ABSTRAK

PENGARUH MODEL *PROBLEM BASED-LEARNING* BERBANTU *LEAFLET* TERHADAP KEMAMPUAN LITERASI SAINS DAN *SUSTAINABILITY AWARENESS* SISWA PADA MATERI INTERAKSI ANTAR MAKHLUK HIDUP DAN LINGKUNGANNYA

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Penelitian ini bertujuan untuk mengetahui pengaruh model *Problem Based-learning* (PBL) berbantu *leaflet* pada materi interaksi antar makhluk hidup dan lingkungannya terhadap kemampuan literasi sains dan *sustainability awareness* peserta didik. Penelitian ini menggunakan desain *quasy experimental* dengan bentuk *pretest-posttest* kelompok *non-ekuvalen*. Sampel pada penelitian ini ditentukan dengan *purposive sampling* & didapat kelas VII.3 (eksperimen) serta VII.2 (kontrol). Kelas eksperimen memperoleh rata-rata *N-gain* literasi sains 0,62 dengan kategori sedang & kelas kontrol memperoleh 0,29 dengan kategori rendah. Indikator literasi sains yang mengalami peningkatan tertinggi yaitu kemampuan menjelaskan fenomena secara ilmiah dengan *N-gain* kelas eksperimen 0,47. Indikator ini memperoleh *N-gain* rendah yaitu 0,11 pada kelas kontrol. Analisis indikator literasi sains menunjukkan *N-gain* kelas eksperimen lebih tinggi daripada kelas kontrol pada tiap indikatornya. Berdasarkan hasil uji hipotesis, didapatkan nilai (*Sig.*0,00<0,05) dengan H_1 diterima yaitu penerapan model PBL berbantu *leaflet* berpengaruh signifikan terhadap kemampuan literasi sains. Didukung dengan hasil uji *effect size* sebesar 1,61 dengan interpretasi tinggi. Penerapan model PBL meningkatkan *sustainability awareness* peserta didik. Peningkatan kelas eksperimen tertinggi pada indikator *emotional awareness* dengan persentase *79,62%*. Peningkatan ini mengindikasikan praktik kesadaran berkelanjutan yang dilakukan dengan frekuensi sedang. Model PBL berbantu *leaflet* dapat menjadi alternatif pembelajaran yang efektif karena mampu mengintegrasikan pemahaman konsep dengan konteks nyata sehingga dapat digunakan untuk meningkatkan literasi sains sekaligus menumbuhkan kesadaran keberlanjutan peserta didik.

Kata Kunci: *Leaflet,* Literasi Sains, *Problem Based-Learning, Sustainability Awareness*

ABSTRACT

THE EFFECT OF THE PROBLEM-BASED LEARNING MODEL ASSISTED BY LEAFLETS ON STUDENTS' SCIENTIFIC LITERACY SKILLS AND SUSTAINABILITY AWARENESS IN THE TOPIC OF INTERACTIONS BETWEEN LIVING THINGS AND THEIR ENVIRONMENT

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This study aims to determine the effect of the leaflet-assisted Problem Based Learning (PBL) model on the material of interactions between living things and their environment on students scientific literacy and sustainability awareness. This study used a quasi-experimental design with a non-equivalent group pretest-posttest. The sample in this study was determined by purposive sampling & obtained classes VII.3 (experimental) and VII.2 (control). The experimental class obtained an average N-gain of scientific literacy of 0.62 with a medium category & the control class obtained 0.29 with a low category. The scientific literacy indicator that experienced the highest increase was the ability to explain phenomena scientifically with an N-gain of 0.47 in the experimental class. This indicator obtained a low N-gain of 0.11 in the control class. Analysis of scientific literacy indicators showed that the N-gain of the experimental class was higher than the control class in each indicator. Based on the results of the hypothesis test, a value of (Sig. 0.00 <0.05) was obtained with H1 being accepted, namely the application of the leaflet-assisted PBL model had a significant effect on scientific literacy abilities. Supported by the results of the effect size test of 1.61 with a high interpretation, the implementation of the PBL model increased students' sustainability awareness. The highest increase in the experimental class was in the emotional awareness indicator with a percentage of 79.62%. This increase indicates that sustainable awareness practices are carried out with moderate frequency. The leaflet-assisted PBL model can be an effective learning alternative because it is able to integrate conceptual understanding with real-world contexts, thus improving scientific literacy and fostering students sustainability awareness.

Keywords: *Leaflet, Problem Based-Learning, Scientific Literacy, Sustainability Awareness*