

**THE EFFECTIVENESS OF LABORATORY EXPERIMENT METHOD
TO INCREASE ACTIVITY AND STUDENT'S ACHIEVEMENT IN
TEACHING OF SOLUBILITY AND SOLUBILITY PRODUCT**

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ABSTRACT

The aim of this research is to know the effectiveness of laboratory experiment method to increase students' achievement, students' activities and the significance correlation between students' achievement and student's activity. Population of this research are all of students in grade XI at 2nd semester from SMA Negeri 1 Lubukpakam, SMA Negeri 3 Medan, and SMA Swasta Methodist 1 Medan. Sample was chosen by purposive random sampling and taken 2 class for each school. The students were divided into two groups, one as experimental class and other as control class. Research design in this study using *Quasy experimental design*. The Instrument test that was used in the form of 20 multiple choice as achievement test and non-test in list of activity form. In experimental class was used laboratory experiment method and in control was used conventional method. After conducting research, have gotten the result in experimental class the average of % gain is 80.00 ± 6.71 and in control class 63.00 ± 7.00 . The hypothesis testing by using right side t-test. Criterion of hypothesis is received H_a if the value of $t_{count} > t_{tabel}$. From the calculation of hypothesis testing for student's achievement obtained the value of t_{count} is 15.591 where $t_{tabel} = 1.288$. It means that $t_{count} (15.591) > t_{tabel} (1.288)$ so it means (H_a) is accepted and (H_o) is rejected. It proved that the mean of student's achievement that taught using laboratory experiment method is higher than conventional method. Also hypothesis testing for student's learning activities obtained result $t_{count} = 5.633$ while $t_{tabel} = 1.288$, it means that $t_{count} > t_{tabel}$ so it means accepted (H_a) and rejected (H_o). It means the mean of student's learning activity that taught using laboratory experiment method is higher than conventional method. The result of correlation calculation between student's activities and student's achievement obtained low correlation and positive in experimental class where obtained $r_{count} = 0.264$. The % effectiveness of applying laboratory experiment method to increase student's achievement in experiment class is 23.33 % while the % effectiveness to increase student's learning activity in experiment class is 18 %.