Pengaruh Model Pembelajaran Group Investigation Mode dalam Jaringan Terhadap Kemampuan Berpikir Kritis Fisika Siswa Kelas XI MIPA di SMA Negeri 1 Kediri Tabanan

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis perbedaan kemampuan berpikir kritis siswa antara siswa yang belajar menggunakan model *Group Investigation* berbantuan *E-Learning* dan siswa yang belajar menggunakan model *Direct Instruction* berbantuan *E-Learning*. Penelitian ini adalah eksperimen kuasi yang menggunakan *pretest−posttest non−equivalent control group design*. Dalam penelitian ini populasi adalah sebanyak 4 kelas (138 siswa) siswa kelas XI MIPA SMA Negeri 1 Kediri Tabanan Tahun ajaran 2020/2021. Sampel penelitian yang digunakan adalah 2 kelas (68 siswa) yang dipilih menggunakan *random selection technique* berbasis kelompok dari kelas-kelas yang sudah ada, sehingga terpilih kelas XI MIPA 1 sebagai kelas eksperimen dan kelas XI MIPA 4 sebagai kelas kontrol. Tes kemampuan berpikir kritis yang terdiri dari 15 soal esai digunakan untuk mengumpulkan data kemampuan berpikir kritis. Analisis data yang digunakan adalah analisis deskriptif dan analisis kovarian (ANAKOVA) satu jalur. Pengujian hipotesis dilakukan pada taraf signifikansi 5%. Hasil penelitian memperlihatkan bahwa antara siswa yang belajar menggunakan model *Group Investigation* berbantuan *E-Learning* dan siswa yang belajar menggunakan model *Direct Instruction* berbantuan *E-Learning* terdapat perbedaan kemampuan berpikir kritis secara signifikan ($F^* = 14{,}387$; $p < 0{,}05$). Diperoleh kemampuan berpikir kritis siswa yang belajar menggunakan model *Group Investigation* berbantuan *E-Learning* (M= 88,41; SD = 3,42, kategori sangat baik) secara signifikan lebih tinggi dibandingkan dengan siswa yang belajar menggunakan model *Direct Instruction* berbantuan *E-Learning* (M= 83,58; SD= 3,33, kategori baik). Oleh karena itu, implikasinya untuk mencapai berpikir kritis siswa dalam proses pembelajaran fisika di SMA, maka sebaiknya difasilitasi dengan menerapkan model model *Group Investigation* berbantuan *E-Learning*.

Kata kunci : *group investigation, direct instruction, e−learning*, kemampuan berpikir kritis, pembelajaran fisika

The Influence of the Group Investigation Mode Learning Model in the Network on the Critical Thinking Ability of Class XI Mathematics and Natural Sciences Students at SMA Negeri 1 Kediri Tabanan

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ABSTRACT

This study aims to analyze the differences in students' critical thinking skills between students who learn to use the Group Investigation model assisted by E-Learning and students who learn to use the Direct Instruction model assisted by E-Learning. This study is a quasi-experimental using a pretest-posttest non-equivalent control group design. In this study, the population consisted of 4 classes (138 students) of class XI MIPA SMA Negeri 1 Kediri Tabanan for the academic year 2020/2021. The research sample used was 2 classes (68 students) which were selected using a group-based random selection technique from existing classes, so that class XI MIPA 1 was chosen as the experimental class and class XI MIPA 4 was the control class. A critical thinking ability test consisting of 15 essay questions was used to collect critical thinking ability data. The data analysis used was descriptive analysis and one-way analysis of covariance (ANACOVA). Hypothesis testing was carried out at a significance level of 5%. The results showed that between students who studied using the Group Investigation model assisted by E-Learning and students who studied using the Direct Instruction model assisted by E-Learning there were significant differences in critical thinking abilities ($F^* = 14,387$; $p<0.05$). It was found that the critical thinking ability of students who studied using the Group Investigation model assisted by E-Learning ($M = 88.41$; $SD = 3.42$, very good category) was significantly higher than the students who studied using the Direct Instruction model assisted by E-Learning ($M = 83.58$; $SD = 3.33$, good category). Therefore, the implication is that to achieve students' critical thinking in the physics learning process in high school, it should be facilitated by applying the Group Investigation model assisted by E-Learning.

Keywords: group investigation, direct instruction, e-learning, critical thinking skills, physics learning