

ABSTRAK

**PENINGKATAN KEMAMPUAN LITERASI SAINS PESERTA DIDIK KELAS V SD
KANISIUS KLEPU MENGGUNAKAN MEDIA *VIRTUAL LABORATORY PhET
COLORADO***

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Hasil *Programme for International Student Assessment* (PISA), kemampuan literasi sains peserta didik di Indonesia masih tergolong rendah dibandingkan rata-rata internasional. Penelitian ini bertujuan mendeskripsikan peningkatan literasi sains peserta didik kelas V SD Kanisius Klepu melalui penggunaan media *virtual laboratory PhET Colorado* dengan model *Inquiry Learning*. Penelitian menggunakan metode Penelitian Tindakan Kelas (PTK) dalam dua siklus, dengan subjek 21 peserta didik. Teknik pengumpulan data meliputi observasi, wawancara, tes literasi sains, dan dokumentasi, serta dianalisis secara kuantitatif dan kualitatif. Hasil penelitian menunjukkan peningkatan nilai rata-rata dari 52,38 (pra-siklus), menjadi 73,81 (siklus I), dan 80,68 (siklus II). Dengan demikian, *virtual laboratory PhET Colorado* efektif sebagai alternatif media pembelajaran untuk meningkatkan literasi sains peserta didik.

Kata kunci : Literasi sains, Media Pembelajaran, dan *Virtual Laboratory PhET Colorado*.

ABSTRACT

**IMPROVING SCIENTIFIC LITERACY SKILLS OF GRADE V STUDENTS AT KANISIUS
KLEPU ELEMENTARY SCHOOL USING THE PhET COLORADO VIRTUAL LABORATORY
MEDIA**

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Based on the results of the Programme for International Student Assessment (PISA), Indonesian students' scientific literacy remains low compared to the international average. This study aims to describe the improvement of scientific literacy among fifth-grade students of SD Kanisius Klepu through the use of the PhET Colorado virtual laboratory as a learning medium, implemented with the Inquiry Learning model.

The research employed Classroom Action Research (CAR) conducted in two cycles, involving 21 students as the research subjects. Data were collected through observation, interviews, scientific literacy tests, and documentation, and were analyzed using both quantitative and qualitative techniques.

The results showed an increase in the average scores from 52.38 (pre-cycle) to 73.81 (Cycle I) and 80.68 (Cycle II). Therefore, the PhET Colorado virtual laboratory can be considered an effective alternative learning medium to improve students' scientific literacy.

Keywords: Scientific literacy, Learning media, PhET Colorado virtual laboratory.