

ABSTRAK

ALISYA RAYNISA SUTISNA: “Model Pembelajaran *Process Oriented Guided Inquiry Learning* (POGIL) Terhadap Peningkatan Keterampilan Berpikir Reflektif Pada Materi Ekosistem”

Keterampilan berpikir reflektif penting dalam pembelajaran abad ke-21, namun pembelajaran Biologi yang berfokus pada penguasaan konsep membuat peserta didik kurang terbiasa merefleksikan proses berpikirnya. *Process Oriented Guided Inquiry Learning* (POGIL) merupakan model pembelajaran yang berpotensi meningkatkan keterampilan berpikir reflektif. Penelitian ini bertujuan menganalisis peningkatan keterampilan berpikir reflektif melalui penerapan POGIL pada materi ekosistem. Penelitian ini menggunakan metode *quasi experiment* dengan desain *nonequivalent control group design*. Sampel penelitian terdiri atas 56 peserta didik kelas X di salah satu SMA di Kabupaten Bandung yang ditentukan menggunakan teknik *sampling jenuh*. Data dikumpulkan melalui tes keterampilan berpikir reflektif (*pretest* dan *posttest*), lembar observasi, dan angket refleksi, kemudian dianalisis menggunakan analisis *N-Gain* dan uji *Mann-Whitney*. Hasil penelitian menunjukkan keterlaksanaan pembelajaran POGIL berkategori sangat baik, dengan persentase aktivitas guru 95% dan peserta didik 91%. Rata-rata *N-Gain* kelas eksperimen sebesar 0,70 (kriteria tinggi), sedangkan kelas kontrol sebesar 0,54 (kategori sedang). Hasil uji *Mann-Whitney* menunjukkan nilai signifikansi 0,002 ($p < 0,05$), sehingga peningkatan keterampilan berpikir reflektif pada kelas POGIL secara signifikan lebih tinggi dibandingkan kelas kontrol. Implikasi dari hasil penelitian ini menunjukkan bahwa pembelajaran dengan model POGIL dapat meningkatkan keterampilan berpikir reflektif peserta didik.

Kata kunci: Ekosistem, keterampilan berpikir reflektif, *Process Oriented Guided Inquiry Learning* (POGIL)

ABSTRACT

ALISYA RAYNISA SUTISNA: *"The Process Oriented Guided Inquiry Learning (POGIL) Model on the Improvement of Reflective Thinking Skills in Ecosystem Material"*

Reflective thinking skills are important in 21st-century learning; however, Biology instruction that focuses primarily on conceptual mastery makes students less accustomed to reflecting on their thinking processes. Process Oriented Guided Inquiry Learning (POGIL) is a learning model that has the potential to improve reflective thinking skills. This study aimed to analyze the improvement of students' reflective thinking skills through the implementation of POGIL in ecosystem material. This study employed a quasi-experimental method with a nonequivalent control group design. The sample consisted of 56 tenth-grade students from a senior high school in Bandung Regency, selected using a saturated sampling technique. Data were collected through reflective thinking skills tests (pretest and posttest), observation sheets, and reflection questionnaires, and were analyzed using N-Gain analysis and the Mann-Whitney test. The results showed that the implementation of POGIL was categorized as very good, with teacher activity at 95% and student activity at 91%. The average N-Gain score of the experimental class was 0.70 (high category), while that of the control class was 0.54 (medium category). The Mann-Whitney test showed a significance value of 0.002 ($p < 0.05$), indicating that the improvement in reflective thinking skills in the POGIL class was significantly higher than that in the control class. These findings imply that the POGIL learning model can improve students' reflective thinking skills.

Keywords: *Ecosystem, reflective thinking skills, Process Oriented Guided Inquiry Learning (POGIL)*