

Sitti Sarrofah. 2022. Penerapan Problem Based Learning dengan Pendekatan Kontekstual terhadap Literasi Sains Siswa pada Materi Pencemaran Lingkungan. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Irsad Rosidi, S.Pd., M.Pd.

ABSTRAK

Tujuan penelitian ini adalah untuk mengetahui kemampuan literasi sains siswa pada materi pencemaran lingkungan di SMPN 1 Arosbaya. Jenis penelitian menggunakan *pre-experimental* desain bentuk *One Group Pretest-Posttest*. Pengambilan sampel menggunakan teknik *Nonprobability Sampling* bentuk *Purposive Sampling*. Sampel dalam penelitian ini adalah siswa kelas VII A SMPN 1 Arosbaya semester genap tahun ajaran 2021/2022 yang berjumlah 30 siswa. Pengumpulan data menggunakan teknik tes, observasi, angket, dan dokumentasi. Teknik analisis data menggunakan uji t sampel berpasangan. Hasil penelitian menunjukkan bahwa 1) hasil signifikansi uji t sampel berpasangan diperoleh $0,000 < 0,05$ sehingga H_0 ditolak dan H_a diterima sehingga ada perbedaan sebelum dan sesudah penerapan *Problem Based Learning* dengan pendekatan kontekstual pada materi pencemaran lingkungan, 2) Kemampuan literasi sains siswa sesudah pembelajaran lebih tinggi dari pada sebelum pembelajaran dibuktikan dengan persentase rata-rata literasi sains siswa secara keseluruhan pada *posttest* sebesar 82% dengan kategori baik dan *pretest* sebesar 45% dengan kategori sangat rendah, 3) Keterlaksanaan model pembelajaran *Problem Based Learning* dengan pendekatan kontekstual memperoleh rata-rata persentase sebesar 96,90% dengan kategori sangat baik, 4) Respon siswa setelah penerapan *Problem Based Learning* dengan pendekatan kontekstual pada materi pencemaran lingkungan memperoleh rata-rata persentase sebesar 91% dengan kategori sangat baik.

Kata kunci: literasi sains siswa, pencemaran lingkungan, pendekatan kontekstual, dan *problem based learning*.

Sitti Sarrofah. 2022. Application of Problem Based Learning with a Contextual Approach to Students' Scientific Literacy on Environmental Pollution Materials. Thesis, Natural Science Education Study Program, Education Faculty, University of Trunojoyo Madura. Advisor: Irsad Rosidi, S.Pd., M.Pd.

ABSTRACT

The purpose of this study was to determine the scientific literacy ability of students on environmental pollution material at SMPN 1 Arosbaya. This type of research used a *pre-experimental* design in the form of *One Group Pretest-Posttest*. The sample was taken by nonprobability sampling technique in the form of *purposive sampling*. The samples in this study were students of class VII A of SMPN 1 Arosbaya even semester of the academic year 2021/2022, totaling 30 students. The data was collected using test techniques, observation, questionnaires, and documentation. The data analyzed using technique paired sample t test. The results showed that 1) the results of the significance of the paired sample t test were $0.000 < 0.05$ so that H_0 was rejected and H_a was accepted so that there was a difference before and after the application of *Problem Based Learning* with a contextual approach to environmental pollution material, 2) Students' scientific literacy skills after learning more higher than before learning as evidenced by the average percentage of students' overall scientific literacy in the posttest by 82% in the good category and the pretest by 45% in the very low category, 3) The implementation of the *Problem Based Learning* learning model with a contextual approach obtained an average the percentage of 96.90% in the very good category, 4) Student responses after the application of *Problem Based Learning* with a contextual approach to environmental pollution material obtained an average percentage of 91% in the very good category.

Keywords: student science literacy, environmental pollution, contextual approach, and *problem based learning*.