

ABSTRAK

EFEKTIVITAS PEMBELAJARAN BERBASIS PROYEK PENGOLAHAN LIMBAH KULIT NANAS DAN AMPAS TEBU DALAM MENINGKATKAN KETERAMPILAN BERPIKIR KRITIS SISWA SMA

Oleh

UPIT NURJANAH

Penelitian ini bertujuan untuk mendeskripsikan efektivitas pembelajaran berbasis proyek pengolahan limbah kulit nanas dan ampas tebu dalam meningkatkan keterampilan berpikir kritis siswa SMA. Populasi dalam penelitian ini adalah seluruh siswa kelas XI di SMAN 16 Bandar Lampung tahun pelajaran 2024/2025. Pengambilan sampel dilakukan dengan teknik *purposive sampling* dan kelas XI F4 dijadikan sebagai sampel penelitian. Metode penelitian yang digunakan adalah *Weak-Eksperiment* dengan *The One Group Pretest-Posttest Design*. Perangkat pembelajaran meliputi RPP, LKPD berbasis proyek, serta instrumen penelitian yang terdiri dari soal pretes postes keterampilan berpikir kritis yang terdiri dari 7 soal essay, dan instrumen lembar kinerja produk siswa, instrumen angket respon siswa, dan lembar observasi terhadap keterlaksanaan PBP. Teknik analisis data dilakukan dengan uji statistik parametrik uji *t* dan perhitungan *n-gain*. Hasil penelitian menunjukkan bahwa rata-rata skor postes siswa lebih tinggi daripada rata-rata skor pretes, dengan *n-gain* rata-rata siswa yaitu sebesar 0,74 yang berkategori minimal sedang. Rata-rata persentase respon siswa sebesar 82,55% berkategori sangat baik dan keterlaksanaan pembelajaran sebesar 81,82% berkategori sangat tinggi. Berdasarkan hasil penelitian ini dapat disimpulkan bahwa pembelajaran berbasis proyek pengolahan limbah kulit nanas dan ampas tebu efektif dalam meningkatkan keterampilan berpikir kritis siswa SMA.

Kata kunci: keterampilan berpikir kritis, limbah kulit nanas dan ampas tebu, pembelajaran berbasis proyek

ABSTRACT

THE EFFECTIVENESS OF PROJECT-BASED LEARNING IN PINEAPPLE PEEL AND SUGARCANE BAGASSE WASTE PROCESSING TO ENHANCE CRITICAL THINKING SKILLS AMONG HIGH SCHOOL STUDENTS

By

UPIT NURJANAH

This research aims to describe the effectiveness of project-based learning on the processing of pineapple peel and sugarcane bagasse waste in improving high school students' critical thinking skills. The population in this research is all 11th-grade students at SMAN 16 Bandarlampung in the 2024/2025 academic year. The sample was taken using purposive sampling technique and class XI F4 was chosen as the research sample. The research method used is a weak-experiment with The One Group Pretest-Posttest Design. The learning tools include lesson plans (RPP), project-based student worksheets (LKPD), and research instruments consisting of critical thinking pretest-posttest questions which consist of 7 essay questions, and instruments such as the student product performance sheet, student response questionnaire, and observation sheet on the implementation of PBL. Data analysis techniques were conducted using parametric statistical t-test and n-gain calculation. The research results showed that the average posttest score of students was higher than the average pretest score, with an average n-gain of 0,74, categorized as at least moderate. The average percentage of student responses was 82,55% in the very good category, and the implementation of learning reached 81,82% in the very high category. Based on the results of this research, it can be concluded that project-based learning on the processing of pineapple peel and sugarcane bagasse waste is effective in improving high school students' critical thinking skills.

Keywords: critical thinking skills, pineapple peel and sugarcane bagasse waste, project-based learning