

ABSTRAK

Felicia, NIM.4203151030. Pengaruh *Phenomenon Based Learning* Terintegrasi Etnosains Terhadap Kemampuan Literasi Sains Siswa Pada Materi Suhu, Kalor dan Pemuaian di Kelas VII SMP Negeri 35 Medan T.P 2023/2024.

Penelitian ini bertujuan untuk mengetahui pengaruh penerapan model PhenoBL terintegrasi etnosains terhadap kemampuan literasi sains pada kompetensi menjelaskan fenomena secara ilmiah, mengevaluasi dan merancang penyelidikan ilmiah dan menafsirkan data dan bukti secara ilmiah pada materi suhu, kalor dan pemuaian. Penelitian ini dilakukan di SMP Negeri 35 Medan dengan populasi seluruh siswa kelas VII. Pengambilan sampel dilakukan dengan teknik *cluster sampling*, maka kelas yang terpilih adalah kelas VII-5 dan VII-6 dengan total sebanyak 64 siswa. Jenis penelitian yang digunakan adalah *Quasi Experiment*. Pengumpulan data pada penelitian ini menggunakan instrument tes pilihan berganda yang berjumlah 30 soal. Data diolah secara deskriptif dengan *IBM SPSS statistic 29 for windows*. Hasil analisis menunjukkan bahwa nilai rata-rata *pretest* kelas eksperimen 30,40 dan kelas kontrol 29,78 serta rata-rata *posttest* kelas eksperimen 70,20 dan kelas kontrol 50,62. Uji t pada kompetensi menjelaskan fenomena secara ilmiah signifikansi $0,009 < 0,05$, kompetensi mengevaluasi dan merancang penyelidikan ilmiah signifikansi $0,022 < 0,05$ dan kompetensi menafsirkan data dan bukti secara ilmiah signifikansi $0,043 < 0,05$, yang berarti H_0 ditolak dan H_a diterima, artinya bahwa penerapan *phenomenon based learning* berpengaruh signifikan terhadap kemampuan literasi sains siswa pada materi suhu, kalor dan pemuaian. Hasil penelitian menunjukkan bahwa terdapat pengaruh *Phenomenon Based Learning* terintegrasi etnosains secara signifikan terhadap kemampuan literasi sains siswa pada materi suhu, kalor dan pemuaian di kelas VII SMP Negeri 35 Medan T.P 2023/2024.

Kata kunci: *Phenomenon Based Learning*, Etnosains, Literasi Sains, Suhu, Kalor dan Pemuaian

ABSTRACT

Felicia, NIM.4203151030. The Influence of Ethnoscience Integrated Phenomenon Based Learning on Students' Scientific Literacy Ability on Temperature, Heat and Expansion Material in Class VII SMP Negeri 35 Medan T.P 2023/2024.

This research aims to determine the effect of implementing the ethnoscience integrated PhenoBL model on scientific literacy skills in the competence to explain phenomena scientifically, evaluate and design scientific investigations and interpret data and evidence scientifically on the subject of temperature, heat and expansion. This research was conducted at SMP Negeri 35 Medan with a population of all class VII students. Sampling was carried out using a cluster sampling technique, so the classes selected were classes VII-5 and VII-6 with a total of 64 students. The type of research used is Quasi Experiment. Data collection in this study used a multiple choice test instrument consisting of 30 questions. Data was processed descriptively with IBM SPSS statistics 29 for windows. The results of the analysis show that the average pretest score for the experimental class is 30.40 and the control class is 29.78 and the average posttest score for the experimental class is 70.20 and the control class is 50.62. The t test on competence to explain phenomena scientifically has a significance of $0.009 < 0.05$, competence in evaluating and designing scientific investigations has a significance of $0.022 < 0.05$ and competence in interpreting data and evidence scientifically has a significance of $0.043 < 0.05$, which means that H_0 is rejected and H_a is accepted. This means that the application of phenomenon based learning has a significant effect on students' scientific literacy abilities in the material of temperature, heat and expansion. The results of the research show that there is a significant influence of Phenomenon Based Learning integrated with ethnoscience on students' scientific literacy skills in the material temperature, heat and expansion in class VII SMP Negeri 35 Medan T.P 2023/2024.

Keywords: *Phenomenon Based Learning, Ethnoscience, Scientific Literacy, Temperature, Heat and Expansion*