

**IMPLEMENTASI MODEL *PROBLEM BASED LEARNING* (PBL) PADA
PEMBELAJARAN IPA TERPADU UNTUK MENINGKATKAN
LITERASI SAINS DAN KEMAMPUAN BERPIKIR KRITIS SISWA
KELAS VII SMP PADA MATERI PENCEMARAN LINGKUNGAN**

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ABSTRAK

Penelitian ini merupakan penelitian *quasi experiment* dengan desain penelitian *non-equivalent pretest dan posttest control group design*. Penelitian ini bertujuan untuk menganalisis peningkatan kemampuan literasi sains dan berpikir kritis siswa melalui implementasi model PBL pada pembelajaran IPA Terpadu pada siswa kelas VII di salah satu SMPN di Kabupaten Lampung Utara. Teknik pengambilan sampel menggunakan teknik *purposive sampling* sehingga diperoleh 50 orang siswa. Data diperoleh dengan menggunakan lembar observasi keterlaksanaan model PBL, tes literasi sains, tes skala sikap, tes berpikir kritis, panduan wawancara guru, dan angket tanggapan siswa. Hasil penelitian menunjukkan bahwa hampir seluruh aktivitas pembelajaran model PBL pada pembelajaran IPA terpadu terlaksana. Peningkatan kemampuan literasi sains ditunjukkan oleh pencapaian N-gain literasi sains pada aspek pengetahuan dan kompetensi pada kelas eksperimen 0,42 (sedang) dan N-gain kelas kontrol 0,26 (rendah), sedangkan N-gain literasi aspek sikap sains pada kelas eksperimen 0,44 (sedang) dan N-gain kelas kontrol 0,31 (sedang). Peningkatan kemampuan berpikir kritis ditunjukkan oleh N-gain kelas eksperimen 0,47 (sedang) dan N-gain kelas kontrol 0,32 (sedang). Guru menunjukkan tanggapan positifnya terhadap implementasi model PBL pada pembelajaran IPA terpadu. Selain itu, hampir seluruh siswa menyatakan respon positif mereka terhadap penerapan model PBL pada pembelajaran IPA terpadu. Jadi, dapat disimpulkan bahwa implementasi model PBL lebih baik dalam meningkatkan kemampuan literasi sains pada aspek pengetahuan, kompetensi, dan sikap sains dan juga dalam meningkatkan kemampuan berpikir kritis siswa.

Kata Kunci: Model Problem Based Learning (PBL), Literasi Sains, Kemampuan Berpikir Kritis

**IMPLEMENTATION OF PROBLEM BASED LEARNING (PBL) MODEL
IN INTEGRATED SCIENCE LEARNING TO ENHANCE SCIENTIFIC
LITERACY AND CRITICAL THINKING ABILITY OF VII GRADE
MIDDLE SCHOOL STUDENT ON ENVIRONMENTAL POLLUTION**

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ABSTRACT

This research is a quasi experiment with research design non-equivalent pretest and post-test control group design. This study aimed to analyze the upgrading of scientific literacy and critical thinking ability of students through the implementation of PBL model of integrated science teaching in grade VII in one of the middle school in North Lampung regency. The sampling technique used purposive sampling technique in order to obtain 50 students. Data obtained with using observation sheet of performing PBL models, scientific literacy test, scale test of attitude, critical thinking test, list of teacher interview, and students' questionnaire responses. The results showed that almost all learning activities PBL models in integrated science teaching implemented. Increased capabilities demonstrated by the achievement of scientific literacy N-gain scientific literacy in the aspect of knowledge and competence in the experimental class 0.42 (moderate) and N-gain control class 0.26 (low), while the N-gain attitude aspect of science literacy in the experimental class 0.44 (moderate) and N-gain control class 0.31 (moderate). Improved critical thinking skills demonstrated by the experimental class N-gain 0.47 (moderate) and N-gain control class 0.32 (moderate). Teachers show positive responses to the implementation model of PBL in integrated science teaching. Moreover, almost all of the students expressed their positive response to the application of the model of PBL in integrated science teaching. Thus, it can be concluded that the implementation of PBL better models to improve scientific literacy abilities in aspects of knowledge, competencies, and attitudes of science and also in improving students' critical thinking skills.

Keywords: Problem Based Learning (PBL) Model, Scientific Literacy, Critical Thinking Ability