

## ABSTRAK

**Roni Roni Haloho.** Efek Model *Problem Based Learning* Terhadap Kemampuan Berpikir Kreatif dan Kemampuan Pemecahan Masalah Fisika Siswa SMA. Program Pascasarjana Universitas Negeri Medan, 2017.

Penelitian ini bertujuan untuk menganalisis peningkatan kemampuan berpikir kreatif dan peningkatan kemampuan pemecahan masalah, menganalisis apakah peningkatan kemampuan berpikir kreatif dan kemampuan pemecahan masalah yang dibelajarkan dengan model *problem based learning* lebih baik daripada siswa yang dibelajarkan dengan pembelajaran konvensional. Penelitian ini merupakan penelitian eksperimen semudengan desain *two group pretest-posttest design*. Populasi penelitian adalah seluruh siswa kelas X SMA Negeri 1 Silimakuta semester II tahun ajaran 2016/2017. Sampel penelitian diambil secara acak yang terdiri dari 73 siswa. Kelas X-B adalah kelas eksperimen, terdiri dari 35 siswa menggunakan model *problem based learning*. Kelas X-D adalah kelas kontrol terdiri dari 38 siswa menggunakan pembelajaran konvensional. Instrumen penelitian menggunakan tes essay kemampuan berpikir kreatif dan kemampuan pemecahan masalah yang telah dinyatakan valid. Analisis data menggunakan uji t statistik. Hasil penelitian menunjukkan bahwa rata-rata peningkatan kemampuan berpikir kreatif dan rata-rata peningkatan kemampuan pemecahan masalah menggunakan pembelajaran konvensional adalah 0,31 dan 0,30 berada dikategori rendah sedangkan siswa yang menggunakan model *problem based learning* masing-masing adalah 0,49 berada pada kategori sedang. Hasil pengujian hipotesis menggunakan *independent sample t-test* menunjukkan bahwa masing-masing nilai signifikansi ( $\text{sig} < 0,05$  yaitu 0,00 maka  $H_0$  ditolak, artinya bahwa kemampuan berpikir kreatif dan kemampuan pemecahan masalah siswa menggunakan model *problem based learning* lebih baik daripada pembelajaran konvensional, sehingga dapat disimpulkan bahwa terdapat efek model *problem based learning* untuk meningkatkan kemampuan berpikir kreatif dan kemampuan pemecahan masalah.

Kata Kunci: *Model Problem Based Learning, Kemampuan Beripikir Kreatif, Kemampuan Pemecahan Masalah.*

## ABSTRACT

**Roni Rohana Haloho.** The Effect of Problem Based on Learning Model toward Student's Creative Thinking and Problem Solving Ability in Senior High School. Postgraduated, University of Medan.

This research aimed to analyze the gain of student's creative thinking and problem solving ability used conventional learning and problem based on learning model, analyzing whether the gain of creative thinking and problem solving ability that were learned by problem based on learning model will be better than the student that were learned by conventional learning. This research was the quasi experiment research with two cluster design pretes and posttes. The research population was the whole of the 1<sup>st</sup> grade students of SMA Negeri 1 Silimakuta, 2<sup>nd</sup> semester of 2016/2017 academic year. Research sample were taken randomly that consist of 73 students. Class X-B was experiment class, consits of 35 students used problem based on learning model. X-D class was control class consits of 38 students used conventional learning. The instruments of this research used essay test of creative thinking and problem solving ability that already valid. The analyzing of data used t statistic. The results showed that the average gain of student's creative thinking and the problem solving ability used conventional learning was 0,31 and 0,30 stay on the low category, whereas the students that used problem based on learning model each was 0,49 stay on the medium category. The result of hypothesis testing used independent sample t test, showed that each the significant (sig) <0,05 viz 0,00 thus  $H_0$  rejected, it mean that the students creative thinking and problem solving ability used problem based on learning model is better than the conventional learning, till obtain the concluded there is an effect of problem based on learning model to increase student's creative thinking and problem solving ability as well.

Keywords: *Problem Based on Learning Model, Creative Thinking Ability, Problem Solving Ability.*

