

**THE EFFECTIVENESS OF DISCOVERY LEARNING  
MODEL INTEGRATED WITH EXPERIMENT TO  
INCREASE STUDENT'S ACHIEVEMENT ON  
LEARNING COLLOIDAL SYSTEM**

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**ABSTRACT**

The objectives of this research are to get the comparison between discovery learning model integrated with experiment and without experiment to increase student's achievement, and student's interest. Beside of that, this research also conducted to know the correlation between student's achievement and student's interest. This research was done in SMA N 2 Lintongnihuta. Population is all the students in SMA N 2 Lintongnihuta which taken by total sampling. The research instruments are achievement test and non test in list interest form. Both of instruments have been validated. The research data analyzed by SPSS -17 for windows. The result data shows that (1) The student's achievement taught by discovery learning model integrated with experiment give higher significance difference than discovery learning model without experiment. It can be seen from the average of gain and also proved with t-test, at significant level  $\alpha = 0.05$ ,  $H_{a1}$  is received and  $H_{o1}$  is refused where  $\text{Sig.} < \alpha$ , (2) The student's interest taught by discovery learning model integrated with experiment give higher significance difference than discovery learning model without experiment. It can be seen from the average of interest and also proved with t-test, at significant level  $\alpha = 0.05$ ,  $H_{a2}$  is received and  $H_{o2}$  is refused where  $\text{Sig.} < \alpha$ , (3) There is correlation between two variables that are student's achievement and student's interest at significant level  $\alpha = 0.05$ ,  $H_{a3}$  is received and  $H_{o3}$  is refused where  $\text{Sig.} < \alpha$ , with Pearson correlation ( $r$ ) = 0.637, it means categorized in high correlation.

**Keywords:** Discovery Learning Model, Experiment, Student's Achievement, Student's Interest