

**THE INFLUENCE OF EXPERIMENTAL METHOD USING PAS IN
SENIOR HIGH SCHOOL TOWARD STUDENT'S PROCESS
SKILL AND ACHIEVEMENT IN ELECTROLYTE AND
NON ELECTROLYTE SOLUTION**

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Abstract

The main objective of this research is to know the influences of experiment method using PAS toward student's process skill and achievement. In addition, the objective of this research are to know the feasibility of PAS, the result testing of PAS, and student's perception to PAS. This research was conducted in MAN 2 Model Medan on the second semester. The sample that is used are the students in grade X in two classes, one class as experiment class and the other as a control class. The instrument that is used in this research has been tested based on validity and reliability. Based on validity, from 30 questions, there are 18 questions are valid and r_{cal} for reliability test is 0,806. It means that the questions are reliable with high categories. Research result show The average of post test in experiment class is $80,30 \pm 9,75$ with gain is 0,67 (medium) and the average of post test in control class is $70,61 \pm 8,88$ with gain is 0,51 (medium). The data of research result had been analyzed by using normality test and homogeneity test which is shown that data (gain) are normal distribution and homogen. It is as a requirement to do hypothesis test. Based on hypothesis test using t-test was gotten value of $t_{cal} > t_{table}$ that is $5,33 > 1,717$ at significance level ($\alpha=0,05$), in order that H_a is received and H_o is refused, it means that student's achievement in class that had been learnt by using experiment method with PAS guidance is higher than student's achievement that had been learnt with conventional method. The feasibility percentage of PAS guidance is 88,89%, it means that PAS is feasible to used in experiment. Result testing of PAS give the same result with theory. Students who be learnt by using laboratory experiment method with PAS can increase their process skill with the average is 92,18% in very high categorized. The average of student's perception to PAS guidance is 83,31%. It means that students perception in experiment class is good, and the students understand about the instruction and the content of PAS guidance.