

ABSTRACT

Selvi Cahayani Damanik, NIM 4203151017 (2024). The Effect Of Ethnoscience Integrated Phenomenon Based Learning With PBL To Improve Students' Scientific Literacy On Temperature, Heat And Expansion Materials At Smp Negeri 27 Medan Tp 2023/2024.

This research aims to determine the influence of the ethnoscience-integrated phenomenon based learning with PBL on students' scientific literacy abilities in the material heat temperature and expansion at SMP Negeri 27 Medan T/P 2024/2025. The research used a quasi-experimental design with a Pretest and Posttest Control Group Design. The sample consists of two classes, namely class VII-2 (Experimental Class) with ethnoscience-integrated phenomenon based learning with PBL and class VII-3 (Control Class) using the PBL learning model. Sampling was carried out using the Random Sampling technique. Data collection was carried out using tests, observations, interviews and documentation. Data were analyzed by testing the hypothesis using the Independent Sample t-test and effect size test. The hypothesis of this research was tested using the t test and it was obtained that $t_{\text{count}} = 4.449$ was greater than $t_{\text{table}} = 1,670$ with $\alpha = 0.05$ with a significance level of 95%, so $t_{\text{count}} > t_{\text{table}}$ then H_a was accepted and H_o was rejected. Meanwhile, the calculation effect test obtained 1.13 in the Very high category. Based on the hypothesis test, it can be concluded that the ethnoscience-integrated phenomenon based learning with PBL on heat temperature and expansion material has an effect on the scientific literacy abilities of class VII students at SMP Negeri 27 Medan.

Keywords: Phenomenon-based learning; Scientific Literacy Ability