

**THE EFFECT OF SCIENTIFIC INQUIRY LEARNING MODEL TO SCIENCE
PROCESS SKILLS ON ELASTICITY AND HOOKE'S LAW TOPIC
GRADE XI ODD SEMESTER IN SMA SWASTA
SANTA MARIA MEDAN A.Y 2018/2019**

**Chandra Meisan Sitanggang
(4143322005)**

ABSTRACT

This research have purpose to know the effect of scientific inquiry learning model to science process skills on Elasticity and Hooke's law topic grade XI odd semester in SMA Swasta Santa Maria Medan A.Y 2018/2019. This research is a quasi experiment with control group pretest-posttest design. Population in this research are whole students of SMA Swasta Santa Maria Medan class XI science odd semester academic year 2018/2019 which totally 2 classes so that class XI Science-1 as experiment class and class XI science-2 as control class each consists of 30 students. The instrument was used to get data is essay test which contains of 7 questions and had been validated by some experts in Physics.

Based on the result of research obtained the mean pretest of experiment class is 49.76 with the standard deviation 12.12 and the mean pretest of control class is 48.81 with the standard deviation 12.56. After doing normality test and homogeneity test, data of pretest from both of sample was normal distribution and homogeneous. From the result of hypothesis test by t test two tail on significant level $\alpha = 0.05$ get that oth of sample have the same initial ability. Then after given the treatment for experiment class using scientific inquiry learning and control class using the conventional learning model, so the result of mean posttest of experiment class is 76.31 with standard deviation 11.77 and mean posttest of control class 70,83 with the standard deviation 12.83. The result of hypothesis test through t test one tail get that H_0 rejected and H_a accepted. It can be concluded that there is the effect of Scientific Inquiry Learning model on student's science process skills on Elasticity and Hooke's law topic of SMA Swasta Santa Maria Medan class XI science odd semester academic year 2018/2019. The result of student's activity based on science process skills indicator during the learning process using the scientific inquiry learning model of research have increase every meet and has the good category.

Keywords: Scientific inquiry, conventional, science process skills, activity, elasticity and Hooke's law.