

**PENGARUH MODEL PEMBELAJARAN *PROBLEM BASED LEARNING*
BERBANTUAN APLIKASI XMIND TERHADAP KEMAMPUAN
BERPIKIR KREATIF SISWA SMA**

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis perbedaan kemampuan berpikir kreatif siswa antara yang belajar menggunakan model pembelajaran *Problem Based Learning* berbantuan aplikasi *XMIND* dan model pembelajaran konvensional. Metode penelitian yang digunakan adalah kuasi eksperimen (*quasi-experimental design*) dengan rancangan *Non-Equivalent Control Group Design*. Populasi dalam penelitian ini melibatkan seluruh siswa kelas XI SMA Negeri 1 Amlapura yang berjumlah 176 siswa, dengan sampel sebanyak 88 siswa yang dipilih menggunakan teknik *simple randomize* berbasis kelompok. Sampel terbagi ke dalam dua kelompok, yaitu kelas eksperimen (44 siswa) yang diterapkan model pembelajaran *Problem Based Learning* berbantuan aplikasi *XMIND* dan kelas kontrol (44 siswa) yang diterapkan pembelajaran konvensional. Data kemampuan berpikir kreatif dikumpulkan melalui instrumen tes kemampuan berpikir kreatif yang mencakup indikator *fluency*, *flexibility*, *originality*, dan *elaboration*. Data dianalisis menggunakan Analisis Kovarian (ANACOVA) satu jalur berbantuan SPSS versi 27 pada taraf signifikansi $\alpha = 0,05$. Hasil analisis menunjukkan nilai $F = 486,246$ dengan $p = 0,001$, yang berarti terdapat perbedaan kemampuan berpikir kreatif yang signifikan antara kedua kelompok setelah mengontrol kemampuan berpikir kreatif awal sebagai kovariat. Model ANACOVA yang digunakan memiliki nilai koefisien determinasi (R^2) sebesar 0,958, yang menunjukkan bahwa 95,8% variasi kemampuan berpikir kreatif siswa dapat dijelaskan oleh model penelitian, sedangkan 4,2% dipengaruhi oleh faktor lain di luar model. Nilai *Estimated Marginal Mean* (rata-rata terkoreksi) menunjukkan bahwa kelas eksperimen memiliki rata-rata terkoreksi sebesar 25,485 ($SE = 0,104$), lebih tinggi dibandingkan kelas kontrol sebesar 22,083 ($SE = 0,104$). Dengan demikian, model pembelajaran *Problem Based Learning* berbantuan aplikasi *XMIND* berpengaruh secara signifikan terhadap kemampuan berpikir kreatif siswa dan dapat dijadikan sebagai alternatif pembelajaran fisika untuk meningkatkan kemampuan berpikir kreatif siswa.

Kata kunci: *Problem Based Learning*, *XMIND*, kemampuan berpikir kreatif, pembelajaran fisika

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ABSTRACT

This study aims to analyze the difference in students' creative thinking skills between those who learn using the Problem Based Learning model assisted by *the XMIND* application and the conventional learning model. The research method used is a quasi-experimental design with a Non-Equivalent Control Group Design. The population in this study involved all grade XI students of SMA Negeri 1 Amlapura which amounted to 176 students, with a sample of 88 students selected using a group-based simple randomize technique. The sample was divided into two groups, namely the experimental class (44 students) who applied the Problem Based Learning model assisted by the XMIND application and the control class (44 students) who applied conventional learning. Data on creative thinking ability was collected through a creative thinking ability test instrument which included indicators of fluency, flexibility, originality, and elaboration. The data was analyzed using the SPSS-assisted one-lane Covariance Analysis (ANACOVA) version 27 at a significance level of $\alpha = 0.05$. The results of the analysis showed a value of $F = 486.246$ with $p = 0.001$, which means that there was a significant difference in creative thinking ability between the two groups after controlling for initial creative thinking ability as a covariate. The ANACOVA model used had a determination coefficient value (R^2) of 0.958, which indicates that 95.8% of the variation in students' creative thinking abilities can be explained by the research model, while 4.2% is influenced by other factors outside the model. The Estimated Marginal Mean value showed that the experimental class had a corrected average of 25.485 ($SE = 0,104$), higher than the control class of 22.083 ($SE = 0,104$). Thus, the Problem Based Learning learning model assisted by the XMIND application has a significant effect on students' creative thinking skills and can be used as an alternative to physics learning to improve students' creative thinking skills.

Keywords: Problem Based Learning, XMIND, creative thinking skills, physics learning.