

**THE EFFECT OF PROBLEM BASED LEARNING MODEL ASSISTED
CONCEPT MAP TO AUTHENTIC PROBLEM SOLVING SKILLS
TOPIC ON DYNAMIC ELECTRIC GRADE X SMA NEGERI 1
SIDIKALANG A.Y 2015/2016**

Novita Sari Silalahi(4123322011)

ABSTRACT

The purpose of this study was to determine the effect of problem based learning model to authentic problem solving skills of students topic on dynamic electric grade X SMA Negeri 1 Sidikalang . This type of research is quasi-experimental. The population of this entire class X SMA Negeri 1 Sidikalang consist of 11 classes. The sample in this study was taken by a random sampling of two classes that's X-8 class as experiment class with 23 students and X-7 class as control class with 26 students. The instrument used to determine student learning outcomes in the material dynamic electric in the form of essay test with numbered 10 and the observation sheet. Based on the result of this research, the average of pretest on experiment class 26.52 and control class 22.69. The both of class was given with different treatment, experimental class with problem based learning(PBL) model and control class with conventional learning model . After learning process was finish the class gave the post-test with an average 74.34 on experimental class and control class 68.07. The t-test results was $t_{count} = 3.02$ and $t_{table} = 1.66$ then $t_{count} > t_{table}$ and H_a was accepted. The results obtained by testing hypotheses is concluded that there is a significant relationship between use problem based learning model to authentic problem solving skills of students grde X SMA Negeri 1 Sidikalang.

Keywords: *problem based learning, authentic problem solving.*