

ABSTRAK

BAYU ARGA PUTRA. Perbedaan Kemampuan Pemecahan Masalah Dan Komunikasi Matematis Siswa Melalui Model Pembelajaran Kooperatif Tipe *Think-Pair-Share* dan *Students Teams Achievement Division* di SMK Al-Ma'sum Stabat. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan 2023.

Tujuan penelitian ini adalah untuk mengetahui (1) perbedaan kemampuan pemecahan masalah matematika siswa melalui model pembelajaran kooperatif tipe *Think-Pair-Share* dan *Students Teams Achievement Division*, (2) perbedaan kemampuan komunikasi matematis siswa melalui model pembelajaran kooperatif tipe *Think-Pair-Share* dan *Students Teams Achievement Division*, (3) interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan pemecahan masalah, (4) interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan komunikasi matematis siswa. Populasi dalam penelitian ini adalah seluruh siswa kelas XI SMK Al-Ma'sum Stabat. Sampel penelitian diambil secara acak sebanyak 2 kelas berjumlah 52 orang siswa. Instrument yang digunakan terdiri dari : (1) tes kemampuan pemecahan masalah dan (2) tes kemampuan komunikasi matematis. Analisis data dilakukan dengan Anava Dua Jalur. Hasil penelitian ini menunjukkan bahwa (1) terdapat perbedaan kemampuan pemecahan masalah matematika siswa melalui model pembelajaran kooperatif tipe *Think-Pair-Share* dan *Students Teams Achievement Division* dengan nilai sig (p) $0,024 < 0,05$, (2) terdapat perbedaan kemampuan komunikasi matematis siswa melalui model pembelajaran kooperatif tipe *Think-Pair-Share* dan *Students Teams Achievement Division* dengan nilai sig (p) $= 0,011 < 0,05$, (3) tidak terdapat interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan pemecahan masalah dengan sig (p) $= 0,153 > 0,05$, (4) tidak terdapat interaksi antara model pembelajaran dengan kemampuan awal matematika siswa terhadap kemampuan komunikasi matematis siswa dengan nilai sig (p) $= 0,147 > 0,05$.

Kata Kunci: Kemampuan Pemecahan Masalah, Kemampuan Komunikasi Matematis, Model Pembelajaran Kooperatif Tipe *Think-Pair-Share*, dan Model Pembelajaran Kooperatif Tipe *Students Teams Achievement Division*.

ABSTRACT

BAYU ARGA PUTRA. Differences in Students' Problem Solving and Mathematical Communication Skills Through Think-Pair-Share Cooperative Learning Models and Student Teams Achievement Division in SMK Al-Ma'sum Stabat. Thesis. Medan: Postgraduate Program University of Medan 2023.

The purpose of this study was to determine (1) differences in students' mathematical problem solving abilities through the Think-Pair-Share type cooperative learning model and Students Teams Achievement Division, (2) differences in students' mathematical communication skills through the Think-Pair-Share type cooperative learning model and Students Teams Achievement Division, (3) interaction between learning models and students' initial mathematical abilities on problem solving abilities, (4) interactions between learning models and students' initial mathematical abilities on students' mathematical communication abilities. The population in this study were all students of class XI at SMK Al-Ma'sum Stabat. The research sample was taken randomly as many as 2 classes totaling 52 students. The instruments used consist of: (1) a test of problem solving ability and (2) a test of mathematical communication ability. Data analysis was performed with Two Way Anava. The results of this study indicate that (1) there are differences in students' mathematical problem solving abilities through the Think-Pair-Share type cooperative learning model and Students Teams Achievement Division with a sig (p) value of $0.024 < 0.05$, (2) there are differences in students' mathematical communication abilities through the Think-Pair-Share type cooperative learning model and Students Teams Achievement Division with a sig value (p) = $0.011 < 0.05$, (3) there is no interaction between the learning model and students' initial mathematical abilities on problem solving abilities with sig (p) = $0.153 > 0.05$, (4) there is no the interaction between the learning model and students' initial mathematical abilities on students' mathematical communication skills with a sig (p) = $0.147 > 0.05$.

Keywords: Problem Solving Ability, Mathematical Communication Ability, Think-Pair-Share Type Cooperative Learning Model, and *Students Teams Achievement Division* Type Cooperative Learning Model.