

## ABSTRAK

**Lanila Suci Dwi Arum. NIM 5183111016. Penerapan Model Pembelajaran Numbered Heads Together Untuk Meningkatkan Hasil Belajar Mata Pelajaran Konstruksi Gedung dan Sanitasi Siswa Kelas XI di SMK Negeri 2 Binjai. Skripsi. Fakultas Teknik - Universitas Negeri Medan. 2025.**

Penelitian ini adalah Penelitian Tindakan Kelas (PTK) dengan tujuan menerapkan model pembelajaran yang dapat meningkatkan hasil belajar mata pelajaran konstruksi gedung dan sanitasi pada materi gambar instalasi air bersih di kelas XI Program Keahlian Desain Pemodelan dan Informasi Bangunan SMK Negeri 2 Binjai Tahun Ajaran 2024/2025 yang berjumlah 36 siswa. Prosedur tindakan dilaksanakan dalam 2 siklus dimana masing-masing siklus terdiri dari 2 pertemuan. Setiap siklus memiliki tahap perencanaan (planning), pelaksanaan (acting), pengamatan (observing) dan refleksi (reflecting).

Data penelitian diambil dari tes hasil belajar siswa. Hasil uji coba instrument penelitian dari 30 butir soal siklus I terdapat 26 butir soal valid, uji reliabilitas tes didapat 0,893 (sangat tinggi), uji tingkat kesukaran tes didapat 17 butir soal dengan kriteria sedang dan 9 butir soal dengan kriteria mudah, uji daya pembeda tes didapat 11 butir soal dengan kategori baik, 13 butir soal dengan kategori cukup dan 2 butir soal dengan kategori jelek. Pada siklus II dari 30 butir soal terdapat 27 butir soal valid, uji reliabilitas tes didapat 0,856 (sangat tinggi), uji tingkat kesukaran tes didapat 14 butir soal dengan kriteria sedang dan 13 butir soal dengan kriteria mudah, uji daya pembeda tes didapat 9 butir soal dengan kategori baik, 14 butir soal dengan kategori cukup dan 4 butir soal dengan kategori jelek. Penelitian dikatakan berhasil diukur berdasarkan nilai hasil belajar siswa memperoleh nilai minimal 63 sesuai dengan kriteria ketuntasan minimal yang ditetapkan dan terdapat peningkatan dari siklus I ke siklus II.

Hasil penelitian menunjukkan perolehan hasil belajar siswa pada siklus I mencapai 67,5 dengan persentase kelulusan 68,75% meningkat pada siklus II menjadi 79 dengan persentase kelulusan 100%. Hasil uji t menunjukkan terjadinya peningkatan terhadap hasil belajar yaitu dengan diperolehnya t hitung  $8,118651 > t$  tabel  $2,03951$  dengan taraf signifikan 5%. Berdasarkan hasil penelitian dapat disimpulkan bahwa dengan menerapkan model pembelajaran Numbered Heads Together dapat meningkatkan hasil belajar Konstruksi Gedung dan Sanitasi kelas XI Program Keahlian Desain Pemodelan dan Informasi Bangunan SMK Negeri 2 Binjai Tahun Ajaran 2024/2025.

**Kata Kunci** : Numbered Heads Together, Hasil Belajar, SMK

## ABSTRACT

**Lanila Suci Dwi Arum. NIM 5183111016. Implementation of Numbered Heads Together Learning Model to Improve Learning Outcomes of Building Construction and Sanitation Subjects of Grade XI Students at SMK Negeri 2 Binjai. Thesis. Faculty of Engineering - State University of Medan. 2025.**

This research is Classroom Action Research (PTK) with the aim of implementing a learning model that can improve learning outcomes in building construction and sanitation subjects on clean water installation drawing material in class 2025, totaling 36 students. The action procedure is carried out in 2 cycles where each cycle consists of 2 meetings. Each cycle has planning, implementation (acting), observation (observing) and reflection (reflecting) stages.

Research data was taken from student learning achievement tests. The results of testing the research instrument from the 30 items in cycle I contained 26 valid items, the test reliability test was found to be 0.893 (very high), the test difficulty level obtained 17 items with medium criteria and 9 items with easy criteria, the test's differentiating power test There were 11 questions in the good category, 13 questions in the fair category and 2 questions in the poor category. In cycle II, of the 30 questions, there were 27 valid questions, the test reliability was 0.856 (very high), the test difficulty level was 14 questions with medium criteria and 13 questions with easy criteria, the test's differentiating power test was found to be 9 questions with good category, 14 questions in the sufficient category and 4 questions in the poor category. The research was said to be successful, measured based on the student learning outcomes that obtained a minimum score of 63 in accordance with the minimum completeness criteria set and there was an increase from cycle I to cycle II.

The research results showed that student learning outcomes in the first cycle reached 67.5 with a passing percentage of 68.75%, increasing in the second cycle to 79 with a passing percentage of 100%. The results of the t test show that there has been an increase in learning outcomes, namely by obtaining t count  $8.118651 > t$  table 2.03951 with a significance level of 5%. Based on the research results, it can be concluded that applying the Numbered Heads Together learning model can improve the building construction and sanitation learning outcomes for class XI Building Modeling and Information Design Skills Program Binjai 2 State Vocational School for Academic Year 2024/2025.

**Keywords** : Numbered Heads Together, Learning Results, Vocational School