ABSTRAK

Rezeki Sri Agustina. NIM. 8226174009 (2025). Penerapan Model Inkuiri Terbimbing Berbantuan Aplikasi Kodular dalam Pembelajaran Sistem Gerak Pada Manusia Untuk Meningkatkan Kemampuan Berpikir Kritis dan Literasi Sains Siswa Kelas XI SMA.

Penelitian ini bertujuan mengetahui pengaruh penerapan model inkuiri terbimbing berbantuan aplikasi kodular terhadap kemampuan berpikir kritis dan kemampuan literasi sains siswa, serta untuk mengetahui manakah pengaruh yang lebih besar diantara kemampuan berpikir kritis dan kemampuan literasi sains siswa yang menggunakan model inkuiri terbimbing berbantuan aplikasi kodular pada materi sistem gerak pada manusia kelas XI SMA. Penelitian dilakukan di SMA Negeri 1 Aek Natas dengan sampel sebanyak 2 kelas yang ditentukan dengan teknik *cluster random sampling*, yaitu kelas eksperimen sebanyak 35 siswa dan kelas kontrol sebanyak 34 siswa. Data penelitian dikumpulkan menggunakan instrumen tes yang terdiri dari tes kemampuan berpikir kritis (30 soal pilihan berganda) dan tes kemampuan literasi sains (5 soal bentuk essai). Data dianalisis menggunakan pendekatan *independent sample t-test* dengan bantuan program SPSS. Hasil penelitian menunjukkan bahwa: 1) penerapan model inkuiri terbimbing berbantuan aplikasi kodular berpengaruh signifikan terhadap kemampuan berpikir kritis siswa (p=0,001); 2) penerapan model inkuiri terbimbing berbantuan aplikasi kodular berpengaruh terhadap kemampuan literasi sains siswa (p=0,013); dan 3) penerapan model inkuiri terbimbing berbantuan aplikasi kodular memberikan pengaruh lebih besar terhadap kemampuan berpikir kritis siswa dibandingkan kemampuan literasi sains siswa pada pembelajaran sistem gerak pada manusia kelas XI SMA Negeri 1 Aek Natas (p=0,000).

Kata Kunci: Biologi, model inkuiri terbimbing, kemampuan berpikir kritis, kemampuan literasi sains, kodular

ABSTRACT

Rezeki Sri Agustina. NIM. 8226174009 (2025). Implementation of Guided Inquiry Model Assisted by Kodular Application in Learning Human Movement System to Improve Critical Thinking Skills and Science Literacy of Students in Grade XI of SMA.

This study aims to determine the effect of the application of a guided inquiry model assisted by the Kodular application on students' critical thinking skills and scientific literacy skills, and to determine which has a greater influence between critical thinking skills and scientific literacy skills of students who use the guided inquiry model assisted by the Kodular application on the material of the human locomotor system in grade XI SMA. The research was conducted at SMA Negeri 1 Aek Natas with a sample of 2 classes determined using the cluster random sampling technique, namely the experimental class of 35 students and the control class of 34 students. The research data was collected using a test instrument consisting of a critical thinking ability test (30 questions in multiple choice form) and a scientific literacy ability test (5 questions in essay form). Data were analyzed using the independent sample t-test approach with the help of the SPSS program. The results of the study showed that: 1) the application of the guided inquiry model assisted by the kodular application had a significant effect on students' critical thinking skills ($p=0.001$); 2) the application of the guided inquiry model assisted by the kodular application had an effect on students' scientific literacy skills ($p=0.013$); and 3) the application of the guided inquiry model assisted by the kodular application had a greater effect on students' critical thinking skills compared to students' scientific literacy skills in learning the human movement system of class XI SMA Negeri 1 Aek Natas ($p=0.000$).

Keywords: Biology, Critical Thinking Skills, Guided Inquiry Model, Kodular, Science Literacy Skills