

## ABSTRAK

### PENGARUH MODEL *PROBLEM BASED LEARNING* TERHADAP KEMAMPUAN PEMECAHAN MASALAH MATEMATIS DI SMA N 1 DELI TUA

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Penelitian ini bertujuan untuk mengetahui bertujuan untuk mengungkap pengaruh model *problem based learning* terhadap kemampuan pemecahan masalah matematis siswa dengan melihat apakah model *problem based learning* lebih baik dari pada pembelajaran langsung dalam proses pembelajaran matematika. Populasi penelitian adalah siswa kelas X SMA N 1 Deli Tua semester genap tahun ajaran 2018/2019 berjumlah 185 orang. Pengambilan sampel dilakukan dengan *cluster random sampling* dan terpilihlah kelas X IPA 2 dan kelas X IPA 3 masing-masing berjumlah 38 siswa. Penelitian ini merupakan penelitian eksperimen semu. Instrumen yang digunakan berupa tes kemampuan pemecahan masalah matematis yang telah valid dan reliabel. Rata-rata kemampuan pemecahan masalah matematis siswa dengan model *problem based learning* (80,39%) sedangkan dengan pembelajaran langsung (76,05%). Analisis data dilakukan dengan Uji Analisis Regresi dengan menggunakan program SPSS 20. Seluruh data berdistribusi normal dan homogen. Berdasarkan analisis data dengan menggunakan taraf signifikakan 0,05 dengan mendapat hasil  $t_{hitung}$  untuk kelas eksperimen 10,550 dengan besar pengaruh (75,6%) dan kelas kontrol 5,491 dengan besar pengaruh (45,6%). Berdasarkan hasil analisis tersebut dapat ditarik kesimpulan bahwa model *problem based learning* lebih baik dibandingkan model pembelajaran langsung dalam materi sistem persamaan linear dua variabel.

**Kata Kunci :** *Problem Based Learning*, Kemampuan Pemecahan Masalah Matematis,

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This study aims to find out aims to uncover the effect of problem based learning models on students' mathematical problem solving abilities by seeing whether the problem based learning model is better than direct learning in the process of learning mathematics. The study population was students of class X SMA N 1 Deli Tua even semester 2018/2019 academic year totaling 185 people. Sampling was done by cluster random sampling and selected class X IPA 2 and class X IPA 3 each amounted to 38 students. This research is a quasi-experimental study. The instrument used was a valid and reliable mathematical problem-solving ability test. The average mathematical problem solving ability of students with problem based learning models (80.39%) while with direct learning (76.05%). Data analysis was performed using the Regression Analysis Test using the SPSS 20. All data were normally distributed and homogeneous. Based on data analysis using a significance level of 0.05 by getting the results of tcount for the 10,550 experimental class with a large influence (75.6%) and a control class of 5.491 with a large effect (45.6%). Based on the results of the analysis it can be concluded that the problem based learning model is better than the direct learning model in the material system of two-variable linear equations.

**Keywords: Problem Based Learning, Mathematical Problem Solving Ability.**