PENGARUH MODEL *PROBLEM BASED LEARNING* TERHADAP KEMAMPUAN BERPIKIR KRITIS FISIKA SISWA SMA

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ABSTRAK

Penelitian ini bertujuan menganalisis perbedaan kemampuan berpikir kritis antara siswa yang belajar menggunakan model pembelajaran *Problem Based Learning* (PBL) dengan siswa yang belajar menggunakan model pembelajaran *Direct Instruction* (DI). Penelitian ini menggunakan metode kuantitatif dengan jenis penelitian eksperimen semu dan desain penelitian *one way pretest-posttest non equivalent control group design.* Populasi penelitian ini adalah siswa kelas XI MIPA di SMA Dwijendra Denpasar yang terbagi menjadi 3 kelas dengan total populasi 97 siswa. Sampel penelitian diambil dengan teknik *simple randomize* dengan 2 kelas sampel yang digunakan yaitu XI MIPA 2 sebagai kelompok eksperimen dan XI MIPA 1 sebagai kelompok kontrol dengan total sampel 65 siswa. Data kemampuan berpikir kritis diukur menggunakan instrumen penelitian berbentuk 10 soal esai dengan reliabilitas tes sebesar 0,739 dan konsistensi internal bergerak pada 0,363-0,752. Data dianalisis dengan menggunakan analisis deskriptif, analisis kovarian (ANAKOVA) dan uji lanjut LSD taraf signifikansi 5%. Hasil uji ANAKOVA yang menunjukkan adanya perbedaan kemampuan berpikir kritis fisika siswa antara siswa yang belajar menggunakan model PBL dengan siswa yang belajar menggunakan model DI ($F^* = 77{,}253;\ p < 0{,}01$). Hasil tes kemampuan berpikir kritis setelah perlakuan (*posttest)* menunjukkan kelompok model PBL lebih unggul dibandingkan kelompok model DI. Terbukti dari rata-rata kemampuan berpikir kritis siswa kelompok model PBL sebesar $77{,}34$ ($SD = 7{,}09$), sedangkan kelompok model DI memperoleh nilai rata-rata kemampuan berpikir kritis sebesar $62{,}04$ ($SD = 8{,}89$). Hasil penelitian ini menunjukkan bahwa penerapan model PBL berpengaruh lebih tinggi terhadap kemampuan berpikir kritis siswa.

Kata-kata kunci: model *problem based learning*, model *direct instruction*, kemampuan berpikir kritis, pembelajaran fisika.

THE EFFECT OF *THE PROBLEM-BASED LEARNING MODEL* ON THE CRITICAL THINKING ABILITY OF HIGH SCHOOL STUDENTS IN PHYSICS

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ABSTRACT

This study aims to analyze the difference in critical thinking skills between students who learn using *the Problem Based Learning* (PBL) learning model and students who learn using *the Direct Instruction* (DI) learning model. This study uses a quantitative method with a type of pseudo-experimental research and a *one-way pretest-posttest non-equivalent control group design.* The population of this study is class XI students of MIPA at SMA Dwijendra Denpasar which is divided into 3 classes with a total population of 97 students. The research sample was taken by *simple randomize* technique with 2 sample classes used, namely XI MIPA 2 as the experimental group and XI MIPA 1 as the control group with a total sample of 65 students. The data on critical thinking skills was measured using a research instrument in the form of 10 essay questions with a test reliability of 0.739 and internal consistency moving at 0.363-0.752. The data were analyzed using descriptive analysis, covariance analysis (ANAKOVA) and 5% significance LSD follow-up test. The results of the ANAKOVA test showed that there was a difference in students' critical thinking skills in physics between students who learned using the PBL model and students who learned using the DI model (). The results of the $F^* = 77{,}253$; $p < 0{,}01$*posttest* showed that the PBL model group was superior to the DI model group. It is evident from the average critical thinking ability of students in the PBL model group of , while the DI model group obtained an average score of critical thinking ability of . The results of this study show that the application of the PBL model has a higher effect on students' critical thinking skills.$77{,}34$ $(SD = 7{,}09)62{,}04(SD = 8{,}89)$

Keywords: *problem based learning model, direct instruction model,* critical thinking ability, physics learning.