## THE EFFECT OF COOPERATIVE LEARNING MODEL TYPE OF STUDENT TEAMS ACHIEVEMENT DIVISIONS (STAD) BASED ON MIND MAPPING ON LEARNING OUTCOMES OF STUDENTS IN THE DYNAMIC ELECTRICS SUBJECT MATTER IN CLASS X EVEN SEMESTER SMA NA BINJAI A.Y. 2015/2016

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## ABSTRACT

This research aims to know the results of student learning by using cooperative learning model of the type of student teams achievement divisions (STAD) based on mind mapping in experiment class and learning conventional models in the control class, and also to know the influence of cooperative learning model of the type of student teams achievement divisions (STAD) based on mind mapping on learning outcomes of students.

Type of this research is quasi experimental. The population of this research is all the students class X even semester SMA Negeri 4 Binjai A.Y. 2015 / 2016 which consisted of 298 students and consisting of six classes regular and 2 classes excellent. A sample of this research was taken two classes are determined by means of cluster random sampling, namely class X4 as a experiment class and a class X5 as a control class that each class number 39 students and 41 students.

From the data analysis the results obtained average value of experimental class pretest was 34,1 with standard deviation 10.70 and the average value of the control's class pretest 32,94 with standard deviation 11.06, thus obtained  $F_{count}$  of 1.06 and  $F_{table}$  of 1,71. Because  $F_{count} < F_{table}$  (1,06 < 1,71), so that the results for these two classes have pretest homogeneous. Then obtained  $t_{count} < t_{table}$  (0,47 < 1,99), It concluded there was no significant difference between the results of learning students experiments class with control class. After study completion given obtained average value of experimental class posttest is 76,53 with standard deviation 9.60 and average value of control class is 70,48 posttest with standard deviation 10,77. Both of these data have a normal distribution. Results of hypothesis testing obtained  $t_{count} > t_{table}$  atau 2,61 > 1,66 so the conclusion is that there is the influence of cooperative learning model type of student teams achievement divisions (STAD) based on mind mapping on the learning outcomes of students.