

**THE EFFECT OF GUIDED DISCOVERY LEARNING  
ON STUDENT'S LEARNING OUTCOMES  
OF STATIC FLUID IN CLASS X  
SMA NEGERI 10 MEDAN  
ACADEMIC YEAR  
2016/2017**

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**ABSTRACT**

The objectives of this research are: (1) To know the student's learning outcomes in physics subject after taught by Guided Discovery Learning. (2) To know the student's learning outcomes in physics subject after taught by Conventional Learning. (3) To know the effect of Guided Discovery Learning on student's learning outcomes of Static Fluid in Class X SMA Negeri 10 Medan Academic Year 2016/2017.

The research method was quasi experimental. The populations were all X IPA grade students in semester II that consist of 6 classes SMA Negeri 10 Medan. The samples of this research conduct two classes and consist of 63 students, 32 from experiment class and 31 from control class and define by random cluster sampling.

The results of were obtained: pre-test mean value of experiment class was 41.72 and 40.16 for control class and then post-test mean value of the experiment class was 81.56 and 62.90 was the mean value for control class. Standard deviation in pre-test were 7.47 in experiment class and 7.79 in control class and standard deviation in post-test for two classes were 7.01 and 8.64. Normality of the test result from the both samples was normal and homogenous. In the testing of hypothesis for pre-test, the criteria is:  $H_0$  is accepted if  $t_{count} < t_{table}$  and  $H_0$  is rejected if  $t_{count}$  has another score, where  $t_{table}$  obtained from list of distribution t. From the calculation of test t for concept mastery using  $\alpha = 0.05$ , obtained  $t_{count} = 0.82$ , where  $t_{table} = 1.99$ . It means, experiment class and control class have same ability. And for post-test, the criteria is :  $H_a$  is accepted if  $t_{count} > t_{table}$  and is rejected if  $t_{count}$  has another score. From the calculation of t-test one side for  $\alpha = 0.05$ , obtained  $t_{count} = 9.43$ , where  $t_{table} = 1.67$ . So, there was the effect of Guided Discovery Learning on Student's Learning Outcomes of Static Fluid in Class X SMA Negeri 10 Medan. Based on observation that done by observers with using observation sheet of student activity, conclude that activity of students in experiment class more active than control class.

**Key word:** Guided Discovery Learning, student's learning outcomes, activity.