

## ABSTRACT

**Ulfah Syuhada Nasution.** Differences in Mathematical Problem-solving Ability of Students Between Problem Based Learning (PBL) Learning, Realistic Mathematics Education (RME), and Cooperative Type Student's Team Achievement Division (STAD) in SMP Negeri Kisaran class VIII. Thesis. Medan: Postgraduate Mathematics Education Program Medan State University 2017.

The purpose of this research is to know: (1) to know whether there is any difference between students' mathematical problem solving ability among of *Based Learning (PBL)*, *Realistic Mathematics Education (RME)*, and Cooperative Type of *Student's Team Achievement Division (STAD)* in VII Grade of Kisaran Junior High School; (2) Which learning model contributes the most to students' mathematical problem solving abilities in SMP Negeri Kisaran (3) to know is there any interaction between students' mathematical problem solving ability among of *Based Learning (PBL)*, *Realistic Mathematics Education (RME)*, and Cooperative Type of *Student's Team Achievement Division (STAD)* in VII Grade of Kisaran Junior High School. Kinds of this research is Quasi eksperiment. The population of this research is all VIII students Kisaran Junior High School that use 2013 Curriculum, namely SMPN 1 Kisaran, SMPN 2 Kisaran, SMPN 3 Kisaran, and SMPN 6 Kisaran. The sample of this research is VIII-4 Grade represents SMPN 1 Kisaran which is thought with *Problem Based Learning (PBL)*, VIII-3 Grade represents SMPN 6 Kisaran which is thought with *realistic mathematics education (RME)*, and VIII-5 Grade represents SMPN 3 Kisaran that is thought with Cooperative Type STAD. The instrumen used consists of students' mathematical problem solving ability. The analysis is done by ANAVA. The results of the researarc show that: (1) there is any difference between students' mathematical problem solving ability among of *Based Learning (PBL)*, *Realistic Mathematics Education (RME)*, and Cooperative Type of *Student's Team Achievement Division (STAD)* in VII Grade of Kisaran Junior High School. (2) there is no ineration between the learning with students' first ability with students' mathematical problem solving in VIII Grade students of Kisaran Junior High School.

**Key words:** *Problem Based Learning (PBL)*, *Realistic Mathematics Education (RME)*, Cooperative Type of *Student's Team Achievement Division (STAD)*.

## ABSTRAK

**Ulfah Syuhada Nasution.** Perbedaan Kemampuan Pemecahan masalah Matematis Siswa Antara Pembelajaran *Problem Based Learning (PBL)*, *Realistic Mathematics Education (RME)*, dan Kooperatif Tipe *Student's Team Achievement Division (STAD)* di SMP Negeri Kisaran kelas VIII. Tesis. Medan : Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan 2017.

Tujuan penelitian ini adalah untuk mengetahui : (1) apakah terdapat perbedaan kemampuan pemecahan masalah matematis siswa antara pembelajaran *problem based learning (PBL)*, *realistic mathematics education (RME)*, dan kooperatif Tipe *Student's Team Achievement Division (STAD)* di SMP Negeri Kisaran kelas VIII. (2) Manakah model pembelajaran yang Paling berkontribusi terhadap kemampuan pemecahan masalah matematis siswa di SMP Negeri Kisaran (3) apakah terdapat interaksi antara pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan pemecahan masalah matematis siswa di SMP Negeri kisaran kelas VIII. Jenis penelitian ini adalah *quasi eksperiment*. Populasi penelitian ini adalah seluruh siswa kelas VIII SMP Negeri di Kisaran yang menggunakan kurikulum 2013 , yaitu SMP negeri 1 kisaran, SMP negeri 2 kisaran, SMP negeri 3 kisaran,dan SMP negeri 6 kisaran. Sampel penelitian ini adalah kelas VIII-4 mewakili SMP negeri 1 kisaran diajarkan dengan pembelajaran *problem based learning (PBL)*, kelas VIII-3 mewakili SMP negeri 6 kisaran diajarkan dengan pembelajaran *realistic mathematics education (RME)* , dan kelas VIII-5 mewakili SMP negeri 3 kisaran diajarkan dengan pembelajaran kooperatif tipe STAD. Instrumen yang digunakan terdiri dari tes kemampuan pemecahan masalah matematika siswa. Analisis yang dilakukan menggunakan ANAVA. Hasil penelitian menunjukkan bahwa: (1) terdapat perbedaan kemampuan pemecahan masalah matematis siswa antara pembelajaran *problem based learning (PBL)*, *realistic mathematics education (RME)*, dan kooperatif Tipe *Student's Team Achievement Division (STAD)* di SMP Negeri Kisaran kelas VIII. (2) Tidak terdapat interaksi antara pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan pemecahan masalah matematis siswa di SMP Negeri kisaran kelas VIII.

**Kata kunci** : pembelajaran *problem based learning (PBL)*, pembelajaran *realistic mathematics education (RME)*, dan pembelajaran kooperatif Tipe *Student's Team Achievement Division (STAD)*, kemampuan pemecahan masalah matematis.