

## ABSTRAK

**Irawati Lebora Hutabarat. “Efek Model *Problem Based Learning* Terhadap Kreativitas Dan Kemampuan Pemecahan Masalah Fisika SMA”. Program Pascasarjana Universitas Negeri Medan, 2017.**

Penelitian ini bertujuan untuk menganalisis kreativitas dan kemampuan pemecahan masalah siswa yang dibelajarkan dengan model *problem based learning* dengan pembelajaran langsung. Penelitian ini merupakan penelitian *quasi eksperimen* dengan desain *two group pretest posttest*. Populasi penelitian ini adalah seluruh siswa kelas X SMA Negeri 1 Bandar semester II tahun pelajaran 2016/2017. Sampel penelitian ini di ambil secara *cluster random sampling* yaitu sebanyak 2 kelas yang berjumlah 64 siswa, kelas eksperimen yang terdiri dari 32 siswa dibelajarkan dengan model *problem based learning* dan kelas kontrol terdiri dari 32 siswa dibelajarkan dengan pembelajaran langsung. Instrumen yang digunakan dalam penelitian ini yaitu instrumen tes kreativitas dalam bentuk uraian sebanyak 7 item dan kemampuan pemecahan masalah dalam bentuk uraian sebanyak 5 item. Hasil analisis dengan uji t adalah kreativitas adalah  $t_{hitung} > t_{tabel}$  ( $2,150 > 1,988$ ) maka dapat disimpulkan kreativitas fisika siswa yang dibelajarkan dengan model *problem based learning* lebih baik daripada siswa yang dibelajarkan dengan pembelajaran langsung dan hasil uji hipotesis kemampuan pemecahan masalah adalah  $t_{hitung} > t_{tabel}$  ( $3,038 > 1,988$ ) maka dapat disimpulkan kemampuan pemecahan masalah fisika siswa yang dibelajarkan dengan model *problem based learning* lebih baik daripada siswa yang dibelajarkan dengan pembelajaran langsung.

Kata Kunci : Model *Problem Based Learning*, Kreativitas, Kemampuan Pemecahan Masalah,

## ABSTRACT

**Irawati Lebora Hutabarat. "The Effect of Problem Based Learning on Creativity and Problem Solving Ability of High School Physics, Posgraduate School of State University of Medan, 2017.**

This study aims to analyze the creativity of physics learning students who taught with problem-based learning with direct learning and problem solving skills of physics students who taught with problem-based learning model with direct learning. This research is a quasi experimental research with two group pretest posttest design. The population of this study is all students of class X SMA Negeri 2 Bandar semester II academic year 2016/2017. The sample of this research was taken by cluster random sampling that is as much as 2 classes which amounted to 64 students, experiment class consisting of 32 students applied with problem based learning and control class consist of 32 students applied by direct learning. The instrument used in this research is the creativity test instrument in the form of a description of 7 problems and problem-solving abilities in the form of description of 5 questions that have been declared valid by the team of experts. The resulting data is analyzed by t test is the test of creativity hypothesis is  $t_{count} > t_{table}$  ( $2,150 > 1,988$ ) hence can concluded student physics creativity which taught with problem based learning model better than student which is taught by direct learning and result of hypothesis ability of problem solving is  $t_{count} > t_{table}$  ( $3,038 > 1,988$ ) it can be concluded the ability problem-solving physics students who taught with problem-based learning model is better than students who are taught by direct learning.

**Keywords:** *Problem Based Learning, Creativity, Problem Solving Ability,*