

ABSTRAK

JETTI H SINAMBELA. Pengaruh Model *Discovery Learning* terhadap Kemampuan Pemahaman Konsep Matematis dan Kemandirian Belajar Siswa SMP. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan, 2018.

Tujuan dari penelitian ini untuk mengetahui apakah terdapat: (1) Pengaruh model *discovery learning* terhadap kemampuan pemahaman konsep matematis siswa, (2) Pengaruh model *discovery learning* terhadap kemandirian belajar siswa, (3) Interaksi antara faktor pembelajaran dan kemampuan awal matematika terhadap kemampuan pemahaman konsep matematis, (4) Interaksi antara faktor pembelajaran dan kemampuan awal matematika terhadap kemandirian belajar siswa. Penelitian ini merupakan penelitian eksperimen semu. Populasi penelitian ini adalah seluruh siswa kelas VII SMP Swasta Bina Bersaudara Medan. Teknik pengambilan sampel yang digunakan adalah teknik total sampling sehingga sampel penelitian adalah siswa kelas VII kemudian secara acak dipilih kelas eksperimen diberi perlakuan pembelajaran *discovery learning* dan kelas kontrol dengan pembelajaran konvensional. Instrumen penelitian ini adalah tes kemampuan pemahaman konsep matematis dan angket kemandirian belajar. Instrumen tersebut dinyatakan telah memenuhi syarat validitas isi, serta koefisien reliabilitas sebesar 0,74 dan 0,97 berturut-turut untuk kemampuan pemahaman konsep matematis dan kemandirian belajar siswa. Analisis data dilakukan dengan anava 2 jalur. Berdasarkan hasil analisis tersebut diperoleh hasil penelitian yaitu: (1) terdapat pengaruh model *discovery learning* terhadap kemampuan pemahaman konsep matematis siswa, (2) terdapat pengaruh model *discovery learning* terhadap kemandirian belajar siswa, (3) tidak terdapat interaksi antara pembelajaran dengan kemampuan awal siswa terhadap kemampuan pemahaman konsep matematis siswa, (4) tidak terdapat interaksi antara pembelajaran dengan kemampuan awal siswa terhadap kemandirian belajar siswa. Berdasarkan hasil penelitian, maka peneliti menyarankan pembelajaran *discovery learning* sebagai alternatif untuk meningkatkan kemampuan pemahaman konsep matematis siswa dan kemandirian belajar siswa, sebagai pembelajaran matematika yang inovatif, dapat menciptakan suasana pembelajaran yang menyenangkan, dan memberi kesempatan pada siswa untuk mengungkapkan gagasannya dalam bahasa dan cara mereka sendiri.

ABSTRACT

JETTI H SINAMBELA. The Effect of Discovery Learning on Mathematical Understanding Concepts Ability and Self-Regulated Learning of Junior High School. Thesis. Medan: Math Education Program Post Graduate State University of Medan, 2018.

The purpose of this research is to find out whether there are: (1) the effect of discovery learning on mathematical understanding concepts ability, (2) the effect of discovery learning on self-regulated learning, (3) the interaction between instruction and the initial mathematical ability towards mathematical understanding concepts, (4) Interaction between instruction and the initial mathematical ability towards self-regulated learning. This research is quasi-experimental research. The population is all seventh grade students of Bina Bersaudara in Medan. Sample was taken by using total sampling technique so that the sample of the research was the seventh grade students then using randomly selected the experimental class was treated with discovery learning and control class with conventional learning. The instrument of the research are the mathematical understanding concepts ability test and self-regulated learning questionnaire. The instrument was declared to have satisfied the requirements of content validity, as well as reliability coefficients are 0.74 and 0.97 respectively for the mathematical understanding concepts ability and self-regulated learning. Data were analyzed by using two way anova. Based on the results of the analysis obtained the results of the study are: (1) there is the effect of discovery learning model on the mathematical understanding concept ability, (2) there is the effect of discovery learning models on self-regulated learning, (3) there is no interaction between instruction and students initial ability on mathematical understanding concepts ability, (4) there is no interaction between instruction and students initial ability to self-regulated learning. Based on the results of the study, the researcher suggest discovery learning as an alternative to improve the student's mathematical understanding concepts ability and self-regulated learning, as an innovative mathematics learning, it can create a pleasant learning environment, and provide opportunities for students to express their ideas in their own languages and ways.