

## ABSTRAK

### Siti Nurhalimah. 2023. **IMPLEMENTASI MODEL PEMBELAJARAN FOCUS EXPLORE REFLECT APPLY (FERA) BERBANTUAN MEDIA CROCODILE PHYSICS DALAM MENINGKATKAN KETERAMPILAN BERPIKIR KRITIS SISWA PADA MATERI GELOMBANG BUNYI**

Penelitian ini dilatar belakangi oleh kegiatan pembelajaran yang cenderung berpusat pada guru sehingga kurang dapat melatih keterampilan berpikir kritis siswa pada materi gelombang bunyi. Upaya yang dilakukan peneliti untuk mengatasi masalah tersebut adalah dengan menerapkan model pembelajaran *Focus Explore Reflect Apply* (FERA) berbantuan media *crocodile physics*. Tujuan penelitian ini adalah untuk mengetahui pengaruh model pembelajaran *Focus Explore Reflect Apply* (FERA) berbantuan media *crocodile physics* terhadap keterampilan berpikir kritis siswa pada materi gelombang bunyi dan untuk mengetahui peningkatan keterampilan berpikir kritis pada siswa setelah diimplementasikan model pembelajaran *Focus Explore Reflect Apply* (FERA) berbantuan media *crocodile physics* pada materi gelombang bunyi di kelas XI IPA SMA Negeri 1 Cihaurbeuti. Metode penelitian yang digunakan adalah *quasi experimental* dengan desain penelitian *nonequivalent control group design*, populasi penelitian ini seluruh kelas XI IPA sebanyak 7 kelas dengan jumlah siswa sebanyak 250 orang, dengan teknik *sampling purposive* yang dipilih sebanyak 2 kelas yaitu kelas XI IPA 3 sebagai kelas eksperimen dan XI IPA 2 sebagai kelas kontrol. Untuk mengukur keterampilan berpikir kritis siswa dilakukan tes sebelum perlakuan (*pretest*) dan setelah diberi perlakuan (*posttest*) berbentuk *essay* dengan jumlah soal 9 butir pada materi gelombang bunyi. Soal *essay* tersebut mencakup 5 indikator keterampilan berpikir kritis. Teknik analisis data yang digunakan adalah uji prasyarat (uji normalitas, uji homogenitas), dan uji hipotesis (uji t). Hasil uji hipotesis menggunakan uji t pada taraf signifikansi ( $\alpha = 0,05$ ) menunjukkan bahwa setelah diterapkannya model pembelajaran *Focus Explore Reflect Apply* (FERA) berbantuan media *crocodile physics* diperoleh  $t_{hitung} > t_{tabel}$  yaitu  $3,74 > 1,67$ , sehingga  $H_0$  ditolak dan  $H_a$  diterima. Artinya, penerapan model pembelajaran *Focus Explore Reflect Apply* (FERA) berbantuan media *crocodile physics* terbukti berpengaruh terhadap keterampilan berpikir kritis pada materi gelombang bunyi. Peningkatan keterampilan berpikir kritis dapat dilihat dari hasil uji *N-Gain* dimana kedua kelas berada pada kategori sedang tetapi nilai kelas eksperimen lebih besar dibandingkan dengan kelas kontrol.

Kata kunci: *Crocodile physics*, gelombang bunyi, keterampilan berpikir kritis, model *Focus Explore Reflect Apply* (FERA).

## **ABSTRACT**

### **Siti Nurhalimah. 2023. IMPLEMENTATION OF THE FOCUS EXPLORE REFLECT APPLY (FERA) LEARNING MODEL ASSISTED BY CROCODILE PHYSICS MEDIA IN IMPROVING STUDENTS' CRITICAL THINKING SKILLS ON SOUND WAVES MATERIAL**

*This research is motivated by learning activities that tend to be passive, which is only centered on the teacher so that it is less able to train students' critical thinking skills which causes low students' critical thinking skills on sound waves material. The efforts made by researchers to overcome this problem are by applying the Focus Explore Reflect Apply (FERA) learning model assisted by crocodile physics media. The purpose of this study was to determine the effect of the Focus Explore Reflect Apply (FERA) learning model assisted by crocodile physics media on students' critical thinking skills on sound waves material and to determine the increase in critical thinking skills in students after implementing the Focus Explore Reflect Apply (FERA) learning model assisted by crocodile physics media on sound waves material in class XI IPA SMA Negeri 1 Cihaurbeuti. The research method used was quasi experimental with a research design of nonequivalent control group design, the population of this study was all XI IPA classes as many as 7 classes with a total of 250 students, with purposive sampling technique selected as many as 2 classes, namely XI IPA 3 class as an experimental class and XI IPA 2 as a control class. To measure students' critical thinking skills, a test was carried out before treatment (pretest) and after being given treatment (posttest) in the form of an essay with a total of 9 items on sound waves material. The essay questions include 5 indicators of critical thinking skills. Data analysis techniques used are prerequisite tests (normality test, homogeneity test), and hypothesis testing (t test). The results of hypothesis testing using the t test at the significance level ( $\alpha = 0.05$ ) show that after the application of the Focus Explore Reflect Apply (FERA) learning model assisted by crocodile physics media,  $t_{count} > t_{table}$   $3.74 > 1.67$ , so  $H_0$  is rejected and  $H_a$  is accepted. This means that the application of the Focus Explore Reflect Apply (FERA) learning model assisted by crocodile physics media is proven to have an effect on critical thinking skills in sound wave material. Improved critical thinking skills can be seen from the results of the N-Gain test where both classes are in the medium category but the experimental class scores are greater than the control class.*

*Keywords: Critical thinking skills, crocodile physic, Focus Explore Reflect Apply (FERA) model, sound waves.*