THE EFFECT OF COOPERATIVE LEARNING MODEL TYPE OF JIGSAW BASED ON MIND MAPPING ON STUDENT'S LEARNING OUTCOMES IN THE TEMPERATURE AND HEAT SUBJECT MATTER IN CLASS X EVEN SEMESTER SMA NEGERI 3 MEDAN LEARNING YEAR 2013/2014

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ABSTRACT

The objectives of this research are: (1) To know the student's learning outcomes in physics subject taught by cooperative learning model type of jigsaw based on mind mapping. (2) To know the student's learning outcomes in physics subject taught by conventional learning based on mind mapping. (3) To know the effect of cooperative learning model type of jigsaw based on mind mapping on student's learning outcomes in the temperature and heat subject matter. The type of research was quasi experiment with the population all of student in class X even semester in SMA N 3 Medan which consits of 14 classes. Sample of this research was obtained by technique of cluster random sampling.

The sample is X MIA 12 as the experiment class and X MIA 14 as the control class. Experiment class taught by cooperative learning model type of jigsw based on mind mapping and control class taught by direct instruction model. The research instrument has 20 questions in multiple choice forms with 5 options, the instrument tested validated. In this research obtained the mean of pre-test in experiment class is 41.41 and in control class is 41.25. After that do the treatment in experiment class taught by cooperative learning model type of jigsaw based on mind mapping and in control class taught by direct instruction model, and then done the post-test.

The mean of post-test in experiment class is 80.16 and in control class was 68.90. In hypothesis testing obtained $t_{count} > t_{table}$ that was 5.18 >1.669 at significant level $\alpha = 0.05$ and n = 32. So, can be concluded that the student's learning outcomes in experiment class differ with control class. Can be concluded that there is effect of cooperative learning model type on student's learning outcomes in the temperature and heat subject matter in class x even semester SMA N 3 Medan academic year 2013/2014.

Key words: jigsaw, mind mapping, student's learning outcomes