

## ABSTRAK

Retno Dwi Putri (1204275). **Peningkatan Kemampuan Penalaran Induktif Matematis Siswa Sekolah Menengah Pertama dengan Model *Discovery Learning*.**

Penelitian ini dilatarbelakangi oleh pentingnya kemampuan penalaran induktif matematis bagi siswa dan fakta rendahnya kemampuan penalaran induktif matematis siswa. Tujuan dari penelitian ini adalah: (1) mengetahui perbedaan peningkatan kemampuan penalaran induktif matematis antara siswa yang memperoleh pembelajaran dengan model *discovery learning* dan model ekspositori, (2) mengetahui kualitas peningkatan kemampuan penalaran induktif matematis siswa yang memperoleh pembelajaran dengan model *discovery learning*, dan (3) mengetahui kesalahan-kesalahan siswa dalam menyelesaikan soal-soal kemampuan penalaran induktif matematis. Metode yang digunakan dalam penelitian ini adalah metode kuasi eksperimen dengan desain kelompok kontrol non-ekivalen. Populasi dalam penelitian adalah seluruh siswa kelas VII di salah satu SMP Negeri di kota Bandung, dengan sampel sebanyak dua kelas. Satu kelas diberikan perlakuan berupa model *discovery learning* sedangkan kelas lainnya dengan model ekspositori. Data penelitian diperoleh melalui tes kemampuan penalaran induktif matematis siswa, lembar observasi dan analisis jawaban postes siswa. Hasil penelitian menunjukkan bahwa: (1) peningkatan kemampuan penalaran induktif matematis siswa melalui model *discovery learning* lebih baik dibandingkan dengan kemampuan penalaran induktif matematis siswa melalui pembelajaran ekspositori, (2) peningkatan kemampuan penalaran induktif matematis siswa yang memperoleh pembelajaran dengan model *discovery learning* dan ekspositori termasuk kedalam kualitas sedang, dan (3) kesalahan-kesalahan yang dilakukan siswa dalam menyelesaikan soal penalaran induktif matematis diklasifikasikan kedalam tiga jenis kesalahan yaitu: kesalahan konsep, kesalahan prinsip dan kesalahan operasi.

**Kata Kunci** : Model *Discovery Learning*, Kemampuan Penalaran Induktif Matematis

## ABSTRACT

Retno Dwi Putri (1204275). **Improvement of inductive mathematical reasoning ability of Junior High School Student with Discovery Learning Model**

The research was distributed by the importance of inductive mathematical reasoning ability of students and the fact of inductive mathematical reasoning ability that students had. The aims of this study were: (1) to determine the difference of inductive mathematical reasoning ability among students who were learning by using discovery learning model and ekspositori learning, (2) to investigated the increasing quality of inductive mathematical reasoning ability that students were learning by using discovery learning model, and (3) to investigated the mistakes committed students in completing the capability of inductive mathematical reasoning ability. The methods used in this research is a method of quasi experimental design with nonequivalent control group design. The population of the research is the students of 7<sup>th</sup> grade in one junior high school in Bandung city, has been selected two classes. One of the class is given discovery learning model, and the other ekspositori model. Research data obtained through test of inductive mathematical reasoning ability, observation and analysis of answer sheet posttest students. The result showed that : (1) increased the inductive mathematical reasoning ability of students through discovery learning model is higher compared to inductive mathematical reasoning ability of students through ekspositori model, (2) the increased inductive mathematical reasoning ability of students who obtain learning with discovery learning model and ekspositori model each including into better quality. (3) the mistakes committed students in resolving the question of mathematical inductive reasoning are classified into three types of error i.e. concept error, errors of principle and operating errors.

**Keywords : Discovery Learning Model, Inductive Mathematical Reasoning Ability**