

ABSTRAK

JOHANNES MARBUN. NIM 8116176008. Efek Model Pembelajaran Kooperatif Tipe Jigsaw Berbasis Mind Map dan Kemampuan Berpikir Kritis Terhadap Hasil Belajar Fisika Siswa Kelas XI SMK Negeri 1 Sorkam T.P 2013/2014. Tesis. Medan. Program Studi Pendidikan Fisika Pascasarjana Universitas Negeri Medan. 2013.

Penelitian ini bertujuan untuk: (1) menganalisis perbedaan hasil belajar fisika siswa yang dibelajarkan menggunakan model pembelajaran kooperatif tipe jigsaw tanpa mind map dengan pembelajaran kooperatif tipe jigsaw berbasis mind map; (2) menganalisis perbedaan hasil belajar fisika siswa yang memiliki kemampuan berpikir kritis fisika tinggi dengan kemampuan berpikir kritis fisika rendah; (3) menganalisis interaksi antara model pembelajaran kooperatif tipe jigsaw berbasis mind map dan model pembelajaran kooperatif tipe jigsaw tanpa mind map dengan kemampuan berpikir kritis fisika terhadap hasil belajar fisika. Penelitian ini merupakan penelitian eksperimen dengan desain faktorial 2x2. Populasi penelitian ini adalah seluruh siswa kelas XI SMK Negeri 1 Sorkam semester I T.P 2013/2014. Sampel penelitian ini terdiri dari dua kelas dengan jumlah sampel 72 orang yang ditentukan dengan cluster random sampling, yaitu XI-1 TKJ sebagai kelas eksperimen menggunakan model pembelajaran kooperatif tipe jigsaw berbasis mind map sebanyak 36 orang dan XI TSM sebagai kelas eksperimen menggunakan model pembelajaran kooperatif tipe jigsaw tanpa mind map sebanyak 36 orang. Instrumen penelitian berupa tes kemampuan berpikir kritis fisika dan tes hasil belajar fisika. Uji persyaratan telah dilakukan berupa uji parametrik karena data yang diperoleh berdistribusi normal dan homogen. Hipotesis penelitian diuji dan dianalisis menggunakan GLM (*General Linier Model*) pada taraf signifikansi 0,05 dengan bantuan SPSS versi 17.0 for windows. Berdasarkan analisis data dan uji hipotesis yang dilakukan, diperoleh bahwa: (1) model pembelajaran kooperatif tipe jigsaw berbasis mind map lebih baik dalam meningkatkan hasil belajar fisika siswa dibandingkan model pembelajaran kooperatif tipe jigsaw tanpa mind map; (2) hasil belajar fisika siswa yang memiliki kemampuan berpikir kritis fisika tinggi lebih baik dibandingkan siswa yang memiliki kemampuan berpikir kritis fisika rendah; (3) terdapat interaksi antara model pembelajaran kooperatif tipe jigsaw tanpa mind map dan model pembelajaran kooperatif tipe jigsaw berbasis mind map dengan kemampuan berpikir kritis fisika terhadap hasil belajar fisika.

Kata kunci: model pembelajaran, kooperatif, jigsaw, mind map, kemampuan berpikir kritis fisika, hasil belajar

ABSTRACT

JOHANNES MARBUN. ID 8116176008. The Effect of The Cooperative Learning Model with Jigsaw Type Based on Mind Map and The Critical Thinking on The Students' Physics Achievement at 11th grade Sorkam Vocational School Periode 2013/2014. Thesis. Medan. Physical Education Program of Postgraduate Studies of The State University of Medan. 2013.

The purpose of this research consists of (1) analyse difference of the students' physics achievement among the cooperative learning model with jigsaw type without mind map and the cooperative learning model with jigsaw type based on mind map; (2) analyse difference of the students' physics achievement between the students have high critical thinking and who have low critical thinking; (3) analyse interaction of the cooperative learning model with jigsaw type based on mind map and the cooperative learning model with jigsaw type without mind map together critical thinking for physics to the students' physics achievement. The research used experiment with 2x2 factorial design. The population of this research were the student of second semester of 11th grade Sorkam Vocational School periode 2013/2014. The sample of this research were two class consisted of 72 students in which determined by using cluster random sampling, the first was eleven-one computer class as the experiment class used the cooperative learning model with jigsaw type based on mind map which consisted of 36 students and the second was eleven motorcycle class as the experiment class used the cooperative learning model with jigsaw type without mind map which consisted of 36 students. The instruments of this research are critical thinking test and physics achievement test. The proper test have been done by using parametric technic because the distribution of data are normaly and homogenously. The hypothese of this research analysed with GLM (General Linier Model) on 0,05 level of signficance and help on SPSS 17.0 for windows version. The results of this research consisted of (1) the cooperative learning model with jigsaw type based on mind map was better than the cooperative learning model with jigsaw type without mind map in improving the students' physics achievement; (2) the students' physics achievement that had high critical thinking was better than low critical thinking; (3) There are interaction between using of the cooperative learning model with jigsaw type without mind map and cooperative learning model with jigsaw type based on mind map together critical thinking for physics in improving the students' physics achievement.

Keywords: Learning Model, cooperative, jigsaw, mind map, critical thinking for physics, achievement