

PENGARUH PENERAPAN MODEL PEMBELAJARAN *NUMBERED HEADS TOGETHER* BERBANTUAN *NEARPOD* TERHADAP PEMAHAMAN KONSEP MATEMATIS PESERTA DIDIK KELAS X SMA NEGERI 1 KEDIRI

Oleh

Made Ika Kusuma Wiguna, NIM 2113011063

Jurusan Matematika

ABSTRAK

Rendahnya tingkat penguasaan konsep matematika oleh siswa menjadi pemicu dijalankannya studi ini. Tujuan dari studi ini yakni guna mengetahui bagaimana penguasaan siswa terhadap konsep matematika dipengaruhi oleh pendekatan pembelajaran *Numbered Heads Together*, yang didukung oleh media *Nearpod*. Studi ini, yang mengaplikasikan desain *post-test only control group*, diklasifikasikan sebagai studi kuasi-eksperimen. Semua siswa di kelas X di SMA Negeri 1 Kediri sebanyak 10 kelas dengan total 322 anak menjadi populasi penelitian. Teknik pengambilan sampel acak berkelompok kemudian diterapkan guna memilih dua kelompok sebagai sampel penelitian. Kelompok eksperimen, kelas X.5, terdiri dari 32 siswa dan diajar mengaplikasikan metodologi *Numbered Heads Together* dengan bantuan *Nearpod*. Sementara itu, kelas X.4, yang terdiri dari 32 siswa dan diajar mengaplikasikan teknik tradisional, berfungsi sebagai kelompok kontrol. Dengan koefisien korelasi sebesar $r = 0,678$, alat penelitian yang diterapkan yakni tes penguasaan konsep matematika yang memenuhi persyaratan validitas dan reliabilitas. Uji *t* (*independent samples t-test*) diterapkan guna pengujian hipotesis setelah uji homogenitas dan normalitas terpenuhi. Analisis statistik deskriptif mengindikasikan bahwa rata-rata skor post-test kelompok eksperimen dan kontrol masing-masing yakni 76,04 dan 69,53. H_0 ditolak dan H_1 diterima sebagai hasil perhitungan uji *t*, yang mengindikasikan nilai *t* sebesar -1,917 dengan tingkat signifikansi $p = 0,03$, di mana $p < 0,05$. Hal ini mengindikasikan bahwa siswa yang mengaplikasikan model pembelajaran *Numbered Heads Together* yang dibantu oleh *Nearpod* lebih mengerti konsep matematika dibandingkan siswa yang mengaplikasikan metode pembelajaran tradisional. Dengan demikian, bisa dikatakan bahwa pendekatan pembelajaran *Numbered Heads Together* yang didukung oleh *Nearpod* telah mengoptimalkan penguasaan konsep matematika siswa kelas sepuluh di SMA Negeri 1 Kediri.

Kata kunci: *Numbered Heads Together, Nearpod, pemahaman konsep matematis*

**THE EFFECT OF THE IMPLEMENTATION OF THE NUMBERED
HEADS TOGETHER LEARNING MODEL ASSISTED BY NEARPOD ON
THE UNDERSTANDING OF MATHEMATICAL CONCEPTS OF GRADE X
STUDENTS AT STATE SENIOR HIGH SCHOOL 1 KEDIRI**

By

Made Ika Kusuma Wiguna, NIM 2113011063

Department of Mathematics

ABSTRACT

Students' poor understanding of mathematical concepts served as the impetus for this study. This study looked at how students' comprehension of mathematical concepts was affected by the Nearpod-supported Numbered Heads Together learning approach. This study used a post-test only control group design in a quasi-experimental manner. The population comprised all 322 pupils enrolled in ten classes at State Senior High School 1 Kediri in the tenth grade. Using cluster random sampling, two classes were selected as the research sample: class X.5, which consisted of 32 students and was taught using the Numbered Heads Together learning model with Nearpod assistance, and class X.4, which consisted of 32 students and was taught using traditional instruction. A mathematical concept understanding test that has been tested and deemed reliable with a reliability coefficient of $r = 0.678$ served as the research tool. Once the normality and homogeneity criteria were satisfied, an independent samples t-test was used to test the hypothesis. The experimental and control groups' mean post-test scores were 76.04 and 69.53, respectively, according to the results of the descriptive statistical analysis. H_0 was rejected and H_1 was approved according to the t-test analysis, which yielded a result of $t = -1.917$ with a significance level of $p = 0.03$, where $p < 0.05$. These results show that compared to students who received traditional training, those who were taught utilizing the Numbered Heads Together learning paradigm with Nearpod assistance attained a superior level of mathematical concept knowledge. Thus, it can be said that tenth-grade students at State Senior High School 1 Kediri have a better knowledge of mathematical concepts when the Numbered Heads Together learning paradigm is implemented with the help of Nearpod.

Keywords: *Numbered Heads Together, Nearpod, understanding of mathematical concepts*