

ABSTRAK

HASBI QUROTU AINI. 2026. **Pengaruh Model Pembelajaran INoSIT (*Integration Nature of Science in Inquiry with Technology*) terhadap Kemampuan Literasi Sains Peserta Didik pada Materi Gerak Parabola.** Pendidikan Fisika. Fakultas Keguruan dan Ilmu Pendidikan. Universitas Siliwangi.

Penelitian ini dilatarbelakangi oleh rendahnya literasi sains peserta didik, khususnya pada materi gerak parabola yang menuntut kemampuan menghubungkan konsep fisika dengan fenomena nyata, merancang penyelidikan ilmiah, serta menginterpretasikan data secara kritis. Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran *Integration Nature of Science in Inquiry with Technology* (INoSIT) terhadap literasi sains peserta didik pada materi gerak parabola. Penelitian ini merupakan penelitian kuantitatif dengan metode kuasi eksperimen dan *posttest only control design*. Populasi penelitian adalah seluruh kelas XI yang mengambil peminatan fisika di SMA Negeri 1 Cisayong. Dengan teknik pengambilan sampel *cluster random sampling* diperoleh kelas XI-C3 sebagai kelas eksperimen dan kelas XI-C1 sebagai kelas kontrol. Instrumen penelitian berupa tes literasi sains yang disusun berdasarkan kompetensi sains pada kerangka PISA 2025. Analisis data dilakukan melalui uji prasyarat berupa uji normalitas dan uji homogenitas. Hasil uji menunjukkan bahwa data *posttest* salah satu kelas tidak berdistribusi normal, sehingga uji hipotesis menggunakan *Mann Whitney U Test*. Hasil pengujian menunjukkan bahwa $Z_{hitung} > Z_{tabel}$ yaitu $15,62 > 1,96$ pada taraf signifikansi ($\alpha = 0,05$), sehingga H_0 ditolak dan H_a diterima. Berdasarkan hasil tersebut dapat disimpulkan bahwa model pembelajaran *Integration Nature of Science in Inquiry with Technology* (INoSIT) berpengaruh terhadap kemampuan literasi sains peserta didik pada materi gerak parabola di kelas XI SMA Negeri 1 Cisayong tahun ajaran 2025/2026. Model pembelajaran INoSIT berpengaruh terhadap kemampuan literasi sains peserta didik karena melibatkan peserta didik secara aktif dalam penyelidikan ilmiah berbasis teknologi.

Kata kunci: Gerak Parabola, INoSIT, Literasi Sains.

ABSTRACT

HASBI QUROTU AINI. 2026. ***The Effect of The INoSIT (Integration Nature of Science in Inquiry with Technology) Learning Model on Students' Science Literacy Skills in Projectile Motion Topics.*** Physics Education. Faculty of Teacher Training and Education. Siliwangi University.

This study was motivated by the low level of science literacy among students, particularly regarding projectile motion, which requires the ability to connect physics concepts with real-world phenomena, design scientific investigations, and critically interpret data. This study aims to determine the effect of the Integration of the Nature of Science in Inquiry with Technology (INoSIT) learning model on students' science literacy in projectile motion. This is a quantitative study using a quasi-experimental method and a posttest-only control design. The study population consists of all 11th-grade students taking the physics track at SMA Negeri 1 Cisayong. Using cluster random sampling, Class XI-C3 was selected as the experimental class and Class XI-C1 as the control class. The research instrument is a science literacy test developed based on the science competencies outlined in the PISA 2025 framework. Data analysis was conducted through prerequisite tests, namely normality and homogeneity tests. The test results showed that the posttest data for one of the classes were not normally distributed; therefore, the Mann-Whitney U test was used for hypothesis testing. The test results showed that $Z_{\text{statistic}} > Z_{\text{table}}$, specifically $15,62 > 1,96$ at the significance level ($\alpha = 0,05$), so H_0 was rejected and H_1 was accepted. Based on these results, it can be concluded that the Integration of Nature of Science in Inquiry with Technology (INoSIT) learning model has an effect on students' science literacy skills regarding projectile motion material in Grade 11 at SMA Negeri 1 Cisayong in the 2025/2026 academic year. The INoSIT learning model enhances students' science literacy skills because it actively engages them in technology-based scientific inquiry.

Keywords: INoSIT, Projectile Motion, Science Literacy.