

## ABSTRAK

**Evy Noviyanti Siregar: Pengaruh Model Mengajar Menginduksi Perubahan Konsep (M3PK) Simson Tarigan Dengan Menggunakan Media *Exelearning* Terhadap Keterampilan Berpikir Kritis Dan Hasil Belajar Kimia Siswa Pada Materi Pokok Elektrolit Dan Non Elektrolit Kelas X SMA.**

Tesis. Medan: Program Studi Pendidikan Kimia Pascasarjana  
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Penelitian ini bertujuan untuk mengetahui: (1) Apakah hasil belajar siswa yang dibelajarkan dengan M3PK dan *exe learning* lebih tinggi dibandingkan hasil belajar siswa yang dibelajarkan dengan model konvensional dan *exe learning* (2) Apakah keterampilan berpikir kritis siswa yang dibelajarkan dengan M3PK dan *exe learning* lebih tinggi dibandingkan keterampilan berpikir kritis siswa yang dibelajarkan dengan model konvensional dan *exe learning*. (3) Apakah terdapat interaksi antara M3PK dengan menggunakan media *exelearning* dan model pembelajaran konvensional dengan keterampilan berpikir kritis siswa terhadap hasil belajar kimia siswa. Populasi penelitian ini adalah seluruh siswa kelas X SMA Dharma Pancasila Medan yang terdiri dari 6 kelas. Teknik penarikan sampel dilakukan dengan *purposive sampling* dan diambil sebanyak 2 kelas dengan 2 (dua) kelompok perlakuan yaitu dengan M3PK Berbasis *Exelearning* dan dengan model konvensional dengan media *Exelearnig*. Instrumen pengumpulan data digunakan tes hasil belajar berbentuk pilihan berganda sebanyak 20 butir soal, serta instrumen data keterampilan berpikir kritis siswa digunakan lembar observasi. Telah dilakukan uji persyaratan berupa uji normalitas dan homogenitas, yang diperoleh hasil bahwa data normal dan homogen. Teknik analisa data dilakukan dengan General Linier Models (GLM) Univariate untuk hipotesis 1, 2 dan 3. Teknik analisa data menggunakan uji-t dengan taraf signifikansi  $\alpha = 0,05$ . Hasil penelitian menunjukkan bahwa: (1) Hasil belajar siswa yang dibelajarkan dengan M3PK dan *exe learning* lebih tinggi dibandingkan hasil belajar siswa yang dibelajarkan dengan model konvensional dan *exe learning* (diperoleh *Sig: 0,005*) (2) Keterampilan berpikir kritis siswa yang dibelajarkan dengan M3PK dan *exe learning* lebih tinggi dibandingkan keterampilan berpikir kritis siswa yang dibelajarkan dengan model konvensional dan *exe learning*. (diperoleh *Sig: 0,002*) (3) Terdapat interaksi antara M3PK dengan menggunakan media *exelearning* dan model pembelajaran konvensional dengan keterampilan berpikir kritis siswa terhadap hasil belajar kimia siswa. (diperoleh *Sig: 0,003*).

Kata Kunci : Model Mengajar Menginduksi Perubahan Konsep (M3PK), *Exe Learning*, Keterampilan Berpikir Kritis Siswa, dan Hasil Belajar.

## ABSTRACT

Evy Noviyanti Siregar: **Effect of Teaching Model Induces Changes in Concept (M3PK) Simson Tarigan Activity Against Media Exelearning Against Critical Thinking Skills and Learning Outcomes Chemistry Students On Topic Electrolytes and Non-Electrolytes Class X High School.**

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This study aims to determine: (1) Is the student learning outcomes that learned with M3PK and exe learning higher than student learning outcomes that learned with the conventional model and exe learning (2) Is critical thinking skills of students that learned with exe learning M3PK and higher than the critical thinking skills of students that learned with conventional models and exe learning. (3) Is there is an interaction between M3PK by using the exelearning media and conventional model with critical thinking skills of students toward outcome study chemistry students. The study population was all students of class X SMA Dharma Pancasila Medan which consists of 6 classes. The sampling technique was done by using a purposive (*purposive sampling*) and taken as many as 2 classes with 2 (two) treatment groups is by M3PK Based Exelearning and with conventional models with Exelearning media. Data collection instruments used test results to learn as much as 20 multiple-choice items, as well as the instruments used student activity data sheet questionnaire. The instruments for collecting data used objective test and the questioner of the activity of the study. Tests have been conducted in the form requirements of normality and homogeneity test, which showed that the normal data and homogeneous. The technique for analyzing data used General Linear Models (GLM) Univariate for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Hypothesis. Data analysis technique using the T- test with significance level  $\alpha = 0.05$ . The results showed that: (1) The results of student learning that learned with M3PK and exe learning higher than student learning outcomes that learned with the conventional model and exe learning (acquired Sig: 0,005) (2) Critical thinking skills of student learning that learned with M3PK and exe learning critical thinking skills of students is higher than that learned with the conventional model and exe learning. (Obtained Sig: 0,002) (3) There is an interaction between M3PK by using the exelearning media and conventional model with critical thinking skills of students toward outcome study chemistry students (obtained Sig: 0.003).

Keywords: Teaching Model Induces Changes in Concept (M3PK), Exe Learning, Students Critical Thinking Skills. Learning Outcomes.