ABSTRAK

Nurmuludin (2016), Peningkatan Kemampuan Penalaran Induktif dan *Beliefs* Matematis Siswa SMP dengan Pembelajaran *Inquiry* dan *Guided Inquiry*

Penelitian ini bertujuan untuk mengetahui dan menganalisis perbedaan peningkatan kemampuan penalaran induktif dan *beliefs* matematis antara siswa yang memperoleh pembelajaran *Inquiry*, *Guided Inquiry*, dan Konvensional. Penelitian ini menggunakan kuas eksperimen dengan desain *nonequivalent control group*, dimana populasinya adalah seluruh siswa kelas VIII pada salah satu Sekolah Menengah Pertama Negeri di Kabupaten Cilacap. Sampel terdiri atas tiga kelas dimana setiap kelas diberi perlakuan dengan pembelajaran *Inquiry*, *Guided Inquiry* dan Konvensional. Instrumen yang digunakan dalam penelitian ini terdiri atas tes kemampuan penalaran induktif matematis dan angket *beliefs* matematis. Data yang dianalisis adalah data N-gain kemampuan penalaran induktif dan *beliefs* matematis. Data dianalisis dengan menggunakan uji *One Way Anova*, *Kruskal-Wallis*, dan *Mann-Whitney U*. Berdasarkan hasil analisis diperoleh kesimpulan bahwa: (1) Peningkatan kemampuan penalaran induktif matematis siswa *Guided Inquiry* lebih tinggi secara signifikan daripada siswa *Inquiry*; (2) Tidak terdapat perbedaan peningkatan kemampuan penalaran induktif matematis secara signifikan pada siswa *Guided Inquiry* berdasarkan kategori KAM; (3) Tidak terdapat perbedaan peningkatan kemampuan penalaran induktif matematis secara signifikan pada siswa *Inquiry* berdasarkan kategori KAM; (4) Peningkatan *beliefs* matematis siswa *Inquiry* dan *Guided Inquiry* lebih tinggi secara signifikan dari pada siswa Konvensional.

Kata kunci: kemampuan penalaran induktif matematis, *beliefs* matematis, Pembelajaran *Inquiry*, Pembelajaran *Guided Inquiry*.

ABSTRACT

Nurmuludin (2016), The Enhancement of Junior High School Student's Mathematical Inductive Reasoning and Beliefs Using Inquiry and Guided Inquiry Learning

This research aimed to know and analyze the differences of mathematical inductive reasoning and beliefs enhancement between students who received Inquiry, Guided Inquiry, and Conventional learning. This research used quasi experimental with non-equivalent control group design, which all students of grade VIII in one of Junior High School in Cilacap as the population. The samples consist of three class which each class have been treated with Inquiry, Guided Inquiry, and Conventional learning treatment. The instruments consisted of mathematical inductive reasoning tests and mathematical beliefs questionnaire. The analyzed data were N-gain of mathematical inductive reasoning and beliefs data. The data were analyzed using One Way Anova, Kruskall-Wallis and Mann-Whitney U tests. Based on the analyzed result, the conclusion were : (1) mathematical inductive reasoning enhancement of Guided Inquiry students was higher significantly than Inquiry; (2) there is no difference of mathematical inductive reasoning enhancement significantly in Guided Inquiry students based on Early Mathematical Ability categories; (3) there is no difference of mathematical inductive reasoning enhancement significantly in Inquiry students based on Early Mathematical Ability categories; (4) mathematical beliefs enhancement of Inquiry and Guided Inquiry students was higher significantly than Conventional students.

Keyword: *mathematical inductive reasoning, mathematical beliefs, Inquiry learning, Guided Inquiry learning, Conventional learning*