ABSTRAK

RIFKA HADIA LUBIS. Perbedaan Peningkatan Kemampuan Pemahaman Konsep dan Kemampuan Komunikasi Matematis Siswa yang diajarkan dengan Model Pembelajaran *Think-Pair-Share* dan *Think-Talk-Write* Berbantuan *Geogebra*.

Penelitian ini bertujuan untuk mengetahui: (1) Perbedaan peningkatan kemampuan pemahaman konsep matematis siswa yang memperoleh pembelajaran *Think-Pair-Share* (TPS) berbantuan *Geogebra* dengan siswa yang memperoleh pembelajaran *Think-Talk-Write* (TTW) berbantuan *Geogebra*, (2) Perbedaan peningkatan kemampuan komunikasi matematis siswa yang memperoleh pembelajaran *Think-Pair-Share* berbantuan *Geogebra* dengan siswa yang memperoleh pembelajaran *Think-Talk-Write* berbantuan *Geogebra*, (3) Proses jawaban siswa dalam menyelesaikan soal kemampuan pemahaman konsep setelah mendapat pembelajaran *Think-Pair-Share* berbantuan *Geogebra* dan *Think-Talk-Write* berbantuan *Geogebra*, (4) Proses jawaban siswa dalam menyelesaikan soal kemampuan komunikasi pada pembelajaran *Think-Pair-Share* dengan Bantuan *Geogebra* dan pembelajaran *Think-Talk-Write* dengan Bantuan *Geogebra*. Penelitian ini merupakan penelitian quasi eksperimen. Populasi penelitian ini adalah seluruh siswa SMP Negri 2 Pandan Nauli. Analisis data kemampuan pemahaman konsep dan kemampuan komunikasi matematik dilakukan dengan analisis kovarians (ANAKOVA). Hasil penelitian menunjukkan bahwa (1) Perbedaan peningkatan kemampuan pemahaman Konsep matematis siswa yang diberi pembelajaran *Think-Pair-Share* berbantuan *Geogebra* lebih tinggi daripada siswa yang diberi pembelajaran *Think-Talk-Write* berbantuan *Geogebra* (2) Perbedaan peningkatan kemampuan komunikasi matematis siswa yang diberi pembelajaran *Think-Pair-Share* berbantuan *Geogebra* lebih tinggi daripada siswa yang diberi pembelajaran *Think-Talk-Write* berbantuan *Geogebra* (3) Proses jawaban siswa dalam menyelesaikan soal pemahaman konsep yang mendapatkan pembelajaran *Think-Pair-Share* berbantuan *Geogebra* lebih baik dibandingkan proses penyelesaian jawaban siswa yang mendapatkan pembelajaran *Think-Talk-Write* berbantuan *Geogebra*. (4) Proses jawaban siswa dalam menyelesaikan soal kemampuan komunikasi yang mendapatkan pembelajaran *Think-Pair-Share* berbantuan *Geogebra* lebih baik dibandingkan proses penyelesaian jawaban siswa yang mendapatkan *Think-Talk-Write* berbantuan *Geogebra*.

Kata Kunci: Geogebra, Kemampuan Pemahaman Konsep, Kemampuan Komunikasi, *Think-Pair-Share* dan *Think-Talk-Write*

ABSTRACT

RIFKA HADIA LUBIS. Differences upgrades mathematical concept understanding and communication that is taught students with learning model *Think-Pair-Share* and *Think-Talk-Write* with *Geogebra* assisted.

This study aimed to determine: (1) The difference enhancement between the concept understanding ability of students receiving learning model *Think-Pair-Share* with *Geogebra* assisted and students receiving learning model *Think-Talk-Write* with *Geogebra* assisted, (2) The difference upgrades between the communication ability of students receiving learning model *Think-Pair-Share* with *Geogebra* assisted and students receiving learning model *Think-Talk-Write* with *Geogebra* assisted, (3) The process of student answers in solving the problem of conceptual understanding after *Think-Pair-Share* learning with *Geogebra* assisted and think-talk-write learning with Geogebra assisted, (4) The process of students answers in solving the problem of communication ability after *Think-Pair-Share* learning with *Geogebra* assisted and *Think-Talk-Write* learning with *Geogebra* assisted. This research is a quasi experimental research. The population of this study is SMP Negri 2 Pandan Nauli. Data analysis ability of concept understanding and mathematics communication ability done with covariance analysis (ANACOVA). The results showed that, (1) The deference in the ability to understand the concept of mathematical students who are given a *Think-Pair-Share* with *Geogebra* assisted better than who are given a *Think-Talk-Write* with *Geogebra* assisted. (2) the diference in the ability to communications of mathematical students who are given a think-pair-share with geogebra assisted better than who are given a think-talk-write with geogebra assisted. (3) The process of student responsibility in solving the problem of conceptual understanding get the learning *Think-Pair Share* with *Geogebra* assisted better than process of student responsibility with the learning *Think-Talk-Write* with *Geogebra* assisted, (4) The process of student responsibility in solving the problem of communication ability get the learning *Think-Pair-Share* with *Geogebra* assisted better than process of student responsibility with the learning *Think-Talk-Write* with *Geogebra* assisted.

Keyword: *Communication Ability, Geogebra, Think- Pair-Share, Think-Talk Write, Understanding Conceptual Ability.*