

ABSTRAK

Ghina Farras Ayuningtyas (1200419). Kemampuan Berpikir Kreatif Matematis Siswa SMP melalui Implementasi Model Pembelajaran *Means-Ends Analysis* dan *Discovery Learning*

Kemampuan berpikir kreatif matematis dan sikap siswa terhadap suatu pembelajaran berpengaruh pada prestasi belajar siswa. Namun pada kenyataannya, kemampuan berpikir kreatif matematis dan sikap siswa terhadap pembelajaran belum sepenuhnya sesuai dengan harapan. Berdasarkan hal ini, perlu kegiatan pembelajaran yang dapat memunculkan kemampuan berpikir kreatif matematis dan sikap positif. Tujuan dari penelitian ini adalah mengetahui perbedaan pencapaian dan peningkatan kemampuan berpikir kreatif matematis siswa yang memperoleh pembelajaran melalui model *means-ends analysis* dan siswa yang memperoleh pembelajaran melalui model *discovery learning*; mengungkapkan secara deskriptif kesulitan siswa pada masing-masing aspek kemampuan berpikir kreatif matematis selama penerapan model pembelajaran *means-ends analysis* dan selama penerapan model *discovery learning*; serta mendeskripsikan sikap siswa terhadap model pembelajaran *means-ends analysis* dan sikap siswa terhadap model *discovery learning*. Metode penelitian yang digunakan adalah metode kuasi eksperimen dengan desain penelitian *two-group pretest-posttest design*. Hasil penelitian menunjukkan bahwa tidak terdapat perbedaan pencapaian dan peningkatan kemampuan berpikir kreatif matematis antara siswa yang memperoleh pembelajaran melalui model *means-ends analysis* dan *discovery learning*. Kriteria pencapaian kemampuan berpikir kreatif matematis pada kedua kelas penelitian adalah cukup, sedangkan kriteria peningkatan kemampuan berpikir kreatif matematis pada kedua kelas penelitian adalah sedang. Pada kelas *means-ends analysis* kesalahan yang paling banyak dilakukan oleh siswa pada aspek *fluency* adalah kesalahan konsep, aspek *flexibility* adalah kesalahan operasi dan acak, aspek *elaboration* adalah kesalahan dalam menentukan informasi yang diketahui dari soal, aspek *originality* dan *sensitivity* adalah kesalahan prosedur. Pada kelas *discovery* kesalahan yang paling banyak dilakukan oleh siswa pada aspek *fluency* adalah kesalahan konsep, aspek *flexibility* adalah kesalahan operasi dan acak, aspek *elaboration* adalah kesalahan dalam menentukan informasi yang diketahui dari soal, aspek *originality* dan *sensitivity* adalah kesalahan acak. Selanjutnya, siswa menunjukkan sikap positif terhadap model pembelajaran *means-ends analysis* dan *discovery learning*.

Kata kunci: Kemampuan berpikir kreatif matematis, model pembelajaran *means-ends analysis*, model *discovery learning*

ABSTRACT

Ghina Farras Ayuningtyas (1200419). Mathematical Creative Thinking Ability of Junior High School Students through the Implementation of Means-Ends Analysis Learning Model and Discovery Learning Model

The aim of this research is to investigate students' mathematical creative thinking ability and their attitude toward mathematical achievement. In fact, both ability and attitude are not yet fully in line with expectations. Based on this situation, we need learning activities that can encourage mathematical creative thinking ability and positive attitude. The purpose of this research is to analyze the students' achievement and enhancement in mathematical creative thinking, particularly for those who acquired learning through means-ends analysis model and discovery learning model; reveal descriptively the difficulties of students in each aspect of creative thinking ability during the implementation of means-ends analysis and during the implementation of discovery learning; and describe the students' attitudes toward means-ends analysis and the students' attitudes toward discovery learning. The method used is quasi-experimental research design with two-group pretest-posttest design. The results show that there are no differences in achievement and enhancement of mathematical creative thinking ability between students who acquired learning through means-ends analysis model and students who acquired learning through discovery learning model. The level of achievement of mathematical creative thinking abilities in both research classes is sufficient, while the level of the enhancement in mathematical creative thinking abilities in both research classes is moderate. In class of means-ends analysis, the most common mistake made by students on the aspects of fluency is a misconception, aspects of flexibility is the operation and random errors, aspects of elaboration is an error in determining the known information on the matter, aspects of originality and sensitivity are procedural errors. In class of discovery the most common mistake made by students on the aspects of fluency is a misconception, aspects of flexibility is the operation and random errors, aspects of elaboration is an error in determining the information, aspects of originality and sensitivity is a random error. Furthermore, the students show positive attitude towards means-ends analysis and discovery learning.

Keywords: mathematical creative thinking ability, means-ends analysis model, discovery learning model