

Agustin Yuliyah D. 2024. *Pengaruh PjBL berbasis STEM Terhadap Kemampuan Berpikir Kritis dan Self-Regulation Peserta Didik*. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Maria Chandra Sutarja

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh *PjBL* berbasis *STEM* terhadap kemampuan berpikir kritis dan *self-regulation* peserta didik. Penelitian ini merupakan penelitian kuantitatif dengan desain *Quasy Experimental* yang dilaksanakan di SMP Negeri 1 Sepulu dengan subjek penelitian 28 peserta didik VIII-D sebagai kelas eksperimen dan 28 peserta didik VIII-E sebagai kelas kontrol. Berdasarkan hasil penelitian dapat disimpulkan bahwa: (1) Pembelajaran *PjBL* berbasis *STEM* terlaksana dengan sangat baik, dengan rata-rata persentase sebesar 93,33%. (2) Terdapat peningkatan kemampuan berpikir kritis peserta didik di kelas eksperimen dengan rata-rata *N-gain* sebesar 0,64 (Sedang). (3) Terdapat peningkatan *self-regulation* peserta didik di kelas eksperimen dengan rata-rata *N-gain* sebesar 0,59 (Sedang). (4) Terdapat perbedaan kemampuan berpikir kritis peserta didik antara kelas eksperimen dan kontrol setelah dilaksanakannya pembelajaran *PjBL* berbasis *STEM*. (5) Terdapat perbedaan *self-regulation* peserta didik antara kelas eksperimen dan kontrol setelah dilaksanakannya pembelajaran *PjBL* berbasis *STEM*. (6) Respons peserta didik terhadap *PjBL* berbasis *STEM* dalam kategori sangat baik dengan rata-rata persentase sebesar 84,89%.

Kata kunci: Kemampuan Berpikir Kritis, *PjBL* berbasis *STEM*, *Self-Regulation*

Agustin Yuliyah D. 2024. *The Influence of STEM-based PjBL on Students' Critical Thinking and Self-Regulation Abilities*. Thesis, Science Education Study Program, Faculty of Education, Trunojoyo University Madura. Advisor: Maria Chandra Sutarja

ABSTRACT

This study aims to determine the influence of STEM-based PjBL learning on students' critical thinking and self-regulation skills. This study is a quantitative research with a quasy experimental design which was carried out at SMP Negeri 1 Sepulu with 28 VIII-D students as the experimental class and 28 VIII-E students as the control class. Based on the results of the study, it can be concluded that: (1) STEM-based PjBL learning is carried out very well, with an average percentage of 93.33%. (2) There was an increase in students' critical thinking skills in the experimental class with an average N-gain of 0.64 (Moderate). (3) There was an increase in self-regulation of students in the experimental class with an average N-gain of 0.59 (Moderate). (4) There was a difference in students' critical thinking skills between the experimental and control classes after the implementation of STEM-based PjBL learning. (5) There was a difference in student self-regulation between the experimental and control classes after the implementation of STEM-based PjBL learning. (6) Students' response to STEM-based PjBL in the very good category with an average percentage of 84.89%.

Keywords: *Critical Thinking Ability, Self-Regulation, STEM-based PjBL*