

ABSTRAK

Leny Saputri: Pengaruh Model Pembelajaran *Process Oriented Guided Inquiry Learning* (POGIL) Berbantu *Nearpod* terhadap Kemampuan Berpikir Kritis Siswa pada Materi Sel

Materi sistem ekskresi manusia dengan objek bahasan berupa struktur dan fungsi sistem, gangguan fungsi, dan upaya penjangaan kesehatan menuntut siswa untuk memiliki kemampuan analisis tajam, kajian teori, mengingat konten, dan pemahaman konsep dalam meningkatkan hasil belajar. Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *Process Oriented Guided Inquiry Learning* (POGIL) berbantu *nearpod* terhadap kemampuan berpikir kritis siswa pada materi sel. Metode yang digunakan adalah *Quasi Eksperimen* dengan berbentuk *Pretest-Posttest Non-Equivalent Control Group Design*. Pengambilan sampel dilakukan secara *purposive sampling*. XI MIPA 1 (kelas kontrol) dan XI MIPA 2 (kelas eksperimen) dengan masing-masing kelas berjumlah 30 siswa. Instrumen penelitian yang digunakan berupa lembar observasi, tes uraian berpikir kritis, dan lembar angket. Hasil penelitian menunjukkan bahwa keterlaksanaan pembelajaran pada kelas eksperimen diperoleh nilai rata-rata aktivitas guru sebesar 94% dan aktivitas siswa sebesar 97%, dan kemampuan berpikir kritis siswa menggunakan model POGIL berbantu *nearpod* menghasilkan nilai rata-rata *pretest* 52 dan *posttest* 80 dengan nilai N-gain sebesar 0,57 tergolong kategori sedang. Pada kelas kontrol menghasilkan nilai rata-rata *pretest* 51 dan *posttest* 70 dengan nilai N-gain sebesar 0,40 tergolong kategori sedang. Hasil uji-t menunjukkan nilai signifikansi dari kelas eksperimen dan kelas kontrol lebih kecil dari 0,05 yaitu sebesar 0,000, dengan $t_{hitung} 3,973 > t_{tabel} 1,701$, maka H_1 diterima dan H_0 ditolak. Dengan demikian, model POGIL berbantu *nearpod* berpengaruh terhadap kemampuan berpikir kritis siswa.

Kata kunci: Kemampuan Berpikir Kritis, *Process Oriented Guided Inquiry Learning* (POGIL), Sel.

ABSTRACT

Leny Saputri: *The Effect of Nearpod Assisted Process Oriented Guided Inquiry Learning (POGIL) Learning Model on Students' Critical Thinking Ability in Cell Material*

Material on the human excretory system with the object of discussion in the form of system structure and function, functional disorders, and health care measures requires students to have sharp analytical skills, study theory, remember content, and understand concepts in improving learning outcomes. This study aims to determine the effect of the Nearpod-assisted Process Oriented Guided Inquiry Learning (POGIL) learning model on students' critical thinking skills in cell material. The method used is Quasi Experiment with Pretest-Posttest Non-Equivalent Control Group Design. Sampling was done by purposive sampling. XI MIPA 1 (control class) and XI MIPA 2 (experimental class) with 30 students in each class. The research instruments used were observation sheets, critical thinking essay tests, and questionnaires. The results showed that the implementation of learning in the experimental class obtained an average value of teacher activity of 94% and student activity of 97%, and students' critical thinking skills using the Nearpod-assisted POGIL model resulted in an average pretest score of 52 and posttest 80 with a value of N-gain of 0.57 belongs to the medium category. The control class produced an average pretest value of 51 and 70 posttest with an N-gain value of 0.40 belonging to the medium category. The results of the t-test showed that the significance value of the experimental class and control class was less than 0.05, which was 0.000, with $t_{count} 3.973 > t_{table} 1.701$, then H_1 was accepted and H_0 was rejected. Thus, the nearpod-assisted POGIL model influences students' critical thinking skills.

Keywords: *Critical Thinking Ability, Process Oriented Guided Inquiry Learning (POGIL), Cell.*