

## ABSTRAK

Grace Dennys Hutabarat. **Efek Model Pembelajaran *Problem Solving* Dan Motivasi Terhadap Hasil Belajar Fisika Siswa SMA.** Tesis. Medan: Program Studi Pendidikan Fisika Pascasarjana Universitas Negeri Medan, 2013.

Penelitian ini bertujuan untuk: (1) Mengetahui perbedaan hasil belajar fisika siswa antara model pembelajaran *Problem solving* berbasis eksperimen dan model pembelajaran ekspositori. (2) Mengetahui hasil belajar fisika antara siswa yang mempunyai motivasi belajar di atas rata-rata dan motivasi belajar dibawah rata-rata. (3) Mengetahui interaksi antara model pembelajaran *Problem solving* dengan model pembelajaran ekspositori dan motivasi dalam meningkatkan hasil belajar. Penelitian ini merupakan penelitian quasi eksperimen dengan desain faktorial 2x2. Populasi penelitian adalah seluruh siswa kelas X SMA Negeri 1 Sidamanik Semester II T.P 2012/2013. Sampel penelitian terdiri dari dua kelas dengan jumlah sampel 75 orang yang ditentukan dengan *cluster random sampling*, yaitu X-1 sebagai kelas eksperimen menggunakan model pembelajaran *Problem solving* berbasis eksperimen sebanyak 38 orang dan X-2 sebagai kelas kontrol menggunakan model pembelajaran ekspositori sebanyak 37 orang. Instrumen penelitian berupa tes hasil belajar dan angket motivasi. Uji persyaratan telah dilakukan berupa normalitas dan homogenitas, yang diperoleh hasil bahwa data normal dan homogen. Hipotesis dianalisis dengan bantuan SPSS 17.0 *for windows* pada taraf signifikan 0,05. Berdasarkan analisis data dan uji hipotesis yang dilakukan diperoleh bahwa : (1) Model pembelajaran *Problem solving* berbasis eksperimen lebih baik dalam meningkatkan hasil belajar fisika siswa daripada model pembelajaran ekspositori. (2) Hasil belajar fisika siswa yang mempunyai motivasi belajar di atas rata-rata lebih baik dibanding dengan siswa yang mempunyai motivasi belajar dibawah rata-rata. (3) Ada interaksi antara model pembelajaran *Problem solving* dengan model pembelajaran ekspositori dan motivasi dalam meningkatkan hasil belajar.

Kata kunci : model pembelajaran, *Problem solving*, metode eksperimen, motivasi belajar, hasil belajar

## ABSTRACT

Grace Dennys Hutabarat. **The Effect Of the Problem Solving Learning Model and Learning Motivasi on Learning Outcomes Physics of Students SMA.** Thesis. Medan : Physics Education Studies Graduate Program, State University of Medan, 2013.

This research aimed to (1) find out difference the students physics achievement among the *Problem solving* learning model based on the eksperiment and learning model ekspository, (2) to figure out the learning outcome physics of students between the students of high learning motivation with those who had low learning motivation, (3) to figure the interaction between using of *Problem solving* learning with the motivation to improve the learning outcome physics of students. This research used a quasi experiment with 2x2 factorial design. The population of this research was the students of second semester of grade X SMA N 1 Sidamanik academic year 2012 /2013. The samples of this research were two classes, consisted of 75 students in which determined by using cluster random sampling, the first was grade X-1, as the eksperimental class used the *Problem solving* learning model based eksperiment which consisted of 38 student and the second was grade X-2 as control class used the ekspository which consisted of 37 students. The requirements of test had been carried out by using normality and homogeneity tests, and it was figured out that the data were normal and homogenous. The hypotheses were analyzed by using SPSS 17.0 for windows with 0.05 level of significance. The results of this research by using the data analysis and testing of hypotheses were : (1) the *Problem solving* learning model based on the eksperiment was better than that ekspository learning model in improving the learning outcome physics of students, (2) the student of high learning motivation was better than those who had the low learning motivation, (3) The interaction between using of the *Problem solving* learning model based on the eksperiment with ekspository learning model and motivation to improve learning outcome physics of student.

*Key word : learning model, problem solving, method eksperiment , learning motivation, learning outcome*