

## **ABSTRAK**

### **PENGARUH MODEL PjBL TERINTEGRASI STEM (*Science, Technology, Engineering, and Mathematics*) TERHADAP KREATIVITAS SISWA PADA MATERI PERUBAHAN IKLIM**

**Oleh**

**RENY SEPTINA DEWI**

Penelitian ini bertujuan untuk mengetahui pengaruh nyata penerapan model PjBL terintegrasi STEM terhadap kreativitas peserta didik. Penelitian ini menggunakan desain penelitian *Posttest Only Control Group Design*. Populasi dalam penelitian ini adalah seluruh peserta didik kelas X SMAN 2 Gedong Tataan semester ganjil tahun ajaran 2024/2025 yang berjumlah 134 siswa. Sampel dalam penelitian ini dipilih menggunakan teknik *Puspositive sampling* dan terpilih kelas X.2 yang berjumlah 20 siswa dan kelas X.4 yang berjumlah 20 siswa. Data kuantitatif diperoleh dengan LKPD sebagai penilaian kreativitas dimensi proses. Data kualitatif diperoleh dari hasil produk berupa pupuk dan *vlog* yang dinilai menggunakan rubrik penilaian kreativitas dimensi produk, sedangkan respon peserta didik terhadap pembelajaran diukur menggunakan angket respon peserta didik. Hasil penelitian berdasarkan data menunjukkan bahwa kreativitas dimensi proses pada peserta didik yang menerapkan model PjBL terintegrasi STEM mendapatkan hasil rata-rata lebih tinggi dengan kategori tinggi (88) berbeda nyata dengan kelas kontrol yang termasuk kategori rendah (56,25). Pada kreativitas dimensi produk didapatkan hasil rata-rata kelas eksperimen lebih tinggi dengan kategori sangat kreatif (86,6) jika dibandingkan dengan kelas kontrol yang termasuk kategori cukup kreatif (53,3). Hasil uji hipotesis menggunakan *Independent Sample T-Test* didapatkan nilai  $Sig. 0,000 < 0,05$ , yang artinya  $H_0$  ditolak dan  $H_1$  diterima.  $H_1$  yaitu terdapat pengaruh signifikan penerapan model PjBL terintegrasi STEM terhadap kreativitas peserta didik. Berdasarkan hasil angket respon peserta didik (92,5%) berpendapat bahwa model PjBL terintegrasi STEM dalam pembelajaran dapat diterima dengan baik oleh peserta didik.

**Kata kunci :** PjBL Terintegrasi STEM, Kreativitas, Perubahan Iklim.

## **ABSTRACT**

### **THE EFFECT OF STEM (Science, Technology, Engineering, and Mathematics) INTEGRATED PjBL MODEL ON STUDENTS' CREATIVITY IN CLIMATE CHANGE MATERIAL**

**By**

**RENY SEPTINA DEWI**

*This study aims to determine the real effect of the implementation of the STEM integrated PjBL model on students' creativity. This study uses a Posttest Only Control Group Design research design. The population in this study were all students of class X SMAN 2 Gedong Tataan in the odd semester of the 2024/2025 academic year totaling 134 students. The sample in this study was selected using the Purposive sampling technique and selected class X.2 totaling 20 students and class X.4 totaling 20 students. Quantitative data were obtained using LKPD as an assessment of process dimension creativity. Qualitative data were obtained from product results in the form of fertilizer and vlogs which were assessed using a product dimension creativity assessment rubric, while student responses to learning were measured using a student response questionnaire. The results of the study based on data show that the creativity of the process dimension in students who apply the STEM integrated PjBL model gets a higher average result with a high category (88) significantly different from the control class which is included in the low category (56.25). In the creativity of the product dimension, the average result of the experimental class is higher with a very creative category (86.6) when compared to the control class which is included in the fairly creative category (53.3). The results of the hypothesis test using the Independent Sample T-Test obtained a Sig. value of 0.000 <0.05, which means that H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. H<sub>1</sub>, namely there is a significant effect of the application of the STEM integrated PjBL model on student creativity. Based on the results of the student response questionnaire (92.5%) argue that the STEM integrated PjBL model in learning can be well received by students.*

**Keywords:** STEM Integrated PjBL, Creativity, Climate Change.