

## ABSTRAK

**Ariyati, Puji.** 2020. Pengaruh *Problem Based e-Learning* Terhadap Keterampilan Berpikir Kritis dan Prestasi Belajar Kimia Peserta Didik Kelas X SMA. *Tesis*. Singaraja: Program Pascasarjana, Universitas Pendidikan Ganesha.

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Kata kunci: *problem based e-learning*, *direct e-learning*, keterampilan berpikir kritis dan prestasi belajar

Tujuan penelitian ini adalah untuk mendeskripsikan perbedaan pengaruh model *Problem-Based e-Learning* (PBeL) terhadap keterampilan berpikir kritis dan prestasi belajar dalam pembelajaran Kimia. Penelitian ini merupakan penelitian eksperimen semu dengan *pre-test post-test non-ekuivalen control group design*. Populasi penelitian ini sebanyak 3 kelas (95 siswa) kelas X MIPA SMA Negeri 1 Bebandem Tahun Pelajaran 2019/2020. Sampel penelitian ini terdiri dari 2 kelas (64 siswa) yang ditetapkan menggunakan teknik *group random sampling*, yang selanjutnya ditetapkan pula secara random untuk menentukan kelompok eksperimen dan kelompok kontrol. Data keterampilan berpikir kritis dikumpulkan dengan tes uraian dan data prestasi belajar Kimia dikumpulkan dengan tes pilihan ganda diperluas. Analisis data menggunakan uji statistik *Multivariat Analysis of Covarian* (MANCOVA) satu jalur. Pengujian hipotesis menggunakan taraf signifikansi 5%. Hasil penelitian menunjukkan bahwa (1) Terdapat perbedaan keterampilan berpikir kritis dan prestasi belajar Kimia secara bersama-sama antara peserta didik yang belajar dengan model PBeL dan yang belajar dengan model DeL ( $F=26,363$ ;  $p<0,05$ ) (2) Terdapat perbedaan keterampilan berpikir kritis Kimia antara peserta didik yang belajar dengan model PBeL dan yang belajar dengan model DeL ( $F=36,278$ ;  $p<0,05$ ) (3) Terdapat perbedaan prestasi belajar Kimia antara peserta didik yang belajar dengan model PBeL dan yang belajar dengan model DeL ( $F=9,859$ ;  $p<0,05$ ). Model PBeL berpengaruh lebih besar dibandingkan dengan DeL terhadap keterampilan berpikir kritis dan prestasi belajar Kimia peserta didik kelas X SMAN 1 Bebandem.

## ABSTRACT

**Ariyati, Puji.** (2020). The Effect of Problem Based e-Learning on Students' Critical Thinking Skills and Chemistry Learning Achievement in Class X Senior High School. Thesis. Singaraja. Post-graduate program, Ganesha University of Education.

This thesis has been approved and examined by **Dr. I Wayan Sukra Warpala, M.Sc and Prof. Dr. I Wayan Santyasa, M.Si.**

Keywords: problem based e-learning, direct e-learning, critical thinking skills, learning achievement and chemistry learning

This research aimed at describing the effect of *Problem Based e-Learning* (PBeL) model on students' critical thinking skills and learning achievement of Chemistry. This research is a quasi-experimental research with pre-test and post-test non-equivalent design of the control group. The population of this research is the students of class X MIPA SMAN 1 Bebandem in the Academic Year 2019/2020 of 3 classes (95 students). The sample of this study was taken using a group random sampling technique, 2 classes (64 students) are determined as samples, they are the experimental group and the control group. Critical thinking skills data was collected with an essay test and Chemistry learning achievement data was collected with an expanded multiple choice test. Data analysis used the MANCOVA (Multivariate Analysis of Covarian) statistical test which involved one independent variable and two dependent variables with a significance level of 5% and continued with the assumption test. The results showed that (1) There are differences in critical thinking skills and Chemistry learning achievement together between students who learned with the PBeL model and students who learned with the DeL model ( $F=26,363$ ;  $p<0,05$ ) (2) There are differences in critical thinking skills between students who learned with the PBeL model and students learning with the DeL model ( $F=36,278$ ;  $p<0,05$ ) (3) There are differences in Chemistry learning achievement between students who learned with the PBeL model and students learning with the DeL model ( $F=9,859$  ;  $p<0,05$ ). Based on the results of the study it can be concluded that the PBeL model influences students' critical thinking skills and learning achievement of chemistry in Class X SMAN 1 Bebandem.