

THE IMPLEMENTATION OF POGIL STRATEGY WITH WORKSHEET MEDIA TO INCREASE STUDENT'S INTEREST AND ACHIEVEMENT IN TEACHING COLLOIDAL SYSTEM BASED ON LESSON STUDY

Angeline Viska Ayu Rosalia (Reg. No. 4113131004)

ABSTRACT

The objectives of this research are to get the comparison between POGIL strategy with worksheet media based on lesson study and direct instruction method 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 Medan, SMA N 3 Medan, and SMA Swasta Raksana. Population is all the students in each of schools which taken by purposive random 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 -18 for windows. The result data shows that (1) The student's achievement taught by between POGIL strategy with worksheet media based on lesson study give higher significance difference than direct instruction method. It can be seen from The average of gain in experiment class are (0.76 ± 0.02) , where the highest is at SMAN 3 Medan (0.86 ± 0.09) and the lowest is at SMAN 2 Medan (0.71 ± 0.13) , and in control class are (0.56 ± 0.13) , H_{a1} is received and H_{o1} is refused where $\text{Sig.} < \alpha$ ($0.000 < 0.05$), (2) The student's interest taught by POGIL strategy with worksheet media based on lesson study give higher significance difference than direct instruction method. It can be seen from the average of interest and also proved with t-test, SMA N 2 Medan (70,5), SMA N 3 Medan (82,96) and SMA Swasta Raksana (80,25) while in the control class SMA N 2 Medan (59,82), SMA N 3 Medan (76,05) and SMA Swasta Raksana (70,43), H_{a2} is received and H_{o2} is refused where $\text{Sig.} < \alpha$ ($0.000 < 0.05$), (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 $\text{Sig.} < \alpha$ ($0.000 < 0.05$), with Pearson correlation (r) in SMAN 2 Medan (0.508), SMAN 3 Medan (0.553), and SMA Swasta Raksana (0.311), it means categorized in high correlation.

Keywords: POGIL strategy, Worksheet, Lesson Study, Direct Instruction Student's Achievement, Student's Interest