THE EFFECT OF THE OPEN INQUIRY LEARNING ACTIVITIES ON PROBLEM SOLVING ABILITY, AND LEARNING ACHIEVEMENT.

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ABSTRACT

To enhance problem solving ability and learning achievement for students by constructivism Through the thinking process and the learning activities, Open Inquiry Learning Approached and Conventional Learning. The purposes of this study were to compared means of problem solving ability, learning achievement, and study correlation between problem solving ability score, learning achievement score between students in two different contexts: Open Inquiry Learning Approached and Conventional Learning. The population was 130 Grade-10 students and a sample chosen by simple random sampling. The students were randomly organized into two groups : 42 students in the experimental group and 44 in the control group, by drawing numbers. For data gathering pretest – posttest by problem solving ability test, science

achievements test, science process skill test, and scientific attitude scale. The collected were analyzed by means of computing percentage, standard deviation and a t-test. The finding : The pretest mean scores of the two groups 1) Problem solving ability, achievement, and science process skill were not different at the .05 level of significance, but scientific attitude were different at the .05 level of significance. Student's scientific attitude experimental group higher than control group. 2) Correlations were computed to the relationship experimental group means of achievement and problem solving ability were positive correlation at .05 level of significance, achievement and science process skill were positive correlation at .01 level of significance but achievement and scientific attitude were not significance at .05 level. Correlations were computed to the relationship control group means of achievement and science process skill were positive correlation at .05 level of significance but achievement and problem solving ability and scientific attitude were not significance at .01 level.