# Pengaruh Model *E-Learning* berbasis *Group Investigation* terhadap Keterampilan Berpikir Kritis Siswa di SMA

**Oleh:**
**Cokorda Gde Krisparinama, NIM 1613021017**

**Program Studi Pendidikan Fisika**

## Abstrak

Penelitian ini bertujuan menganalisis perbedaan keterampilan berpikir kritis antara siswa yang belajar degan model *E-Learning* berbasis *Group Investigation* dan model *E-Learning* berbasis *Direct Intruction*. Penelitian ini adalah eksperimen kuasi menggunakan *pretest-posttest non-equivalent control group design*. Populasi penelitian ini adalah 6 kelas (215 siswa) siswa kelas XI MIPA SMA Negeri 1 Ubud Tahun ajaran 2019/2020. Sempel penelitian adalah 2 kelas (72 siswa) yang ditentukan secara *assignment random sampling*, sehingga terpilih siswa kelas XI MIPA 1 sebagai kelompok eksperimen dan siswa XI MIPA 6 sebagai kelompok kontrol. Data keterampilan berpikir kritis dikumpulkan dengan tes keterampilan berpikir kritis yang terdiri dari 16 butir berbentuk esai. Data dianalisis dengan analisis deskriptif dan analisis kovarian (ANAKOVA) satu jalur. Pengujian hipotesis dilakukan pada taraf signifikansi 5%. Hasil penelitian menunjukkan bahwa terdapat perbedaan secara signifikan keterampilan berpikir kritis antara siswa yang belajar dengan model *E-Learning* berbasis *Group Investigation* dan yang belajar dengan model *E-Learning* berbasis *Direct Intruction* ($F^* = 6,119$; $p<0,05$). Keterampilan berpikir kritis siswa yang belajar dengan model *E-Learning* berbasis *Group Investigation* ($M = 80,03$; $SD = 7,62$, kategori baik) secara signifikan lebih tinggi dibandingkan dengan yang belajar dengan model *E-Lerning* berbasis *Direct Intruction* ($M = 63,06,13$; $SD = 8,80$, kategori cukup). Implikasinya, bahwa dalam rangka pencapaian berpikir kritis siswa dalam pembelajaran fisika di SMA, mereka sebaiknya difasilitasi dengan model *E-Learning* berbasis *Group investigation*.

**Kata kunci :** *e-learning*, *group investigation*, *direct instruction,* keterampilan berpikir kritis, pembelajaran fisika

# The Effect of Group Investigation-based E-Learning Models on Students' Critical Thinking Skills in High School

## Abstract

This study aims to analyze the differences in critical thinking skills between students who learn with the Group Investigation-based E-Learning model and the Direct Intruction-based E-Learning model. This research is a quasi experiment using pretest-posttest non-equivalent control group design. The population of this study was 6 classes (215 students) of XI MIPA grade students of SMA Negeri 1 Ubud in the academic year 2019/2020. The research sample was 2 classes (72 students) determined by assignment random sampling, so that students selected for class XI MIPA 1 as the experimental group and students of XI MIPA 6 as the control group. Critical thinking skills data were collected with a critical thinking skills test consisting of 16 essay-shaped items. Data were analyzed with descriptive analysis and one-way analysis of covariance (ANAKOVA). Hypothesis testing is performed at a significance level of 5%. The results showed that there were significant differences in critical thinking skills between students who studied with the Group Investigation-based E-Learning model and those who studied with the Direct Intruction-based E-Learning model ($F* = 6.119$; $p < 0.05$). The critical thinking skills of students who learn with the Group Investigation-based E-Learning model (M = 80.03; SD = 7.62, good category) are significantly higher compared to those who learn with the Direct Intruction-based E-Lerning model (M = 63 , 06.13; SD = 8.80, enough categories). The implication is that in the context of achieving students' critical thinking in learning physics in high school, they should be facilitated with a group investigation-based E-Learning model.

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