

ABSTRAK

Andina Putri Istakmala. 2026. **PENGARUH MODEL *DEBATE BASED ON INQUIRY LEARNING* (DBOIL) TERHADAP KETERAMPILAN ARGUMENTASI ILMIAH SISWA PADA MATERI FLUIDA STATIS**

Keterampilan argumentasi ilmiah merupakan bagian dari keterampilan berpikir kritis dan juga keterampilan komunikasi yang menjadi tujuan utama Pendidikan abad 21. Hasil studi pendahuluan di SMA Negeri 2 Tasikmalaya menunjukkan bahwa keterampilan argumentasi ilmiah siswa masih tergolong sangat rendah dengan rata-rata persentase keterampilan argumentasi ilmiah 34,36%. Salah satu upaya untuk mengatasi masalah tersebut adalah menerapkan model *Debate Based on Inquiry Learning* (DBOIL) yaitu model yang mengintegrasikan pembelajaran inkuiri dan juga pembelajaran berbasis debat. Tujuan penelitian ini adalah untuk mengetahui pengaruh model *Debate Based on Inquiry Learning* (DBOIL) terhadap keterampilan argumentasi ilmiah siswa pada materi fluida statis. Penelitian ini merupakan penelitian kuantitatif dengan metode penelitian yang digunakan dalam penelitian ini adalah kuasi eksperimen dengan desain penelitian *the matching-only posttest-only control group design*. Populasi penelitian dalam penelitian ini adalah seluruh kelas XI SMA Negeri 2 Tasikmalaya yang mengambil pelajaran fisika yang berjumlah 180 orang adapun sampel penelitian yang dipilih ialah menggunakan teknik *purposive sampling*, yaitu kelas XI-A1 sebagai kelas eksperimen dan XI-A4 sebagai kelas kontrol, masing-masing 36 siswa. Instrumen penelitian berupa tes uraian sebanyak enam soal yang diberikan sesudah perlakuan (*posttest*). Data dianalisis menggunakan uji-t pada taraf signifikansi $\alpha = 0,05$, Hasil menunjukkan $t_{hitung} > t_{tabel}$ yaitu $3,51 > 1,99$ sehingga H_0 ditolak dan H_a diterima. Dengan demikian, dapat disimpulkan bahwa penerapan model *Debate Based on Inquiry Learning* (DBOIL) berpengaruh terhadap keterampilan argumentasi ilmiah siswa pada materi fluida statis.

Kata kunci : Keterampilan Argumentasi Ilmiah, Model *Debate Based on Inquiry Learning* (DBOIL), Fluida Statis.

ABSTRACT

*Andina Putri Istakmala. 2026. **THE EFFECT OF DEBATE BASED ON INQUIRY LEARNING (DBOIL) FOR STUDENTS' SCIENTIFIC ARGUMENTATION SKILLS IN STATIC FLUID MATERIAL***

Scientific argumentation skills are part of critical thinking skills and communication skills, which are the main objectives of 21st century education. Preliminary studies at Tasikmalaya 2 Public High School show that students' scientific argumentation skills are still very low, with an average scientific argumentation skill percentage of 34.36%. One effort to overcome this problem is to apply the Debate Based on Inquiry Learning (DBOIL) model, which integrates inquiry learning and debate-based learning. The purpose of this study was to determine the effect of the Debate Based on Inquiry Learning (DBOIL) model on students' scientific argumentation skills in static fluid material. This study is a quantitative study using the survey research method used in this study was a quasi-experiment with a matching-only posttest-only control group design. The research population in this study were 180 grade XI students of SMA Negeri 2 Tasikmalaya who took physics lessons. The research sample was selected using a purposive sampling technique, in which class XI-A1 was assigned as the experimental class and class XI-A4 as the control class, with 36 students in each class. The research instrument consisted of six essay questions administered after the treatment (posttest). The data were analyzed using a t-test at a significance level of $\alpha = 0.05$. The results showed that $t_{\text{statistic}} > t_{\text{table}}$, namely $3.51 > 1.99$, so H_0 was rejected and H_a was accepted. Therefore, it can be concluded that the implementation of the Debate Based on Inquiry Learning (DBOIL) model had a significant effect on students' scientific argumentation skills in the topic of static fluids.

Keywords: Scientific Argumentation Skills, Debate Based on Inquiry Learning (DBOIL) Model, Static Fluid.