## THE DIFFERENCES OF STUDENTS' LEARNING OUTCOMES THROUGH IMPLEMENTATION OF COOPERATIVE LEARNING MODEL TYPES INTEGRATED OF MEDIA IN SALT HYDROLYSIS TOPIC

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## Abstract

The objective of this research is to know the difference of students learning outcomes by implementing cooperative learning model types of STAD (Student Team Achievement Division), NHT (Numbered Head Together) and Jigsaw integrated of animation media. This research was conducted in three different classes in grade XI, SMAN 3 Medan, the first experimental class taught by STAD type integrated of animation media, second experiment class taught by NHT type integrated of animation media and third experimental class taught by jigsaw type integrated of animation media. The research instrument in this research are 20 multiple choice questions from 40 questions that have validated. The result of data processing obtained an average pretest experimental class I was  $40,25 \pm 8,26$ . The average of pretest data in experimental class II is  $37.7 \pm 9.52$  while the average pretest experimental class III is  $39,67 \pm 8,69$ . All data pre-test, post-test obtained normally distributed data. The data is then tested homogeneity so that the three classes are homogeneous. While the character aspect analyzed in the third experimental classes who observed by observer were discipline character, teamwork character, mutual respect character and responsibility character. The average of student character who observed in experimental class I was 74,82, the average of students 'character in experimental class II was 70,82, the average of students' character in experimental class III was 71,18. From the data after analyzed, the average of improvement of the students' learning outcomes in experimental class I was 71%, the improvement of the students 'learning outcomes in experimental class II was 72% and the improvement of the students' learning outcomes in experimental class III was 60%. While in experimental class I, experimental class II and experimental class III based on hypothesis test using F-test ( $\alpha = 0.05$ ), the significant value is 4.78. It shows for verbal hypothesis that  $F_{table}$  (3,118)  $< F_{count}$  (4,78) means that Ho is rejected and Ha is accepted. So, it shows that there is any significant difference on students' learning outcomes that taught by cooperative learning model type of STAD integrated of animation media, type of NHT integrated of animation media and type of Jigsaw integrated of animation media. There is a difference after being tested by BNt testing that the most effective and efficient learning that used in the XI class of Natural Science at SMAN 3 Medan in Salt Hydrolysis topic is cooperative learning model type of NHT integrated of animation media.

**Keyword**:Cooperative Learning Model Integrated of Media, Student Team Achievement Division (STAD), Number Head Together(NHT), Jigsaw, Animation Media, Students' Learning Outcomes, Character.