

ABSTRAK

Sondang Fitriani Sitindaon. Pengaruh Model Pembelajaran *Guided Inquiry* Menggunakan Media *PhET* terhadap Keterampilan Pemecahan Masalah dan Berpikir Kritis Siswa SMA

Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *guided inquiry* terhadap keterampilan pemecahan masalah dan berpikir kritis siswa dalam pembelajaran fisika, serta hubungan antara keterampilan pemecahan masalah dan keterampilan berpikir kritis siswa. Penelitian ini menggunakan jenis *quasi eksperiment* dengan desain *two group pretes-postes*. Populasi penelitian adalah siswa kelas X SMA Negeri 4 Medan. Sampel dalam penelitian ini adalah kelas X.7 sebagai kelas kontrol dan kelas X.4 sebagai kelas eksperimen. Pemilihan sampel dilakukan secara *random sampling*. Instrumen yang digunakan terdiri dari tes keterampilan pemecahan masalah dan tes keterampilan berpikir kritis siswa dalam bentuk essay. Data dianalisis menggunakan analisis *one-way anova*. Hasil penelitian menunjukkan bahwa keterampilan pemecahan masalah dan berpikir kritis siswa yang diajar dengan model pembelajaran *guided inquiry* menggunakan media *PhET* lebih baik daripada siswa yang diajar dengan pembelajaran konvensional, model pembelajaran *guided inquiry* menggunakan media *PhET* memiliki pengaruh terhadap keterampilan pemecahan masalah dan berpikir kritis siswa dalam pembelajaran fisika, dan terdapat hubungan antara keterampilan pemecahan masalah dan berpikir kritis siswa.

Kata Kunci: *guided inquiry*, keterampilan pemecahan masalah, berpikir kritis, media *PhET*

ABSTRACT

Sondang Fitriani Sitindaon. The Effect of Guided Inquiry Learning Model Using PhET Media On Students' Problem Solving Skill And Critical Thinking in Senior High School

The research aimed to know whether there is effect of guided inquiry learning model using PhET media to students' problem solving skill, to know whether there is influence of guided inquiry learning using PhET media to students' critical thinking skill, to know whether there is correlation or positive correlation between students' problem solving skill and critical thinking taught by guided inquiry learning using PhET media. This research was quasi experiment research. The population was all students of class X SMA Negeri 4 Medan Academic Year 2016/2017. The sample selection was done by using random class technique of two classes. The first class was the X.4 class as the experimental class taught by guided inquiry learning using PhET media and second class was X.7 taught by conventional learning. The instruments consisted of a validated tested problem solving skills and critical thinking. The data were analyzed by using one-way ANOVA. The results showed that students' problem solving skills and critical thinking of who were taught by guided inquiry learning using PhET media were better than students taught by conventional learning. The guided inquiry learning using PhET media has an influence on students' problem solving skills and critical thinking in physics learning. There was a positive correlation between students' problem solving skills and critical thinking.

Keywords: *guided inquiry, problem solving skill, critical thinking, PhET media*

