

ABSTRAK

Naufal Azhar (1222060077): “Pengaruh Model *Digital Collaborative Inquiry* Terhadap Literasi Sains Siswa pada Materi Perubahan dan Pelestarian Lingkungan Hidup”

Literasi sains merupakan kompetensi penting yang perlu dikembangkan siswa pada abad ke-21. Penelitian ini bertujuan untuk menganalisis pengaruh model *digital collaborative inquiry* terhadap literasi sains. Metode penelitian yang digunakan adalah metode quasi eksperimen dengan desain pretest-posttest control group design yang melibatkan kelas eksperimen dan kelas kontrol dengan jumlah sampel 88 siswa kelas X semester genap tahun ajaran 2025/2026. Hasil menunjukkan bahwa aktivitas guru pada kelas eksperimen dan aktivitas siswa pada kelas eksperimen keduanya mencapai kategori ”sangat baik”. Nilai N-Gain kelas eksperimen sebesar 0,6 dan kelas kontrol sebesar 0,4 keduanya termasuk dalam kategori ”sedang”. Hasil uji *Mann Whitney* menunjukkan nilai Sig. (2.tailed) sebesar 0,000 ($p < 0,05$), yang menandakan H_0 ditolak dan H_1 diterima. Hasil ini diperkuat dengan nilai effect size sebesar 0,47 kategori ”sedang”. Respon siswa terhadap pembelajaran mendapat nilai 81% kategori ”baik”. Dengan demikian, model pembelajaran *digital collaborative inquiry* berpengaruh positif terhadap kemampuan literasi sains siswa pada materi perubahan dan pelestarian lingkungan hidup.

Kata kunci: *Digital collaborative inquiry*, literasi sains, perubahan dan pelestarian lingkungan hidup



ABSTRACT

Naufal Azhar (1222060077): *“The Effect of the Digital Collaborative Inquiry Learning Model on Students’ scientific literacy in the Topic of Environmental Change and Environmental Conservation”*

Science literacy is an essential competency that students need to develop in the 21st century. This study aims to analyze the effect of the digital collaborative inquiry model on science literacy. The research method used was a quasi-experimental method with a pretest-posttest control group design involving an experimental class and a control class, with a sample size of 88 10th-grade students in the second semester of the 2025/2026 academic year. The results showed that both teacher activities in the experimental class and student activities in the experimental class fell into the “very good” category. The N-Gain score for the experimental class was 0.6 and for the control class was 0.4; both fell into the “moderate” category. The results of the Mann-Whitney test showed a Sig. (2-tailed) value of 0.000 ($p < 0.05$), indicating that H_0 was rejected and H_1 was accepted. These results are supported by an effect size of 0.47, which falls into the “moderate” category. Student responses to the learning process scored 81%, falling into the “good” category. Thus, the collaborative inquiry digital learning model has a positive effect on students’ science literacy skills regarding the topic of environmental change and conservation.

Keywords: *Digital collaborative inquiry, science literacy, environmental change and conservation*

