

## ABSTRAK

Jumi Handayani: **Pengaruh Problem Based Learning (PBL) berorientasi Lesson Study dengan media eXe Learning terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Siswa pada Materi Laju Reaksi.** Tesis. Medan: Program Studi Pendidikan Kimia, Pascasarjana Universitas Negeri Medan, 2016.

Penelitian ini bertujuan untuk mengetahui: 1) perbedaan pengaruh model PBL berorientasi *Lesson Study* dengan media *eXe learning* dan model DI terhadap hasil belajar siswa; 2) perbedaan pengaruh tingkat kemampuan berpikir kritis tinggi dan rendah siswa yang dibelajarkan dengan model PBL berorientasi *Lesson Study* dengan media *eXe learning* dan model DI terhadap hasil belajar siswa; 3) interaksi antara kedua model dengan kemampuan berpikir kritis terhadap hasil belajar siswa; dan 4) hubungan antara kemampuan berpikir kritis dengan hasil belajar siswa. Populasi dalam penelitian ini adalah seluruh siswa kelas XI IPA di SMAN Medan Tahun Ajaran 2015/2016. Teknik pengambilan sampel adalah *purposive sampling*. Sampel penelitian ini adalah dua sekolah di SMAN Medan masing-masing sebanyak 2 kelas. Instrumen penelitian berupa tes objektif hasil belajar yang valid dan reliable, tes kemampuan berpikir kritis dan lembar observasi *Lesson Study*. Teknik analisis yang digunakan teknik *Two Way Anova* dan uji *Correlation* pada program SPSS 21. Hasil penelitian disimpulkan bahwa: 1) terdapat perbedaan pengaruh model PBL berorientasi *Lesson Study* dengan media *eXe learning* dan model DI terhadap hasil belajar siswa ( $p = 0,000 < 0,05$ ); 2) terdapat perbedaan pengaruh tingkat kemampuan berpikir kritis tinggi dan rendah siswa yang dibelajarkan dengan model PBL berorientasi *Lesson Study* dengan media *eXe learning* dan model DI terhadap hasil belajar siswa ( $p = 0,000 < 0,05$ ); 3) terdapat interaksi antara kedua model dengan kemampuan berpikir kritis terhadap hasil belajar siswa ( $p = 0,002 < 0,05$ ); dan 4) terdapat hubungan antara kemampuan berpikir kritis dengan hasil belajar siswa ( $p = 0,000 < 0,05$ ).

Kata Kunci: *Problem Based Learning (PBL)*, *Lesson Study*, *eXe learning*, Berpikir Kritis, Hasil Belajar, Laju Reaksi.

## ABSTRACT

Jumi Handayani: **The effects of Problem Based Learning (PBL) oriented Lesson Study with media eXe Learning on Critical Thinking Skills and Outcomes for Students on rate reaction material.** Thesis. Medan : Study Program of Chemistry, Graduate University of Medan, 2016.

The purpose of this research are: 1) differences in the effect of the model PBL oriented Lesson Study with media eXe learning and model of DI on student learning outcomes; 2) differences in the effect of the level of critical thinking skills of high and low students that learned with the model of PBL oriented Lesson Study with media eXe learning and model of DI on student learning outcomes; 3) the interaction between the two models with the ability to think critically about student learning outcomes; and 4) the relationship between critical thinking skills with student learning outcomes. The study population was all high school students of class XI IPA in SMAN Medan of the 2015/2016 academic year. The sampling technique is purposive sampling. This sample is two schools in SMAN Medan each consisting of 2 classes. The research instruments in the form of objective test results to learn that valid and reliable, critical thinking skills test and observation sheet Lesson Study. Technique of analysis used two Way Anova and correlation test in SPSS 21. The results of the study concluded that: 1) there are differences in the influence of the model PBL oriented Lesson Study with media eXe learning and model of DI on student learning outcomes ( $p = 0,000 < 0,05$ ); 2) there are differences in the influence of the critical thinking skills of high and low students that learned with the model of PBL oriented Lesson Study with media eXe learning and model of DI on student learning outcomes ( $p = 0,000 < 0,05$ ); 3) There is interaction between the two models with the ability to think critically about student learning outcomes ( $p = 0,002 < 0,05$ ); and 4) there is a relationship between critical thinking skills with student learning outcomes ( $p = 0,000 < 0,05$ ).

Keywords: Problem Based Learning (PBL), Lesson Study, eXe learning, critical thinking, learning outcomes, rate reaction.