

ABSTRAK

Simon Galileo Sianturi, NIM 4183351014 (2024). Pengaruh Model Pembelajaran Inkuiri Terbimbing Berbantuan Phet Colorado Terhadap Kemampuan Berpikir Kritis Siswa Materi Listrik Dinamis di SMPN 1 Parbuluan

Penelitian ini bertujuan untuk mengetahui pengaruh dan peningkatan kemampuan berpikir kritis peserta didik menggunakan model inkuiri terbimbing berbantuan Phet Colorado pada materi Listrik Dinamis. Penelitian ini dilakukan menggunakan metode *quasi experiment* dengan metode *pretest-posttest control group design*. Populasi penelitian seluruh peserta didik kelas IX SMP N 1 Parbuluan ada 6 kelas T.A 2023/2024 dengan jumlah peserta didik 174 orang. Sampel penelitian diambil dari dua kelas yakni kelas eksperimen IX-1 dengan jumlah 29 orang dan kelas kontrol IX-2 dengan jumlah 29 orang. Instrument yang digunakan berupa pilihan berganda 20 soal yang sudah divalidasi. Uji hipotesis menggunakan uji t pihak kanan dengan hasil penelitian diperoleh nilai $t_{hitung} > t_{tabel}$ ($1,880 > 1,6993$) artinya H_a diterima dan H_0 ditolak, berarti ada pengaruh model inkuiri terbimbing berbantuan Phet Colorado terhadap kemampuan berpikir kritis peserta didik pada materi Listrik Dinamis. Hasil uji N-Gain diperoleh kelas eksperimen memiliki nilai N-Gain 0,49 sementara kelas kontrol 0,45 berada pada. Maka dapat disimpulkan bahwa kemampuan berpikir kritis peserta didik pada kelas eksperimen lebih baik dibandingkan kemampuan berpikir kritis peserta didik kelas kontrol.

Kata kunci : Model Inkuiri Terbimbing, Kemampuan Berpikir Kritis, Phet Colorado, Listrik Dinamis

ABSTRACT

Simon Galileo Sianturi, NIM 4183351014 (2024). The Effect of Guided Inquiry Learning Model Assisted by Phet Colorado on Students' Critical Thinking Skills in Dynamic Electricity Material at SMPN 1 Parbuluan

This study aims to determine the effect and improvement of students' critical thinking skills using the guided inquiry model assisted by Phet Colorado on Dynamic Electricity material. This study was conducted using a quasi-experimental method with a pretest-posttest control group design method. The research population was all grade IX students of SMP N 1 Parbuluan, there are 6 classes in the 2023/2024 academic year with a total of 174 students. The research sample was taken from two classes, namely the experimental class IX-1 with a total of 29 people and the control class IX-2 with a total of 29 people. The instrument used was a multiple choice of 20 validated questions. Hypothesis testing using the right-sided t-test with the results of the study obtained a value of $t_{count} > t_{table}$ ($1.880 > 1.6993$) meaning that H_a is accepted and H_0 is rejected, meaning that there is an influence of the guided inquiry model assisted by Phet Colorado on students' critical thinking skills in the Dynamic Electricity material. The results of the N-Gain test obtained by the experimental class have an N-Gain value of 0.49 while the control class is 0.45 at. So it can be concluded that the critical thinking skills of students in the experimental class are better than the critical thinking skills of students in the control class.

Keywords: Guided Inquiry Model, Critical Thinking Skills, Phet Colorado, Dynamic Electricity

