ABSTRAK

Nadiya Rahma: "Penerapan *Collaborative Inquiry* berbantu E-LKPD dalam Meningkatkan Kemampuan Berpikir Sistem Siswa pada Materi Sistem Reproduksi"

Kemampuan berpikir sistem penting dikembangkan dalam pembelajaran biologi untuk menguasai keterkaitan antar komponen dalam suatu sistem. Berbagai penelitian menunjukkan bahwa keterampilan berpikir sistem siswa masih menjadi permasalahan dalam pembelajaran Biologi. Penelitian ini bertujuan untuk mengetahui keterlaksanaan pembelajaran menggunakan model *Collaborative Inquiry* berbantu E-LKPD, peningkatan kemampuan berpikir sistem siswa, perbedaan peningkatan kemampuan berpikir sistem antara kelas eksperimen dan kelas kontrol, serta respon siswa terhadap penerapan model tersebut. Metode penelitian yang digunakan yaitu *Quasi Experimental* dengan desain *Nonequivalent Control Group* melibatkan siswa kelas XI pada salah satu SMA di Kabupaten Bogor Tahun Ajaran 2025/2026. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran dengan *Collaborative Inquiry* berbantu E-LKPD berada pada kategori sangat baik pada aktivitas guru dengan persentase sebesar 91,46%, sedangkan aktivitas siswa berada pada kategori baik dengan persentase sebesar 89,35%. Peningkatan kemampuan berpikir sistem siswa pada kelas eksperimen memperoleh nilai N-Gain sebesar 0,76 dengan kategori tinggi, sedangkan kelas kontrol memperoleh nilai 0,55 dengan kategori sedang. Respons siswa terhadap penerapan model *Collaborative Inquiry* berbantu E-LKPD memperoleh persentase sebesar 84,38% dengan kategori baik. Hasil uji hipotesis menunjukkan nilai Sig. (2-tailed) sebesar 0,027 (<0,05) sehingga H_0 ditolak dan H_1 diterima, yang menunjukkan bahwa penerapan *Collaborative Inquiry* berbantu E-LKPD efektif meningkatkan kemampuan berpikir sistem siswa pada materi sistem reproduksi.

Kata kunci: *Collaborative Inquiry*, E-LKPD, Kemampuan Berpikir Sistem, Sistem Reproduksi.

ABSTRACT

Nadiya Rahma: "*The Implementation of Collaborative Inquiry assisted by E-LKPD to Enhance Students' Systems Thinking Skills on the Topic of the Reproductive System*"

Developing systems thinking skills is crucial in biology education to enable students to grasp the interconnections between components within a system. Various studies have shown that students' systems thinking skills remain a challenge in biology learning. This study aimed to determine the implementation of the Collaborative Inquiry learning model assisted by E-LKPD, the improvement of students' systems thinking skills, the differences in the improvement of systems thinking skills between the experimental and control classes, and students' responses to the implementation of the model. This study employed a quasi-experimental method using a Nonequivalent Control Group Design, involving eleventh-grade students at a senior high school in Bogor Regency during the 2025/2026 academic year. The results showed that the implementation of the Collaborative Inquiry learning model assisted by E-LKPD was categorized as very good for teacher activities, with a percentage of 91.46%, while student activities were categorized as good, with a percentage of 89.35%. The improvement in students' systems thinking skills in the experimental class obtained an N-Gain score of 0.76, which was categorized as high, whereas the control class obtained an N-Gain score of 0.55, which was categorized as moderate. Students' responses to the implementation of the Collaborative Inquiry learning model assisted by E-LKPD reached 84.38%, which was categorized as good. The hypothesis test yielded a Sig. (2-tailed) value of 0.027 (<0.05), indicating that H_0 was rejected and H_1 was accepted. These findings indicate that the implementation of the Collaborative Inquiry learning assisted by E-LKPD was effective in improving students' systems thinking skills in the topic of the reproductive system.

Keywords: *Collaborative Inquiry, E-LKPD, Systems Thinking Skills, Reproductive System.*