

ABSTRAK

Nur Fazri Husna : Pengaruh Model Pembelajaran POGIL (*process oriented guided inquiry learning*) Berbantuan LKPD Terhadap Peningkatan Kemampuan Literasi Sains Peserta Didik. **Program Studi Pendidikan Fisika FKIP Universitas Malikussaleh, 2025.**

Tujuan penelitian ini, yaitu: (1) untuk mengetahui pengaruh model pembelajaran POGIL (*Process Oriented Guided Inquiry Learning*) berbantuan LKPD terhadap kemampuan literasi sains peserta didik (2) untuk mengetahui adakah peningkatan kemampuan literasi sains peserta didik.

Penelitian ini merupakan penelitian kuantitatif dengan menggunakan metode *quasi eskperimen* dengan desains penelitian *non-equivalent (pretest dan posttest) control group design*. Teknik pengambilan sampel yang digunakan adalah metode *purposive sampling* berjumlah 52 peserta didik terdiri dari 26 peserta didik kelas XI MIA 1 sebagai kelas eksperimen dan 26 peserta didik kelas XI MIA 3 sebgai kelas kontrol. Instrumen yang digunakan berupa tes soal *pretest* dan *posttest* berbentuk pilihan ganda sebanyak 10 butir soal. Analisis data menggunakan uji yang meliputi uji normalitas, homogenitas, uji hipotesis dan uji N-gain.

Hasil penelitian menunjukkan bahwa nilai rata-rata *pretest* yang diperoleh peserta didik di kelas eksperimen adalah 0 dan nilai rata-rata *posttest* yang diperoleh peserta didik adalah 9 sedangkan pada kelas kontrol nilai rata-rata *pretest* yang diperoleh peserta didik adalah 0 dan nilai rata-rata *posttest* yang diperoleh peserta didik adalah 8. Uji statistik dengan menggunakan uji *two tail test* excel 16 diperoleh hasil sig (2-tailed) $0,002 < \text{signifikansi } 0,05$ artinya H_0 ditolak dan H_a diterima, maka terdapat pengaruh model pembelajaran POGIL terhadap peningkatan kemampuan literasi sains peserta didik. Perolehan nilai N-Gain pada kelas eksperimen mencapai sebesar 56,09% termasuk kategori cukup efektif, kelas kontrol memperoleh nilai *N-Gain* 42,55, tergolong tidak efektif. Ini menunjukkan peningkatan kemampuan literasi sains peserta didik di kelas eksperimen lebih tinggi daripada kelas kontrol, sehingga model POGIL yang diterapkan terbukti cukup efektif. Maka dapat disimpulkan bawa terdapat pengaruh dan kemampuan peningkatan pada model pembelajaran POGIL berbantuan LKPD literasi sains peserta didik.

Kata kunci: Fluida Statis, Kemampuan Peningkatan Literasi Sains Peserta didik, LKPD, Model POGIL

ABSTRACT

Nur Fazri Husna : The Influence of the POGIL (process oriented guided inquiry learning) Learning Model Assisted by LKPD on Increasing Students' Scientific Literacy Abilities. **Malikussaleh University FKIP Physics Education Study Program, 2025.**

The aims of this research are: (1) to determine the effect of the POGIL (Process Oriented Guided Inquiry Learning) learning model assisted by LKPD on students' scientific literacy abilities (2) to find out whether there has been an increase in students' scientific literacy abilities.

This research is quantitative research using a quasi-experimental method with a non-equivalent research design (pretest and posttest) control group design. The sampling technique used was the purposive sampling method with a total of 52 students consisting of 26 students from class XI MIA 1 as the experimental class and 26 students from class XI MIA 3 as the control class. The instrument used was a pretest and posttest in the form of multiple choice questions consisting of 10 questions. Data analysis uses tests which include normality, homogeneity, hypothesis testing and N-gain tests.

The results of the study showed that the average pretest score obtained by students in the experimental class was 0 and the average posttest score obtained by students was 9 while in the control class the average pretest score obtained by students was 0 and the average posttest score obtained by students was 8. Statistical tests using the two tail test on excel 16 obtained sig results (2-tailed) $0.002 < \text{significance } 0.05$ meaning H_0 was rejected and H_a was accepted, so there was an influence of the POGIL learning model on improving students' scientific literacy skills. The N-Gain score in the experimental class reached 56.09%, including the fairly effective category, the control class obtained an N-Gain score of 42.55, categorized as ineffective. This shows that the increase in students' scientific literacy skills in the experimental class was higher than in the control class, so the POGIL model applied proved to be quite effective. So it can be concluded that there is an influence and ability to improve the POGIL learning model assisted by LKPD scientific literacy of students.

Keywords: Static Fluid, Ability to Increase Students' Scientific Literacy, LKPD POGIL Model,