

ABSTRAK

EFEKTIVITAS MODEL *DISCOVERY LEARNING* BERBASIS ETNOSAINS MENGINANG UNTUK MENINGKATKAN LITERASI KIMIA DAN *SELF EFFICACY* PADA MATERI LARUTAN PENYANGGA

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Penelitian ini bertujuan untuk mendeskripsikan keefektifan model *discovery learning* berbasis etnosains Menginang untuk meningkatkan literasi kimia dan *self efficacy* pada materi larutan penyangga. Populasi penelitian ini adalah siswa kelas XI SMA Negeri 15 Bandar Lampung tahun ajaran 2024/2025. Sampel penelitian ini yaitu siswa kelas XI 1 sebagai kelas eksperimen dan XI 3 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*. Efektivitas model *discovery learning* berbasis etnosains Menginang dianalisis menggunakan uji perbedaan dua rata-rata, yaitu uji t dan uji ukuran pengaruh (*effect size*) terhadap literasi kimia dan *self efficacy* siswa. Hasil uji hipotesis menunjukkan bahwa rata-rata *n-gain* literasi kimia dan *self efficacy* siswa kelas eksperimen lebih tinggi dibandingkan kelas kontrol. Rata-rata *n-gain* literasi kimia pada kelas eksperimen yaitu 0,80 dengan kriteria “tinggi” sedangkan kelas kontrol yaitu sebesar 0,56 dengan kriteria “sedang”. Kemudian rata-rata *n-gain self efficacy* pada kelas eksperimen yaitu sebesar 0,41 dengan kriteria “sedang” dan kelas kontrol yaitu sebesar 0,22 dengan kriteria “rendah”. Ukuran pengaruh model *discovery learning* dihitung dengan menggunakan uji *effect size*. Hasil uji ini menunjukkan bahwa 97% tingginya literasi kimia dan 98% tingginya *self efficacy* siswa dipengaruhi oleh model *discovery learning* dengan kriteria besar.

Kata kunci: *discovery learning*, etnosains, literasi kimia, *self efficacy*, larutan penyangga

ABSTRACT

EFFECTIVENESS OF DISCOVERY LEARNING MODEL BASED ON MENGINANG ETHNOSCIENCE TO IMPROVE CHEMICAL LITERACY AND SELF-EFFICACY ON BUFFER SOLUTION MATERIAL

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This study aims to describe the effectiveness of the discovery learning model based on Menginang ethnoscience to improve chemical literacy and self-efficacy in buffer solution material. The population of this study were 11th grade students of SMA Negeri 15 Bandar Lampung in the 2024/2025 school year. The samples of this study were students of class XI 1 as the experimental class and XI 3 as the control class. Sampling in this study using cluster random sampling technique. This research method is quasi experiment with non equivalent control group design. The effectiveness of the discovery learning model based on Menginang ethnoscience was analyzed using the two mean difference test, namely the t test and the effect size test on students' chemical literacy and self-efficacy. The results of hypothesis testing showed that the average n-gain of chemical literacy and self efficacy of experimental class students was higher than the control class. The average n-gain of chemical literacy in the experimental class is 0.80 with “high” criteria while the control class is 0.56 with “medium” criteria. Then the average n-gain of self efficacy in the experimental class is 0.41 with “medium” criteria and the control class is 0.22 with “low” criteria. The effect size of the discovery learning model is calculated using the effect size test. The results of this test showed that 97% of the high chemical literacy skills and 98% of the high self-efficacy of students were influenced by the discovery learning model with large criteria.

Keywords: discovery learning, ethnoscience, chemical literacy, self efficacy, buffer solutio