

ABSTRAK

AULIA HASNA RASHIFA: “Pengaruh Model PDEODE (*Predict, Discuss, Explain, Observe, Discuss, Explain*) Terhadap Peningkatan Keterampilan Proses Sains (KPS) Pada Materi Sistem Ekskresi”.

Keterampilan Proses Sains (KPS) merupakan kompetensi penting dalam pembelajaran biologi, khususnya pada materi sistem ekskresi. Penelitian ini bertujuan menganalisis KPS peserta didik melalui penerapan model pembelajaran *Predict, Discuss, Explain, Observe, Discuss, Explain* (PDEODE). Penelitian menggunakan pendekatan kuantitatif dengan metode *quasi experiment* dan desain *Nonequivalent Control Group Design* pada dua kelas XI SMA. Data dikumpulkan melalui tes KPS, lembar observasi, dan angket respons, kemudian dianalisis menggunakan uji *N-Gain*, *Mann Whitney*, dan analisis deskriptif. Hasil penelitian menunjukkan keterlaksanaan pembelajaran berkategori sangat baik pada aktivitas guru (83,37%) dan baik pada aktivitas peserta didik (80,76%). *N-Gain* kelas eksperimen sebesar 0,65, lebih tinggi dibandingkan kelas kontrol sebesar 0,47. Uji *Mann Whitney* menunjukkan nilai signifikansi $< 0,001$, sehingga H_0 ditolak dan H_1 diterima. Respons peserta didik memperoleh rata-rata 84% dengan kategori sangat kuat. Dengan demikian, model pembelajaran PDEODE berpengaruh signifikan terhadap KPS peserta didik pada materi sistem ekskresi.

Kata kunci: *Predict, Discuss, Explain, Observe, Discuss, Explain* (PDEODE), keterampilan proses sains, sistem ekskresi.

ABSTRACT

AULIA HASNA RASHIFA: “*The Effect of the PDEODE Model (Predict, Discuss, Explain, Observe, Discuss, Explain) on Improving Science Process Skills (SPS) in Excretory System Material*”.

Science Process Skills (SPS) are important competencies in biology learning, particularly in the excretory system topic. This study aimed to analyze the improvement of students' SPS through the implementation of the Predict, Discuss, Explain, Observe, Discuss, Explain (PDEODE) learning model. This quantitative study employed a quasi-experimental method with a Nonequivalent Control Group Design involving two Grade XI classes. Data were collected through SPS tests, observation sheets, and student response questionnaires, and analyzed using N-Gain, the Mann Whitney test, and descriptive analysis. The results showed that learning implementation was categorized as very good for teacher activities (83.37%) and good for student activities (80.76%). The N-Gain score of the experimental class was 0.65, higher than that of the control class (0.47). The Mann Whitney test showed a significance value of < 0.001 , indicating that H_0 was rejected and H_1 was accepted. Student responses obtained an average percentage of 84%, categorized as very strong. Thus, the PDEODE learning model significantly improved students' Science Process Skills in the excretory system topic.

Keywords: *Predict, Discuss, Explain, Observe, Discuss, Explain (PDEODE), simple practicum, science process skills, excretory system.*