, basic mathematical ability, mathematical communication ability, mathematical disposition, students' answering process in mathematic questions.