

ABSTRAK

PENGARUH MODEL *PROBLEM BASED LEARNING* TERINTEGRASI STEM TERHADAP KEMAMPUAN *CREATIVE PROBLEM SOLVING* (CPS) PADA MATERI PERUBAHAN IKLIM

Oleh

BUNGA NAJLA SALSABILA

Penelitian ini bertujuan untuk mengetahui pengaruh model PBL terintegrasi STEM terhadap kemampuan CPS peserta didik pada materi Perubahan Iklim. Penelitian ini menggunakan desain eksperimental semu dengan pola desain yaitu *Pretest-Posttest Non-equivalen Control Group Design*. Subjek penelitian ini adalah peserta didik kelas VII SMP Negeri 5 Bandar Lampung yang berjumlah 291 orang dengan sampel diambil dengan teknik *purposive sampling*, sehingga terpilih 64 peserta didik yaitu kelas VII-1 dan VII-2. Data kemampuan CPS diambil menggunakan tes dan dianalisis menggunakan *Independent Sample t-Test*, sedangkan data tanggapan peserta didik dan keterlaksanaan sintaks diambil dengan angket dan dianalisis secara deskriptif. Hasil analisis data menunjukkan bahwa kemampuan CPS kelas eksperimen lebih tinggi ($N\text{-Gain} = 0,61$) dibandingkan dengan kelas kontrol ($N\text{-Gain} = 0,29$). Hasil uji *Independent Sample t-Test* didapatkan nilai *sig* (*2-tailed*) $0,00 < 0,05$ artinya H_1 diterima. Hasil juga didukung oleh uji *effect size* yang menguatkan bukti efektivitas model PBL terintegrasi STEM berpengaruh besar (1,77) terhadap kemampuan CPS. Indikator kemampuan CPS yang tertinggi pada kelas eksperimen yaitu *Solution Finding* ($N\text{-Gain} = 0,70$) dengan kategori “tinggi” dan yang paling rendah yaitu indikator *Acceptance Finding* ($N\text{-Gain} = 0,39$). Hasil analisis data angket tanggapan peserta didik menunjukkan bahwa hampir sebagian besar (87,11%) memberikan tanggapan positif tentang pengaruh Model PBL terintegrasi STEM terhadap kemampuan CPS. Dengan demikian, dapat disimpulkan bahwa penerapan model PBL terintegrasi STEM berpengaruh signifikan terhadap kemampuan CPS peserta didik.

Kata kunci: Kemampuan *Creative Problem Solving* (CPS), *Problem Based Learning* Terintegrasi STEM, Perubahan Iklim.

ABSTRACT

THE EFFECT OF STEM INTEGRATED PROBLEM BASED LEARNING MODEL ON CREATIVE PROBLEM SOLVING (CPS) SKILLS ON CLIMATE CHANGE MATERIALS

By

BUNGA NAJLA SALSABILA

This study aims to determine the influence of the STEM integrated PBL model on students' CPS abilities on Climate Change material. This study uses a pseudo-experimental design with a design pattern, namely Pretest-Posttest Non-equivalent Control Group Design. The subject of this study is 291 students in grade VII of SMP Negeri 5 Bandar Lampung with samples taken by purposive sampling technique, so that 64 students were selected, namely classes VII-1 and VII-2. CPS ability data was taken using a test and analyzed using the Independent Sample t-Test, while the data on student responses and syntax implementation was taken by questionnaire and analyzed descriptively. The results of the data analysis showed that the CPS ability of the experimental class was higher (N-Gain = 0.61) compared to the control class (N-Gain = 0.29). The results of the Independent Sample t-Test were obtained with a sig (2-tailed) value of $0.00 < 0.05$, meaning that H_1 was accepted. The results were also supported by an effect size test that corroborated evidence that the effectiveness of the STEM-integrated PBL model had a major effect (1.77) on CPS ability. The highest CPS ability indicator in the experimental class was Solution Finding (N-Gain = 0.70) with the "high" category and the lowest was the Acceptance Finding indicator (N-Gain = 0.39). The results of the analysis of student response questionnaire data showed that most (87.11%) gave positive responses about the influence of the STEM integrated PBL Model on CPS ability. Thus, it can be concluded that the application of the STEM integrated PBL model has a significant effect on the CPS ability of students. Keywords: Creative Problem Solving (CPS) Ability, STEM Integrated Problem Based Learning, Climate Change.

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