

## ABSTRAK

**Yanty Maria R. Marbun, (2014). Peningkatan Kemampuan Pemecahan Masalah dan Disposisi Matematis Siswa Melalui Model Pembelajaran Berbasis Masalah (PBM) di SMP Negeri 1 Siantar. Tesis Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2014.**

Tujuan penelitian ini untuk mengetahui apakah : (1) peningkatan kemampuan pemecahan masalah matematis siswa yang memperoleh model pembelajaran berbasis masalah lebih tinggi daripada siswa yang memperoleh pembelajaran konvensional, (2) peningkatan disposisi matematis siswa yang memperoleh model pembelajaran berbasis masalah lebih tinggi daripada siswa yang memperoleh pembelajaran konvensional, (3) terdapat interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan kemampuan pemecahan masalah matematis siswa, (4) terdapat interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan disposisi matematis siswa,. Penelitian ini dilaksanakan di SMP Negeri 1 Siantar dengan sampel 60 siswa. Penelitian ini merupakan suatu studi eksperimen semu dengan *pretest-posttest control group design*. Populasi dalam penelitian ini adalah seluruh siswa kelas VII yang mengambil dua kelas (kelas eksperimen dan kelas kontrol) melalui teknik random sampling. Instrumen yang digunakan terdiri dari tes kemampuan pemecahan masalah yang berbentuk uraian dan angket disposisi matematis. Instrumen tersebut dinyatakan telah memenuhi syarat validitas isi dan koefisien reliabilitas. Data dianalisis dengan uji ANAVA dua jalur. Sebelum digunakan uji ANAVA dua jalur terlebih dahulu dilakukan uji normalitas dan uji homogenitas dengan taraf signifikan 5%. Berdasarkan hasil analisis tersebut diperoleh hasil penelitian yaitu : (1) peningkatan kemampuan pemecahan masalah dan disposisi matematis siswa yang memperoleh model pembelajaran berbasis masalah lebih tinggi daripada kemampuan pemecahan masalah dan disposisi matematis siswa yang memperoleh model pembelajaran konvensional, (2) tidak terdapat interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap peningkatan kemampuan pemecahan masalah dan disposisi matematis siswa. Berdasarkan hasil penelitian ini, peneliti menyarankan agar model pembelajaran berbasis masalah dapat dijadikan alternatif bagi guru untuk meningkatkan kemampuan pemecahan masalah dan disposisi matematis siswa.

Kata Kunci: Pembelajaran berbasis masalah (PBM), Kemampuan pemecahan masalah matematis, disposisi matematis.



## ABSTRACT

**Yanty Maria Rosmauli Marbun, (2014). The Improvement of Students' Ability Mathematical Problem Solving and Mathematical disposition by Problem Based Learning Education in Junior High School. Thesis. Medan: Posgraduate of Study Mathematics Education University of Negeri Medan, 2014.**

Keywords: Problem Based Learning, Mathematical Problem Solving, Mathematical Disposition

The purpose of this research was to analyze: (1) The improvement in mathematical problem solving ability of students that given through problem based learning with students that given through usually learning, (2) The improvement in mathematical disposition ability of students that given through problem based learning with students that given through usually learning, (3) The interaction between the learning approach with students' mathematical previous knowledge toward the improvement in mathematical problem solving ability, (4) The interaction between the learning approach with students' mathematical previous knowledge toward the improvement in mathematical disposition, This research has done at SMP Negeri 1 with sample 60 students. This research is a semi-experimental by *pre-test-post-test control group design*. The population of this research is grade seven with taken sample two classes (experiment class and control class) through random sampling technic. These instruments had been established in fulfill requisite content validity and reability coefficient 0,887. The analysis data was done by using two-way ANAVA test. Sample in this research come from normal and homogen sample by level 5% significant. Based of the results analysis, it showed that: (1) Improvement of the students' ability in realistic mathematic education classroom is higher than the students' ability in usually learning classroom, (2) Improvement the students' ability in mathematical disposition in PBM classroom is higher than the students' ability in usually learning classroom, (3) There did not encist between learning model and students' mathematical previous knowledge toward the improvement ability mathematical problem solving, (4) There did not encist between learning model and students' mathematical previous knowledge toward the improvement ability mathematical disposition, Based on the result of this research, the researcher suggested that problem based learning can be used as an alternative for mathematic teacher to improved students' ability in mathematical problem solving and mathematical disposition.