ABSTRAK

ANGGI CAHYA DELI. Pengembangan Penuntun Praktikum Inovatif Terintegrasi Model Pembelajaran Inkuiri Terbimbing Pada Materi Reaksi Reduksi Oksidasi Terhadap Hasil Belajar Kognitif dan Keterampilan Siswa Kelas X SMA. Program Pascasarjana Universitas Negeri Medan, 2017.

Telah dilakukan penelitian dengan tujuan untuk memperoleh penuntun praktikum kimia inovatif terintegrasi model pembelajaran inkuiri terbimbing kelas X SMA semester genap yang valid dan efektif. Penelitian ini merupakan gabungan dari penelitian pengembangan dan eksperimen. Model pengembangan yang digunakan adalah *Research & Development* (R&D) dengan tahapan *Analysis-Design-Development-Implementation-Evaluation* (ADDIE). Populasi dalam penelitian ini adalah seluruh siswa kelas X IPA SMA Negeri Medan. Sampel yang diteliti terdiri dari 2 kelas yang diambil pada sekolah SMA Negeri 6 Medan. Validator dalam penelitian ini meliputi 2 dosen kimia dan 5 guru mata pelajaran kimia. Instrumen yang digunakan adalah angket kelayakan penuntun praktikum yang dimodifikasi BSNP, angket kelayakan penuntun praktikum berdasarkan kesesuaian dengan model pembelajaran inkuiri terbimbing, instrumen tes kognitif, dan lembar observasi keterampilan. Dalam mengujicobakan penuntun praktikum inovatif, digunakan rancangan penelitian *pretest-posttest control group design*. Teknik analisis data menggunakan *independent sample t-test* dengan *SPSS 20 for windows* pada taraf signifikansi 0,05. Berdasarkan hasil penilaian kelayakan penuntun praktikum inovatif diperoleh skor rata-rata 4,3 dengan kriteria sangat valid. Hasil uji coba memperoleh rata-rata nilai *pretest*, *postest*, dan keterampilan pada kelas eksperimen masing-masing sebesar 24,4; 80,1 ; 84,3 sedangkan pada kelas kontrol sebesar 24,6 ; 72,1 ; 78,8. Berdasarkan analisis data hasil belajar aspek kognitif diperoleh bahwa nilai sig. $< \alpha$ (0,000 < 0,05), sedangkan analisis data hasil belajar aspek keterampilan diperoleh nilai sig. $< \alpha$ (0,002 < 0,05). Dengan demikian dapat disimpulkan bahwa: (1) Penuntun praktikum inovatif terintegrasi model pembelajaran inkuiri terbimbing layak digunakan. (2) Pembelajaran menggunakan penuntun praktikum inovatif terintegrasi model inkuiri terbimbing memberikan hasil belajar kognitif yang lebih baik dibandingkan dengan menggunakan penuntun praktikum di sekolah. (3) Pembelajaran menggunakan penuntun praktikum inovatif terintegrasi model inkuiri terbimbing dan penuntun praktikum di sekolah memberikan keterampilan yang berbeda secara signifikan.

Kata Kunci*: Penelitian Pengembangan, Penuntun Praktikum, Inkuiri Terbimbing, Reaksi Reduksi Oksidasi, Kognitif, Keterampilan, Siswa*

ABSTRACT

ANGGI CAHYA DELI. Development of Innovative Practical Guidance Integrated Guided-Inquiry Learning Model on Oxidation Reduction Reaction Topic Towards Cognitive and Skills Achievement For 10th Grade Senior High School. Postgraduate School of the State University of Medan, 2017.

The research has been done aiming to obtain an innovative practical guidance integrated guided inquiry learning model for the 10th Grade Senior High School in second semester. The research was a combination of development and experimental research. The model used is Research & Development (R & D) with the stages of *Analysis – Design – Development – Implementation – Evaluation.* (ADDIE). The population was taken from the students of the 10th Grade Science Senior High School in Medan. The samples of the study consisted of two classes taken at school SMA N. 6 Medan. The validators of this research involved two lecturers and five teachers of chemistry. The instrument used a questionnaire guiding practical feasibility modified by BSNP, eligibility questionnaire practical guidance was based on the conformity of guided inquiry learning model, cognitive test instruments, and the observation skills. In trials of innovative practical guidance in this research used *pretest-posttest control group* design. Data were analyzed by using *independent sample t-test* with *SPSS 20 for windows* at significant level of 0.05. Based on the obtaining results of assesing feasibility of innovative practical guidance and questionnaires were modified by BSNP with guided inquiry learning model with an average score of 4,3 was very valid criteria. The results of trials obtained an average value of pretest, posttest, and skills of the experimental class respectively of 24.4; 80.1; 84.3 while the control class was 24.6; 72.1; 78.8. Based on data analysis results obtained that the cognitive aspects of learning obtained that sig. $< \alpha$ (0.000 <0.05), whereas the data analysis of skills aspects obtained that sig. $< \alpha$ (0.002 <0.05). It could be concluded that: (1) Innovative practical guidance integrated guided inquiry learning model was valid to use. (2) Learning using innovative practical guidance integrated guided inquiry model of cognitive learning outcomes were better than classroom practical guidance. (3) Learning using innovative practical guidance integrated guided inquiry model and classroom practical guidance provide different skills significantly.

Keywords: *Development Research, Practical Guidance, Guided-Inquiry, Oxidation Reduction Reaction, Cognitive, Skill, Student*