

ABSTRAK

Bima Anggraini. NIM. 8146175004. Efek Model Pembelajaran *Inquiry Training* Menggunakan *Mind Mapping* dan Kemampuan Berpikir Formal Terhadap Keterampilan Proses Sains Siswa SMP. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk menganalisis perbedaan keterampilan proses sains siswa dengan model pembelajaran *Inquiry Training* menggunakan *mind mapping* dan dengan pembelajaran konvensional, perbedaan keterampilan proses sains siswa yang memiliki kemampuan berpikir formal di atas rata-rata dan di bawah rata-rata, serta interaksi antara model pembelajaran *Inquiry Training* menggunakan *mind mapping* dan kemampuan berpikir formal dalam meningkatkan keterampilan proses sains siswa. Penelitian ini merupakan penelitian *quasi experiment* dengan desain *two group pretest-posttest design*. Populasi dalam penelitian ini adalah seluruh siswa kelas IX SMP IT An-Nizam Medan. Pengambilan sampel dalam penelitian ini dilakukan dengan *cluster random sampling* dan sampel dibagi menjadi dua kelas, kelas eksperimen yang diajarkan dengan model pembelajaran *Inquiry Training* menggunakan *mind mapping* dan kelas kontrol diajarkan dengan pembelajaran konvensional. Instrumen penelitian ini menggunakan keterampilan proses sains dalam bentuk unjuk kerja dan tes kemampuan formal dalam bentuk tes uraian. Data dalam penelitian ini dianalisis dengan ANAVA dua jalur. Hasil penelitian menunjukkan bahwa keterampilan proses sains siswa yang diajarkan dengan model pembelajaran *inquiry training* lebih baik dibandingkan dengan siswa yang diajarkan dengan pembelajaran konvensional, keterampilan proses sains pada kelompok siswa yang memiliki kemampuan berpikir formal di atas rata-rata lebih baik dibandingkan dengan kelompok siswa yang memiliki kemampuan berpikir formal di bawah rata-rata, dan terdapat interaksi antara model pembelajaran *Inquiry Training* menggunakan *mind mapping* dan kemampuan berpikir formal dalam meningkatkan keterampilan proses sains siswa.

Kata Kunci : *Inquiry Training*, *mind mapping*, kemampuan berpikir formal, keterampilan proses sains.

ABSTRACT

Bima Anggraini. NIM. 8146175004. The Effect of *Inquiry Training Learning Model Use Mind Mapping and Formal Thinking Ability on Student's Science Process Skills in Junior High School* . A Thesis. Medan: Post Graduate School, State University of Medan, 2016.

The aim of this research were to analyzes: the different students's science process skills by using inquiry training learning model and using conventional learning, the different students's science process skills in the group of students who had formal thinking ability above average and below average, and the interaction inquiry training learning model and conventional learning with formal thinking ability of the students's science process skills. This research carried out by a quasi-experimental with using two group pretest-posttest design. The population of this study was class IX SMP IT An-Nizam Medan. The sample in this research was conducted by cluster random sampling of two classes, experiment class by using inquiry training learning model and control class by using conventional learning. The instruments of this study used science process skills in the perform work form and formal thinking ability test were collected by essay test. The data was analyzed by using two-way analysis of varians. The results of this research are students's science process skills of inquiry training learning model were better than conventional learning, students's science process skills who had formal thinking ability above average were better than students who had formal thinking ability below average, and there were an interactions between the inquiry training learning model with formal thinking ability in improving students's science process skills.

Keywords: inquiry training, mind mapping, formal thinking ability, science process skills.

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