

ABSTRAK

Andriono Manalu (NIM : 8126176001) “Efek Model *Problem Based Learning* terhadap Kemampuan Pemecahan Masalah dan Keterampilan Proses Sains Siswa SMA Negeri 2 Pematangsiantar T.A 2014/2015”. Tesis. Program Studi Pendidikan Fisika Pascasarjana Universitas Negeri Medan

Penelitian ini bertujuan Untuk menganalisis perbedaan kemampuan pemecahan masalah siswa, dan keterampilan proses sains siswa yang dibelajarkan dengan model *problem based learning* dengan siswa yang dibelajarkan dengan model pembelajaran konvensional. Penelitian ini menggunakan rancangan “*The posttest only control group design*”. Populasi penelitian ini siswa kelas X SMA Negeri 2 Pematangsiantar tahun pelajaran 2014/2015. Sampel dalam penelitian ini dilakukan secara *random sampling* sebanyak dua kelas, dimana kelas X-3 sebagai kelas eksperimen diterapkan model *Problem Based Learning* dan kelas X-2 sebagai kelas kontrol diterapkan pembelajaran konvensional. Instrumen yang digunakan dalam penelitian ini yaitu instrumen tes kemampuan pemecahan masalah dalam bentuk uraian sebanyak 4 soal dan instrumen tes keterampilan proses sains dalam bentuk uraian sebanyak 9 soal yang telah dinyatakan valid dan reliabel. Dari hasil penelitian dapat disimpulkan kemampuan pemecahan masalah siswa yang diajarkan dengan model *Problem Based Learning* lebih baik dari pembelajaran konvensional, keterampilan proses sains siswa yang diajarkan dengan model *Problem Based Learning* lebih baik dari pembelajaran konvensional.

Kata Kunci : *Problem Based Learning*, Keterampilan Proses Sains dan Kemampuan Pemecahan Masalah

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ABSTRACT

Andriono Manalu (NIM : 8126176001) "Effect of Problem Based Learning Model for Problem Solving Ability and Science Process Skills Students in SMA Negeri 2 Pematangsiantar T.A 2014/2015". A Thesis. Physical Education Studies Studi Program Postgraduate State University of Medan

This study aimed at analyzing the difference problem solving ability and science process skills between students who learned through Problem Based Learning and those who learned with conventional. This research used the design "The posttest only control group design". The population of this research was the ten grade students SMA Negeri 2 Pematangsiantar academic year 2014/2015. The sample in this study conducted by random sampling of two classes, where X-3 class as class applied experimental model of Problem Based Learning and X-2 class as class applied to conventional learning control. The instrument used in this study is problem solving ability test instruments in the form of descriptions of 4 questions and instrumen science process skills test in the form of descriptions as much as 9 questions that have been declared valid and reliable. From the results of this study concluded problem solving ability of students who were taught with problem based learning model is better than conventional learning, science process skills taught students with problem based learning model is better than conventional learning.

Keywords: Problem Based learning, Process Skill of Science and Problem Solving Ability

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