ABSTRAK

Said Idrus (NIM. 8146142031). Pengaruh Model *Process Oriented Guided Inquary Learning* (POGIL) Terhadap Keterampilan Proses Sains (KPS) dan Kemampuan Kognitif Siswa Pada Materi Laju Reaksi. Tesis. Medan : Program Pascasarjana Universitas Negeri Medan (UNIMED). 2016.

Penelitian ini betujuan: (1) Untuk mengetahui pengaruh model *Process Oriented Guided Inquary Learning* (POGIL) terhadap Keterampilan Proses Sains (KPS) Siswa; (2) Untuk mengetahui pengaruh model *Process Oriented Guided Inquary Learning* (POGIL) terhadap kemampuan kognitif siswa; (3) Untuk mengetahui korelasi antara Keterampilan Proses Sains (KPS) dengan kemampuan kognitif siswa. Populasi dalam penelitian ini adalah seluruh siswa kelas XI SMA Negeri Seribu Bukit Gayo Lues sebanyak 3 kelas yang berjumlah 78 orang yang terbagi dalam 2 kelas sampel. Data penelitian yang dikumpulkan dari sampel adalah berupa data keterampilan Proses Sains (KPS) diperoleh dari lembar observasi dan tes. Untuk tes digunakan soal pilihan berganda sebanyak 20 soal dengan reliabilitas sebesar 0,81 (sangat Tinggi). Untuk data kemampuan kognitif siswa diperoleh dari hasil pretes dan poster berupa pilihan berganda sebanyak 20 soal dengan reliabilitas sebesar 0,84 (sangat tinggi). Telah dilakukan uji persyaratan berupa uji normalitas dan homogenitas, diperoleh hasil bahwa data normal dan homogen. Hipotesis diuji dengan *Paired Sample t-Test* pada taraf signifikansi 0,05 dengan menggunakan program SPSS 21 *for windows*. Berdasarkan analisis data dan uji hipotesis yang dilakukan diperoleh bahwa: (1) Terdapat perbedaan pengaruh yang signifikan dari model *Process Oriented Guided Inquary Learning* (POGIL) terhadap Keterampilan Proses Sains (KPS) Siswa pada materi laju reaksi, yang ditunjukkan oleh harga signifikasi sebesar 0,00 sehingga 0,00 < 0,05 yang berarti Ha. (2) Terdapat perbedaan pengaruh yang signifikan dari model *Process Oriented Guided Inquary Learning* (POGIL) terhadap kemampuan kognitif siswa pada materi laju reaksi, yang ditunjukkan oleh harga signifikasi sebesar 0,000 sehingga 0,000 < 0,05 yang berarti Ha. (3) Terdapat interaksi yang signifikan antara KPS dengan Kognitif siswa pada materi laju reaksi, yang ditunjukkan oleh nilai probabilitas atau sig. 0,000< 0,05 sehingga dapat dikatakan bahwa hasil pegujian hipotesis menolak Ho atau menerima Ha dalam taraf alhpa 5%

Kata Kunci : POGIL, KPS, Kognitif, Laju Reaksi.

ABSTRACT

Said Idrus (NIM. 8146142031). Influence Model *inquary Process Oriented Guided Learning* (POGIL) Against Science Process Skills (KPS) and Cognitive Ability Students to Content Reaction rate. Thesis. Terrain: Graduate School, State University of Medan (UNIMED). 2016.

This study aims: (1) To determine the effect models *inquary Process Oriented Guided Learning* (POGIL) against Science Process Skills (KPS) Students; (2) To determine the effect models *inquary Process Oriented Guided Learning* (POGIL) on cognitive abilities of students; (3) To determine the correlation between Science Process Skills (KPS) with students' cognitive abilities. The population in this study were all students of class XI SMAN Seribu Bukit Gayo Lues as many as three classes totaling 78 people, divided into two classes of samples. The research data were collected from the sample is in the form of data science process skills (KPS) was obtained from observation sheets and tests. To use multiple-choice test of 20 questions with the reliability of 0.81 (very High). The data on students' cognitive abilities obtained from the pretest and poster form as much as 20 multiple-choice questions with the reliability of 0.84 (very high). Tests have been conducted in the form requirements of normality and homogeneity test, the result that normal data and homogeneous. The hypothesis was tested with Paired Sample t-Test at significance level of 0.05 using SPSS 21 for windows. Based on data analysis and hypothesis testing are carried out found that: (1) There is a significant difference from the model of *Process Oriented Guided inquary Learning* (POGIL) toward Skills Process Science (KPS) Students on the material reaction rate, which is shown by the price of the significance of 0, 00 so that 0.00 <0.05, which means Ha. (2) There is a significant difference from the model *inquary Process Oriented Guided Learning* (POGIL) on cognitive abilities of students in the material reaction rate, which is shown by the price of the significance of 0.000 to 0.000 <0.05, which means Ha. (3) There is a significant interaction between KPS with students on the Cognitive material reaction rate, which is indicated by the probability or sig. 0.000 <0.05 so that it can be said that the results of test of hypothesis reject or accept Ho Ha in alhpa level of 5%

Keywords: POGIL, KPS, Cognitive, rate of reaction.