

ABSTRAK

Fitri Khoirunnisa : “Pengaruh Model Pembelajaran CLIS (Children Learning in Science) Terhadap Kemampuan Kinerja Ilmiah Siswa Pada Materi Pencemaran Lingkungan”

Pembelajaran abad ke-21 menuntut peserta didik memiliki kemampuan berpikir ilmiah dan pemahaman konsep mendalam. Dalam pembelajaran IPA, kemampuan kinerja ilmiah mencakup mengamati, merumuskan masalah, membuat hipotesis, merancang dan melaksanakan percobaan, serta menarik kesimpulan. Penelitian ini bertujuan menganalisis pengaruh model Children Learning in Science (CLIS) terhadap kemampuan kinerja ilmiah siswa pada materi pencemaran lingkungan. Metode quasi experiment dengan nonequivalent control group design digunakan. Sampel diambil dengan sampling jenuh di salah satu SMP di Jatinangor, melibatkan kelas eksperimen (CLIS) dan kelas kontrol (Problem Based Learning/PBL). Hasil menunjukkan peningkatan signifikan pada kelas eksperimen dengan rata-rata pretest 37,23 (kurang), posttest 85,65 (sangat baik), dan N-Gain 0,70 (tinggi). Kelas kontrol memperoleh pretest 39,77 (kurang), posttest 70,63 (baik), dan N-Gain 0,44 (sedang). Uji independent sample t-test menunjukkan Sig. 0,001 < 0,05 dengan effect size 2,219 (tinggi). Dengan demikian, CLIS berpengaruh positif dan signifikan terhadap kemampuan kinerja ilmiah siswa. Kebaruan penelitian ini terletak pada integrasi sintaks CLIS dengan praktikum kontekstual dan refleksi ilmiah untuk memperkuat konsep dan mengurangi miskonsepsi. Temuan ini menunjukkan bahwa pembelajaran berbasis CLIS efektif dalam meningkatkan keterampilan proses sains siswa pada konteks materi lingkungan secara lebih aktif dan bermakna di kelas serta mendukung implementasi Kurikulum Merdeka di sekolah khususnya pada pembelajaran IPA tingkat SMP.

Kata kunci: Model CLIS, Kinerja ilmiah, Pencemaran lingkungan

ABSTRACT

Fitri Khoirunnisa : *“The Effect of the Children Learning in Science (CLIS) Learning Model on Students’ Scientific Performance Skills in Environmental Pollution Material”*

21st century demands students develop scientific thinking skills and deep conceptual understanding. In science education, scientific performance skills include observing, formulating problems, developing hypotheses, designing and conducting experiments, and drawing conclusions. This study aims to analyze the effect of the Children Learning in Science (CLIS) model on students’ scientific performance skills in environmental pollution topics. The research used a quasi-experimental method with a nonequivalent control group design. Sampling used saturated sampling in one junior high school in Jatinangor, involving an experimental class using CLIS and a control class using Problem-Based Learning (PBL). Results showed significant improvement in the experimental class. Pretest mean was 37.23 (low), posttest 85.65 (very good), and N-Gain 0.70 (high). Control class obtained pretest 39.77 (low), posttest 70.63 (good), and N-Gain 0.44 (medium). Independent sample t-test showed significance $0.001 < 0.05$ with effect size 2.219 (high). Thus, CLIS has a positive and significant effect on students’ scientific performance skills. Integration of CLIS with contextual practicum and reflection strengthens conceptual understanding and reduces misconceptions. Findings show CLIS is effective in improving science process skills in a meaningful learning context. This approach also supports implementation of the Merdeka Curriculum in junior high schools especially in science learning contexts effectively.

Keywords: CLIS learning model, environmental pollution, scientific performance skills.

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