

ABSTRAK
PENGARUH MODEL *PROBLEM-BASED LEARNING* BERBASIS
ETNOSAINS TERHADAP KETERAMPILAN BERPIKIR
KRITIS SISWA PADA MATERI ASAM BASA

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Penelitian ini bertujuan untuk mendeskripsikan pengaruh model *problem-based learning* berbasis etnosains dalam meningkatkan keterampilan berpikir kritis siswa pada materi asam basa. Metode penelitian yang digunakan dalam penelitian ini adalah kuasi eksperimen dengan *pretest-posttest control group design* dan pengambilan sampel dilakukan dengan menggunakan teknik *cluster random sampling*. Populasi dalam penelitian ini yaitu seluruh siswa kelas XI SMA Negeri 13 Bandar Lampung tahun ajaran 2022/2023 yang berjumlah 210 siswa dan ditetapkan XI IPA 5 sebagai kelas eksperimen dan XI IPA 6 sebagai kelas kontrol. Pengaruh model *problem-based learning* berbasis etno-sains dianalisis menggunakan uji perbedaan dua rata-rata pada *n-Gain* dan uji *effect size* terhadap keterampilan berpikir kritis siswa kelas eksperimen dan kelas kontrol. Hasil penelitian menunjukkan bahwa rata-rata *n-Gain* keterampilan berpikir kritis siswa untuk kelas eksperimen sebesar 0,74 yang berarti termasuk dalam kriteria tinggi dan kelas kontrol sebesar 0,54 yang berarti termasuk dalam kriteria sedang. Hasil uji *effect size* menunjukkan 96% tingginya keterampilan berpikir kritis siswa kelas eksperimen dipengaruhi oleh pembelajaran dengan model *problem-based learning* berbasis etnosains. Berdasarkan hasil penelitian dapat disimpulkan bahwa model *problem-based learning* berbasis etnosains berpengaruh secara signifikan dalam meningkatkan keterampilan berpikir kritis siswa pada materi asam basa.

Kata kunci: *problem-based learning*, etnosains, keterampilan berpikir kritis, asam basa.

ABSTRACT
THE EFFECT OF ETHNOSAINS-BASED PROBLEM-BASED LEARNING
MODEL ON STUDENTS' CRITICAL THINKING SKILLS IN
ACID-BASE MATERIALS

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This study aims to describe the effect of the ethnoscience-based problem-based learning model in improving students' critical thinking skills in acid-base material. The research method used in this study was quasi-experimental with a pretest-posttest control group design and sampling was carried out using cluster random sampling technique. The population in this study were all class XI students of SMA Negeri 13 Bandar Lampung for the 2022/2023 school year, totaling 210 students and XI IPA 5 was assigned as the experimental class and XI IPA 6 as the control class. The effect of the ethnoscience-based problem-based learning model was analyzed using the two average difference test on n-Gain and the effect size test on the critical thinking skills of students in the experimental class and the control class. The results showed that the average n-Gain of students' critical thinking skills for the experimental class was 0.74 which means it is included in the high criteria and for the control class is 0.54 which means it is included in the medium criteria. The results of the effect size test showed that 96% of the students' critical thinking skills in the experimental class were influenced by learning using the ethnoscience-based problem-based learning model. Based on the research results, it can be concluded that the ethnoscience-based problem-based learning model has a significant effect on improving students' critical thinking skills in acid-base material.

Keywords: problem-based learning, ethnoscience, critical thinking skills, acids