

## ABSTRAK

**IRFAN.** Perbedaan kemampuan pemecahan masalah matematika dan kemampuan komunikasi matematis siswa yang diajar dengan menggunakan model pembelajaran *Think Paire Share* (TPS) dan *Student Teams Achievement Division* (STAD) di MAS Al-Washliyah 22 Tembung. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, 2023.

Penelitian ini bertujuan untuk menganalisis: 1) Apakah terdapat perbedaan yang signifikan antara kemampuan pemecahan masalah matematis siswa yang diberi model pembelajaran *Think Paire Share* (TPS) dan *Student Teams Achievement Division* (STAD)? 2) Apakah terdapat perbedaan yang signifikan antara kemampuan komunikasi matematis siswa yang diberi model pembelajaran *Think Paire Share* (TPS) dan *Student Teams Achievement Division* (STAD)? 3) Bagaimana proses jawaban siswa yang diberi model pembelajaran berbasis masalah dengan siswa yang diberi model pembelajaran inkuiri? Jenis penelitian adalah eksperimen, populasi dalam penelitian ini adalah seluruh siswa kelas X MIA MAS Al-Washliyah 22 Tembung dengan sampel X MIA-1 sebagai kelas eksperimen 1 dan kelas X MIA-2 sebagai kelas eksperimen 2. Instrumen yang digunakan adalah tes kemampuan pemecahan masalah dan komunikasi siswa. Teknik analisa data yang digunakan adalah uji ANAVA. Hasil penelitian menunjukkan bahwa 1) Pembelajaran *Student Teams Achievement Division* (STAD) berpengaruh lebih signifikan dibandingkan Pengaruh *Think Paire Share* (TPS) terhadap kemampuan pemecahan masalah matematik siswa. 2) Pembelajaran *Student Teams Achievement Division* (STAD) berpengaruh lebih signifikan dibandingkan pengaruh pembelajaran *Think Paire Share* (TPS) terhadap kemampuan komunikasi matematis siswa. 3) Tes kemampuan pemecahan masalah dan komunikasi matematis siswa melalui pembelajaran *Student Teams Achievement Division* (STAD) lebih lengkap dibanding dengan pembelajaran *Think Paire Share* (TPS).

**Kata kunci:** *Pemecahan Masalah, Komunikasi Matematis, Think Paire Share (TPS), Student Teams Achievement Division (STAD)*



## ABSTRACT

**IRFAN.** Differences in mathematical problem-solving abilities and mathematical communication abilities of students who are taught using the Think Pair Share (TPS) and Student Teams Achievement Division (STAD) learning models at MAS Al-Washliyah 22 Tembung. Thesis. Medan: Postgraduate Program, State University of Medan, 2023.

This study aims to analyze: 1) Is there a significant difference between the mathematical problem solving abilities of students who are given the Think Pair Share (TPS) and Student Teams Achievement Division (STAD) learning model? 2) Is there a significant difference between the mathematical communication abilities of students who are given The Think Pair Share (TPS) learning model and Student Teams Achievement Division (STAD)? 3) How is the process of answering students who are given a problem-based learning model with students who are given an inquiry learning model? The type of research was experimental, the population in this study were all students of class X MIA MAS Al-Washliyah 22 Tembung with a sample of X MIA-1 as experimental class 1 and class X MIA-2 as experimental class 2. The instrument used was a problem solving ability test, problems and student communication. The data analysis technique used is the ANOVA test. The results showed that 1) Student teams achievement division (STAD) learning had a more significant effect than the effect of think pair share (TPS) on students' mathematical problem solving abilities. 2) Learning student teams achievement division (STAD) has a more significant effect than the effect of think pair share (TPS) learning on students' mathematical communication skills. 3) The process of solving students' mathematical problem-solving and communication ability tests through student teams achievement division (STAD) learning is more complete than thinking pair share (TPS) learning.

**Keywords :** *Problem Solving, Mathematical Communication, Think Paire Share (TPS), Student Teams Achievement Division (STAD)*

