ABSTRAK

EFEKTIVITAS MODEL PEMBELAJARAN *DISCOVERY* BERMUATAN KIMIA HIJAU *ECO ENZYME* UNTUK MENINGKATKAN *ENVIRONMENTAL AWARENESS* DAN *SELF EFFICACY* SISWA SMA PADA MATERI TITRASI ASAM BASA

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Penelitian ini bertujuan untuk mendeskripsikan keefektifan model pembelajaran *discovery* bermuatan kimia hijau *eco enzyme* pada materi titrasi asam basa untuk meningkatkan *environmental awareness* dan *self efficacy* siswa. Populasi penelitian ini adalah seluruh siswa kelas XI SMA Muhammadiyah 2 Bandar Lampung Tahun Ajaran 2024/2025. Sampel penelitian ini, yaitu siswa kelas XI A sebagai kelas eksperimen dan XI B sebagai kelas kontrol. Pengambilan sampel pada penelitian ini menggunakan teknik *cluster random sampling*. Metode penelitian ini adalah *quasi experiment* dengan *non equivalent control group design*. Teknik analisis data yang dilakukan adalah uji perbedaan dua rata-rata dan *effect size*. Hasil uji menunjukkan bahwa rata- rata *n-gain environmental awareness* siswa sebesar 0,76 berkategori tinggi dan rata- *rata n-gain self efficacy* siswa sebesar 0,5 dengan kategori sedang. Hasil uji menunjukkan terdapat perbedaan yang signifikan pada rata-rata *n-gain environmental awareness* dan *self efficacy* siswa, pada kelas eksperimen lebih tinggi dibandingkan kelas kontrol. Hasil uji *effect size* terhadap *environmental awareness* dan *self efficacy* berkriteria besar dengan *environmental awareness* sebesar 97% dan *self efficacy* sebesar 98%. Hal ini menunjukan bahwa model pembelajaran *discovery* bermuatan kimia hijau *eco enzyme* efektif dalam meningkatkan *environmental awareness* dan *self efficacy* siswa SMA pada materi titrasi asam basa.

Kata Kunci: pembelajaran *discovery*, kimia hijau, *eco enzyme*, *environmental awareness*, *self efficacy*, titrasi asam basa

ABSTRACT

EFFECTIVENESS OF DISCOVERY LEARNING MODEL WITH GREEN CHEMISTRY ECO ENZYME CONTAINING TO IMPROVE ENVIRONMENTAL AWARENESS AND SELF EFFICACY IN HIGH SCHOOL STUDENTS ON THE MATERIAL OF ACID-BASE TITRATION

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This study aims to describe the effectiveness of the discovery learning model with green chemistry eco enzyme content on acid-base titration material to improve students' environmental awareness and self efficacy. The population of this study was all students of class XI of SMA Muhammadiyah 2 Bandar Lampung in the 2024/2025 Academic Year. The sample of this study was students of class XI A as the experimental class and XI B as the control class. Sampling in this study used the cluster random sampling technique. This research method is a quasi experiment with a non-equivalent control group design. The data analysis technique used was the test for differences in two means and effect size. The test results showed that the average value of students' environmental awareness n-gain was 0.76 in the high category and the average value of students' self efficacy n-gain was 0.5 in the moderate category. The test results showed that there was a significant difference in the average n-gain environmental awareness and self-efficacy of students, in the experimental class it was higher than the control class. The results of the effect size test on environmental awareness and self efficacy are large with environmental awareness of 97% and self efficacy of 98%. This shows that the discovery learning model with green chemistry content eco enzyme is effective in increasing environmental awareness and self-efficacy of high school students in acid-base titration material.

Keywords: discovery learning, green chemistry, eco enzyme, environmental awareness, self efficacy, acid base titration