

ABSTRAK

SINSYA RAUDHATUL SYAPIKAH 2026. **PENGARUH MODEL *PROJECT BASED LEARNING* BERBASIS *NATURE JOURNALING* TERHADAP LITERASI BIODIVERSITAS DAN KETERAMPILAN PROSES SAINS PESERTA DIDIK UNTUK MEMITIGASI *NATURE DEFICIT DISORDER* (STUDI EKSPERIMEN DI KELAS X SMA NEGERI 3 TASIKMALAYA TAHUN AJARAN 2025/2026).**

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Pesatnya perkembangan teknologi telah mengurangi interaksi peserta didik dengan alam, yang berpotensi menimbulkan *nature deficit disorder* (NDD). Upaya mitigasi NDD dapat dilakukan melalui penguatan literasi biodiversitas dan keterampilan proses sains (KPS) untuk membangun pemahaman serta perilaku ramah lingkungan. Namun, berbagai penelitian menunjukkan bahwa literasi biodiversitas dan KPS peserta didik SMA masih tergolong rendah. Studi pendahuluan di SMA Negeri 3 Tasikmalaya turut mengonfirmasi bahwa kedua aspek tersebut perlu ditingkatkan. Penelitian ini bertujuan untuk menganalisis pengaruh model *Project Based Learning* (PjBL) berbasis *nature journaling* terhadap literasi biodiversitas dan KPS peserta didik sekaligus memperkuat keterhubungan dengan alam sebagai upaya mitigasi NDD. Penelitian ini merupakan quasi eksperimen dengan desain *pretest–posttest control group* yang dilaksanakan pada bulan November hingga Desember 2025 di SMA Negeri 3 Tasikmalaya. Populasi meliputi seluruh kelas X yang berjumlah 12 kelas sementara sampel ditentukan melalui *purposive sampling*, dengan kelas X.E-1 sebagai kelas kontrol dan X.E-3 sebagai kelas eksperimen. Instrumen penelitian berupa 41 soal pilihan majemuk untuk literasi biodiversitas dan 14 soal uraian untuk KPS. Data dianalisis menggunakan statistik deskriptif, uji normalitas dengan uji *Kolmogorov Smirnov*, uji homogenitas dengan uji *Levene's*, dan uji hipotesis nonparametrik, dengan uji *Quade's Rank Analysis of Covariance*. Hasil penelitian menunjukkan nilai signifikansi 0,000 ($<0,05$) pada literasi biodiversitas dan KPS, yang berarti model PjBL berbasis *nature journaling* berpengaruh signifikan terhadap kedua variabel tersebut. Pembelajaran ini mendorong eksplorasi, pengamatan, dan refleksi langsung terhadap objek alam sehingga memperkuat keterhubungan peserta didik dengan lingkungan dan berkontribusi dalam mitigasi NDD.

Kata Kunci: Keterampilan Proses Sains, Literasi Biodiversitas, *Nature Deficit Disorder*, *Nature Journaling*, *Project Based Learning*

ABSTRACT

SINSYA RAUDHATUL SYAPIKAH. 2026. ***THE EFFECT OF THE PROJECT BASED LEARNING MODEL BASED ON NATURE JOURNALING ON BIODIVERSITY LITERACY AND STUDENTS' SCIENCE PROCESS SKILLS TO MITIGATE NATURE DEFICIT DISORDER (EXPERIMENTAL STUDY IN GRADE X OF SMA NEGERI 3 TASIKMALAYA, SCHOOL YEAR 2025/2026).***

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The rapid development of technology has reduced students' interaction with nature, potentially leading to nature deficit disorder (NDD). NDD mitigation efforts can be carried out by strengthening biodiversity literacy and science process skills (SPS) to build environmentally friendly understanding and behavior. However, various studies indicate that biodiversity literacy and SPS of high school students are still relatively low. A preliminary study at SMA Negeri 3 Tasikmalaya also confirmed that both aspects need to be improved. This study aims to analyze the effect of the Project Based Learning (PjBL) model based on nature journaling on biodiversity literacy and SPS of students while strengthening the connection with nature as an effort to mitigate NDD. This study is a quasi-experimental study with a pretest–posttest control group design conducted from November to December 2025 at SMA Negeri 3 Tasikmalaya. The population included all 12 classes of grade X, while the sample was determined through purposive sampling, with class X.E-1 as the control class and X.E-3 as the experimental class. The research instrument consisted of 41 multiple choice questions for biodiversity literacy and 14 essay questions for the SPS. Data were analyzed using descriptive statistics, normality tests with the Kolmogorov Smirnov test, homogeneity test with the Levene's test, and nonparametric hypothesis test with the Quade's Rank Analysis of Covariance test. The results showed a significance value of 0.000 (<0.05) for biodiversity literacy and SPS, which means that PjBL based on nature journaling has a significant effect on both variables. This learning encourages direct exploration, observation, and reflection on natural objects, thereby strengthening students' connection with the environment, thus contributing to NDD mitigation.

Keywords: Biodiversity Literacy, Nature Deficit Disorder, Nature Journaling, Project Based Learning, Science Process Skills