

PENGARUH MODEL PEMBELAJARAN KOOPERATIF TIPE *GROUP INVESTIGATION* BERBANTUAN *MIND MAP* TERHADAP KETERAMPILAN BERPIKIR KRITIS SISWA DALAM PEMBELAJARAN FISIKA

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ABSTRAK

Penelitian ini bertujuan mendeskripsikan pengaruh model pembelajaran kooperatif tipe *group investigation* berbantuan *mind map* (GI-MM) terhadap keterampilan berpikir kritis siswa dalam pembelajaran fisika. Jenis penelitian ini adalah penelitian eksperimen semu menggunakan desain penelitian *oneway non-equivalent pretest-posttest control group*. Populasi penelitian adalah seluruh kelas X MIPA di SMAN 2 Kuta berjumlah 222 orang. Penentuan sampel menggunakan teknik *random assignment*, diperoleh kelas X MIPA 3 sebagai kelas eksperimen pertama berjumlah 28 orang, X MIPA 1 sebagai kelas eksperimen kedua berjumlah 34 orang, dan X MIPA 2 sebagai kelas kontrol berjumlah 32 orang. Data hasil keterampilan berpikir kritis siswa dikumpulkan menggunakan instrumen berupa tes esai. Data *gain score* ternormalisasi hasil keterampilan berpikir kritis siswa dianalisis menggunakan statistik analisis varian satu jalur (ANOVA). Hasil penelitian menunjukkan bahwa terdapat perbedaan yang signifikan terhadap keterampilan berpikir kritis siswa dalam pembelajaran fisika antara siswa yang mengikuti model pembelajaran GI-MM, model pembelajaran GI, dan model pembelajaran DI ($F = 29,613$; $p < 0,05$). Hasil tindak lanjut uji *t-Scheffe* menunjukkan bahwa keterampilan berpikir kritis siswa yang belajar dengan model pembelajaran GI-MM lebih tinggi dibandingkan dengan siswa yang belajar dengan model pembelajaran DI ($I-J = 0,09412$; $p < 0,05$), keterampilan berpikir kritis siswa yang belajar dengan model pembelajaran GI-MM lebih tinggi dibandingkan dengan siswa yang belajar dengan model pembelajaran GI ($I-J = 0,21071$; $p < 0,05$), dan keterampilan berpikir kritis siswa yang belajar dengan model pembelajaran GI lebih tinggi dibandingkan dengan siswa yang belajar dengan model pembelajaran DI ($I-J = 0,11660$; $p < 0,05$). Dengan demikian, dapat disimpulkan bahwa model pembelajaran *group investigation* berbantuan *mind map* berpengaruh terhadap keterampilan berpikir kritis siswa dalam pembelajaran fisika dan model pembelajaran *group investigation* berbantuan *mind map* memberikan hasil yang lebih baik terhadap keterampilan berpikir kritis siswa kelas X MIPA di SMAN 2 Kuta Tahun Pelajaran 2018/2019 dibandingkan dengan model pembelajaran *group investigation* dan model pembelajaran *direct instruction*.

Kata kunci: model pembelajaran *group investigation* berbantuan *mind map*, keterampilan berpikir kritis, pembelajaran fisika

THE EFFECT OF COOPERATIVE LEARNING MODEL TYPE GROUP INVESTIGATION WITH MIND MAP TOWARD STUDENTS CRITICAL THINKING SKILLS IN LEARNING PHYSICS

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ABSTRACT

This study aimed to describing the influence of cooperative learning models group investigation type with mind map (GI-MM) on students critical thinking skills in learning physics. This type of research is a quasi-experimental study using a non-equivalent pretest-posttest control group research design. The study population was all class X MIPA at SMAN 2 Kuta totaling 222 people. Determination of the sample using random assignment techniques, obtained X MIPA 3 class as the first experimental class totaling 28 people, X MIPA 1 class as the second experimental class amounting to 34 people, and X MIPA 2 class as a control class totaling 32 people. Data on the results of students critical thinking skills were collected using instruments in the form of essay tests. Normalized gain score data results of students critical thinking skills were analyzed using one-way analysis of variance statistics (ANOVA). The results showed that there were significant differences in students critical thinking skills in physics learning between students who learning with GI-MM model, students who learning with GI model, and students who learning with DI model ($F = 29.613$; $p < 0.05$). The results of the pos hoc t-Scheffé test showed that students critical thinking skills that learned with the GI-MM learning model were higher than those of students who studied with the DI learning model ($IJ = 0.09412$; $p < 0.05$), students' critical thinking skills those who learned with the GI-MM learning model were higher than those who studied with the GI learning model ($IJ = 0.21071$; $p < 0.05$), and the critical thinking skills of students who learned with the GI learning model were higher than those of students who studied learning with the DI learning model ($IJ = 0.11660$; $p < 0.05$). Thus, it can be concluded that group investigation model with mind map influences students critical thinking skills in learning physics and group investigation learning model with mind map gives better results on X MIPA class students critical thinking skills in SMAN 2 Kuta 2018/2019 academic year compared to the group investigation learning model and the direct instruction learning model.

Keyword: *group investigation model with mind map, critical thinking skill, learning physics*