

## ABSTRAK

Intan Karlina Muzianti. 2023. **PENGARUH MODEL PEMBELAJARAN *REVIEW, OVERVIEW, PRESENTATION, EXERCISE, SUMMARY* (ROPES) BERBANTUAN *CROCODILE PHYSICS* TERHADAP KETERAMPILAN BERPIKIR KRITIS PESERTA DIDIK PADA MATERI GELOMBANG MEKANIK**

Berdasarkan hasil studi pendahuluan di SMA Negeri 2 Garut diketahui bahwa keaktifan peserta didik masih kurang dan keterampilan berpikir kritis peserta didik tergolong rendah. Selain itu, keterbatasan ruang laboratorium membuat pembelajaran kurang maksimal karena jarang melakukan praktikum. Salah satu upaya yang dapat dilakukan untuk mengatasi masalah tersebut adalah menerapkan model pembelajaran *Review, Overview, Presentation, Exercise, Summary* (ROPES). Keterbatasan ruang laboratorium dapat diatasi dengan praktikum melalui *crocodile physics*. Tujuan penelitian ini adalah untuk mengetahui pengaruh model pembelajaran *Review, Overview, Presentation, Exercise, Summary* (ROPES) berbantuan *crocodile physics* terhadap keterampilan berpikir kritis peserta didik pada materi gelombang mekanik di kelas XI MIPA SMA Negeri 2 Garut tahun ajaran 2022/2023. Penelitian ini menggunakan metode *quasi experimental* dengan desain penelitian *nonequivalent control group*. Populasi penelitian ini yaitu semua kelas XI MIPA SMA Negeri 2 Garut sebanyak 9 kelas. Sampel penelitian diambil menggunakan teknik *purposive sampling* sebanyak 2 kelas yaitu kelas XI MIPA 6 sebagai kelas eksperimen dan kelas XI MIPA 8 sebagai kelas kontrol. Pengukuran keterampilan berpikir kritis peserta didik dilakukan dengan memberikan tes berupa esai dengan masing-masing soal terdiri dari salah satu indikator berpikir kritis. Hasil uji hipotesis menggunakan uji  $t$  pada taraf signifikansi ( $\alpha = 0,05$ ) menunjukkan bahwa  $t_{hitung} > t_{tabel}$  yang berarti  $H_0$  ditolak, sehingga dapat disimpulkan bahwa model pembelajaran ROPES berbantuan *crocodile physics* berpengaruh secara signifikan terhadap keterampilan berpikir kritis pada materi gelombang mekanik. Sintaks model ROPES dapat melatih dan menguatkan keterampilan berpikir kritis. Indikator yang memberikan kontribusi utama terhadap keterampilan berpikir kritis adalah indikator memberikan penjelasan lanjut dan indikator mengatur strategi taktik.

Kata kunci: berpikir kritis, *crocodile physics*, gelombang mekanik, ROPES.

## ABSTRACT

Intan Karlina Muzianti. 2023. ***THE EFFECT OF THE REVIEW, OVERVIEW, PRESENTATION, EXERCISE, SUMMARY (ROPES) LEARNING MODEL WITH THE ASSISTANCE OF CROCODILE PHYSICS ON STUDENTS' CRITICAL THINKING SKILLS IN MECHANICAL WAVES MATERIAL***

*Based on the results of a preliminary study at SMA Negeri 2 Garut it is known that students' activeness is still lacking and students' critical thinking skills are classified as low. In addition, limited laboratory space makes learning less than optimal because it rarely does practicum. One effort that can be done to overcome this problem is to apply the Review, Overview, Presentation, Exercise, Summary (ROPES) learning model. Laboratory space limitations can be overcome by practicing through crocodile physics. The purpose of this study was to determine the effect of the Review, Overview, Presentation, Exercise, Summary (ROPES) learning model assisted by crocodile physics on students' critical thinking skills in mechanical wave material in class XI MIPA SMA Negeri 2 Garut in the 2022/2023 academic year. This study used a quasi-experimental method with a nonequivalent control group research design. The population of this study is all class XI MIPA SMA Negeri 2 Garut as many as 9 classes. The research sample was taken using a purposive sampling technique for 2 classes, namely class XI MIPA 6 as the experimental class and class XI MIPA 8 as the control class. Measurement of students' critical thinking skills is carried out by giving tests in the form of essays with each question consisting of one indicator of critical thinking. The results of hypothesis testing using the  $t$  test at the significance level ( $\alpha = 0.05$ ) show that  $t_{count} > t_{table}$  which means  $H_0$  is rejected, so it can be concluded that the ROPES learning model assisted by crocodile physics has a significant effect on critical thinking skills in mechanical wave material. The ROPES model syntax can train and strengthen critical thinking skills. The indicators that make the main contribution to critical thinking skills are indicators of providing further explanations and indicators of managing tactical strategies.*

*Keywords: critical thinking, crocodile physics, mechanical waves, ROPES.*