

## ABSTRAK

**SELLY:** “Pengaruh Model *Problem Based Learning* Berbasis STEM (*Science, Technology, Engineering, Mathematics*) Terhadap Peningkatan Keterampilan Berpikir Kreatif (KBK) Siswa Materi Sistem Saraf”

Keterampilan berpikir kreatif merupakan aspek yang harus dimiliki siswa pada abad 21. Penelitian bertujuan menganalisis pengaruh model PBL berbasis STEM terhadap peningkatan KBK siswa. Penelitian *Mixed Method* menggunakan desain *Embedded*. Perangkat penelitian berupa Rencana Pelaksanaan Pembelajaran dan *task* kinerja siswa. Instrumen penelitian meliputi: lembar observasi keterlaksanaan, soal uraian terbatas berindikator KBK (kelancaran, keluwesan, originalitas, dan merinci), lembar asesmen kinerja produk, dan angket kendala siswa. *Purposive sampling* terdiri dari 36 siswa kelas eksperimen dan 36 siswa kelas reguler di salah satu Madrasah Aliyah Negeri di Kota Bandung. Keterlaksanaan aktivitas guru peneliti dan siswa mencapai kriteria sangat baik. Peningkatan KBK siswa kelas eksperimen berkriteria sedang sebesar 0,64 dan reguler berkriteria sedang sebesar 0,34. Hasil uji hipotesis menunjukkan pengaruh signifikan penggunaan model PBL berbasis STEM terhadap peningkatan KBK dengan *Sig.* (0,000) < 0,05. Hasil asesmen kinerja produk kelas eksperimen mencapai persentase 95% (sangat baik) dan reguler 88% (sangat baik). Kendala siswa tertinggi terdapat pada tahap orientasi masalah sebesar 4%, dan siswa menyatakan tidak mengalami kendala pada tahap membimbing pengalaman individual atau kelompok. Model PBL berbasis STEM berpengaruh terhadap peningkatan KBK siswa. Model PBL berbasis STEM dapat digunakan untuk membekalkan KBK siswa.

**Kata Kunci :** Keterampilan Berpikir Kreatif, Model PBL berbasis STEM, Sistem Saraf.

## **ABSTRACT**

**SELLY:** *"The Influence of STEM (Science, Technology, Engineering, Mathematics) Problem Based Learning Model on Students' Improvement of Creative Thinking Skills (CTS) on Nervous System Material"*

*Creative thinking skills are an aspect that students must have in the 21st century. The research aims to analyze the effect of the STEM-based PBL model on improving students' CTS. Mixed Method research uses an Embedded design. The research tools are in the form of Learning Implementation Plans and student performance tasks. The research instruments included: implementation observation sheets, limited description questions with CTS indicators (fluency, flexibility, originality, and detailing), product performance assessment sheets, and student constraint questionnaires. Purposive sampling consisted of 36 experimental class students and 36 regular class students at one of the State Aliyah Madrasas in Bandung City. The implementation of the activities of the research teacher and students reached very good criteria. The increase in CTS for experimental class students with medium criteria was 0.64 and regular criteria were 0.34. The hypothesis test results showed a significant effect of using the STEM-based PBL model on increasing CTS with Sig. (0.000) < 0.05. The results of the experimental class product performance assessment reached a percentage of 95% (very good) and 88% regular (very good). The highest student constraints were found at the problem orientation stage of 4%, and students stated that they did not experience problems at the stage of guiding individual or group experiences. The STEM-based PBL model has an effect on increasing students' CTS. The STEM-based PBL model can be used to equip students with CTS.*

**Keywords:** *Creative Thinking Skills, STEM-based PBL Models, Nervous System.*

