THE EFFECTIVENESS OF HYPOTHETICAL-DEDUCTIVE LEARNING CYCLE TO INCREASE SENIOR HIGH SCHOOL STUDENT’S ACHIEVEMENT AND COOPERATION IN THE TEACHING OF COLLOIDAL SYSTEM

Fery Surya Perdana (Reg. Number: 4103332016)

ABSTRACT

The effectiveness of hypothetical-deductive learning cycle to increase senior high school students’ achievement is conducted to compare the best result in teaching colloidal with direct instructional method. This experiment research is known by looking students’ achievement and character in SMAN 1 Perbaungan. The students was divided into two groups, called as experimental class in class XI.A.U.2 and control class in class XI.A.U.1 based on purposive sample techniques. Instrument used is validated multiple choice questions as 20 questions and all questions is reliable. The first time, pre-test is given to both class. Then, in experimental class was used hypothetical-deductive learning cycle and in control class was used direct instructional. The last, post test is given for each of class. Before hypothesis test, data is tested by normality test and homogeneity test by using SPSS-18 program for windows. Based on the result in experimental class was obtained the average of pre-test score 30.60 with standard deviation 9.61 and post test score 82.2 with standard deviation 6.13. In control class was obtained the average of pre-test score 27.40 with standard deviation 8.67 and post test score 70.0 with standard deviation 7.50. The hypothesis is tested by using SPSS-18 program for windows. The result data for hypothesis I, Sig = 0.000, so Sig < \( \alpha \) (0.05) it means The learning outcome as teaching model increase student’s achievement is accepted. Then for hypothesis II, Sig = 0.000, so Sig < \( \alpha \) (0.05) It means that the learning outcome to increase cooperation character is accepted.

Keywords : Hypothetical-Deductive Learning Cycle, Experimental Method, Cooperation Character, Students’ Achievement.