

ABSTRAK

Hotria Rosliana Silitonga, NIM 4192411014 (2023). Efektivitas Model Pembelajaran Kooperatif Tipe *Numbered Head Together* Terhadap Kemampuan Pemecahan Masalah Matematis Siswa Kelas VIII SMP Negeri 16 Medan.

Penelitian ini bertujuan untuk mengetahui: (1) peningkatan kemampuan pemecahan masalah matematis siswa yang diajarkan melalui model pembelajaran *Numbered Head Together* lebih tinggi daripada kemampuan pemecahan masalah matematis siswa yang diajarkan dengan model konvensional, (2) model pembelajaran kooperatif tipe *Numbered Head Together* (NHT) efektif terhadap kemampuan pemecahan masalah matematika siswa kelas VIII SMP Negeri 16 Medan, (3) proses jawaban yang dikerjakan siswa dalam menyelesaikan masalah melalui pembelajaran kooperatif tipe *Numbered Head Together* (NHT) dan model pembelajaran konvensional. Jenis penelitian ini adalah penelitian kuantitatif dengan metode *Quasi Eksperimen* yang di SMP Negeri 16 Medan. Teknik pengambilan sampel pada penelitian ini menggunakan *sampling purposive*, yaitu kelas VIII-1 sebagai kelas eksperimen yang diajar dengan model kooperatif tipe *Numbered Head Together* dan VIII-2 sebagai kelas kontrol yang diajari dengan menggunakan model konvensional. Instrumen pengumpulan data yang digunakan ialah lembar tes kemampuan pemecahan masalah matematis siswa sebanyak 3 butir berupa uraian, lembar observasi keterlaksanaan sintaks dan aktivitas siswa dan angket respon siswa. Analisis data pada penelitian ini menggunakan uji t-test independent dengan berbantuan SPSS 22. Hasil dari penelitian menunjukkan: (1) peningkatan kemampuan pemecahan masalah matematis siswa yang diajarkan melalui model pembelajaran *Numbered Head Together* lebih tinggi daripada kemampuan pemecahan masalah matematis siswa yang diajarkan dengan model konvensional. Hal ini berdasarkan perhitungan $t_{hitung} = 1,738$ menunjukkan bahwa $t_{hitung} 1,738 > t_{tabel} 1,699127$ artinya H_0 ditolak dan H_a diterima, (2) hasil tes akhir kemampuan pemecahan masalah matematis siswa tuntas secara individu dan klasikal dengan persentasi 87,5%, keterlaksanaan pembelajaran berada dalam kategori baik dengan rata-rata 3.605 sementara aktivitas dan respon siswa berada dalam kategori aktif dan positif dengan rata-rata 85.41% dan 79.75%. sehingga model pembelajaran kooperatif tipe *numbered head together* efektif terhadap kemampuan pemecahan masalah matematis siswa kelas VIII SMP Negeri 16 Medan, (3) proses penyelesaian jawaban siswa yang diajar menggunakan model pembelajaran kooperatif tipe *numbered head together* memberikan hasil yang lebih baik dibandingkan dengan yang diberi model pembelajaran konvensional. Temuan penelitian merekomendasikan bahwa pembelajaran kooperatif tipe *Numbered Head Together* efektif dijadikan sebagai salah satu alternatif model pembelajaran di sekolah utamanya untuk mencapai peningkatan kemampuan pemecahan masalah matematis.

Kata Kunci : Efektivitas, Kemampuan Pemecahan Masalah Matematis, Konvensional, *Numbered Head Together*.

ABSTRACT

Hotria Rosliana Silitonga, NIM 4192411014 (2023). The Effectiveness of Numbered Head Together Cooperative Learning Model on Mathematical Problem Solving Ability of Class VIII Students of SMP Negeri 16 Medan.

This study aims to find out: (1) the improvement of mathematical problem solving ability of students taught through Numbered Head Together learning model is higher than the mathematical problem solving ability of students taught with conventional model, (2) cooperative learning model type Numbered Head Together (NHT) is effective on mathematical problem solving ability of students in class VIII SMP Negeri 16 Medan, (3) the answer process done by students in solving problems through cooperative learning type Numbered Head Together (NHT) and conventional learning model. This type of research is quantitative research with the Quasi Experiment method at SMP Negeri 16 Medan. The sampling technique in this study used purposive sampling, namely class VIII-1 as the experimental class taught with the Numbered Head Together type cooperative model and VIII-2 as the control class taught using the conventional model. The data collection instruments used were a 3-item test sheet of students' mathematical problem solving ability in the form of descriptions, observation sheets of syntax implementation and student activities and student response questionnaires. Data analysis in this study used independent t-test with the help of SPSS 22. The results of the study showed: (1) the improvement of mathematical problem solving ability of students taught through Numbered Head Together learning model is higher than the mathematical problem solving ability of students taught with conventional model. This is based on the calculation of $t_{hitung} = 1.738$ showing that $t_{hitung} 1.738 > t_{tabel} 1.699127$ meaning that H_0 is rejected and H_a is accepted, (2) the final test results of students' mathematical problem solving skills were completed individually and classically with a percentage of 87.5%, the implementation of learning was in the good category with an average of 3.605 while student activities and responses were in the active and positive category with an average of 85.41% and 79.75%. Therefore, the cooperative learning model of numbered head together type was effective on mathematical problem solving ability of students in class VIII SMP Negeri 16 Medan, (3) the process of solving the answers of students who were taught using cooperative learning model of numbered head together type gave better results compared to those given conventional learning model. The research findings recommend that Numbered Head Together cooperative learning is effective as an alternative learning model in schools, especially to achieve the improvement of mathematical problem solving ability.

Keywords: Effectiveness, Mathematical Problem Solving Ability, Conventional, Numbered Head Together.