

**THE IMPLEMENTATION OF INQUIRY-BASED LEARNING
MODEL TO IMPROVE STUDENT'S ACHIEVEMENT AND
INTEREST ON SALT HYDROLYSIS TOPIC**

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ABSTRACT

The implementation of inquiry-based learning model with concept mapping to improve student's achievement and interest on salt hydrolysis topic is explained. The aim of this research, to know how is the student's achievement that be taught by inquiry-based learning model with concept mapping significant higher than taught by inquiry-based learning model on salt hydrolysis topic, and the second is to know the student's interest that most improve through both experimental class. This research was done in SMA Swasta Raksana Medan on second semester. The population is XI Nat. Science and the sample is total sampling because there are just two classes consisted. The research instrument that was used in the research consists of test instrument and non-test. Both of instruments have been validated. The research data is analyzed by SPSS-16 for windows. The instrument test that used is multiple choice with five alternative options. The instrument test had been tested based on validity and reliability test. Based on validity, from 40 questions done, there were 27 questions are valid and just 20 questions are used as instrument test and r_{count} for reliability test is 0.743 which means that accepted reliable. The data of this research has been analyzed by hypothesis test. Based on hypothesis test using right side T-test, the result shows that the gain in 1st experimental class is (0.73 ± 0.13) and 2nd experimental class is (0.58 ± 0.13) at significant level $\alpha = 0.05$, H_{a1} is received and H_{o1} is rejected where $\text{Sig.} < \alpha$ $(0.000) < 0.05$. The non-instrument test that is used is questionnaire. It was firstly done the validity by validator. From 20 questionnaire, all was valid. It is used to measure the student's interest. The student's interest in 1st experimental class is higher than in 2nd experimental class. It can be seen from the average of interest and also proved with t-test, the average in 1st experimental class is (27.59) and 2nd experimental class is (19.69) at level $\alpha = 0.01$, H_{a1} is received and H_{o1} is rejected where $\text{Sig.} < \alpha$ $(0.006) < 0.01$. The Pearson correlation for achievement with interest is 0.250 for enough correlation.

Keywords: Inquiry-Based Learning Model, Experiment, Student's Achievement, Student's Interest