

## **ABSTRACT**

*This study aims to measure the effectiveness of AI Gemini-based learning in improving the photography skills of students at SMK Negeri 3 Kuningan. The research method employed was a One Group Pretest-Posttest Design with a quantitative approach. The sample consisted of 36 students of grade X DKV selected using purposive sampling technique. Data were collected through pretest, posttest, questionnaires, and observations, and analyzed using SPSS version 27. The results showed that the average pretest score of 25.75 increased to 33.75 in the posttest, with a mean difference of 8 points. The Paired Sample t-Test indicated a significant difference before and after the treatment ( $t = -60.083$ ;  $p = 0.000 < 0.05$ ). Correlation analysis revealed a very strong relationship between the effectiveness of AI Gemini and photography skills ( $r = 0.937$ ;  $p = 0.000$ ). Furthermore, simple linear regression analysis produced the equation  $Y = 5.767 + 1.021X$  with a coefficient of determination  $R^2 = 0.878$ , meaning that AI Gemini-based learning contributes 87.8% to students' photography skills. Therefore, it can be concluded that the implementation of AI Gemini-based learning is effective in enhancing students' photography skills, particularly in understanding the exposure triangle, image composition, and lighting techniques.*

*Keywords: AI Gemini, photography, skills, learning effectiveness*

## ABSTRAK

Penelitian ini bertujuan untuk mengukur efektivitas pembelajaran berbasis AI Gemini dalam meningkatkan keterampilan fotografi siswa di SMK Negeri 3 Kuningan. Metode penelitian yang digunakan adalah One Group Pretest-Posttest Design dengan pendekatan kuantitatif. Sampel penelitian terdiri dari 36 siswa kelas X DKV yang dipilih menggunakan teknik purposive sampling. Pengumpulan data dilakukan melalui pretest, posttest, angket, dan observasi, kemudian dianalisis menggunakan bantuan SPSS versi 27. Hasil penelitian menunjukkan bahwa rata-rata nilai pretest sebesar 25,75 meningkat menjadi 33,75 pada posttest, dengan selisih rata-rata sebesar 8 poin. Uji Paired Sample t-Test menunjukkan adanya perbedaan signifikan sebelum dan sesudah perlakuan ( $t = -60,083$ ;  $p = 0,000 < 0,05$ ). Analisis korelasi memperlihatkan hubungan yang sangat kuat antara efektivitas AI Gemini dengan keterampilan fotografi ( $r = 0,937$ ;  $p = 0,000$ ). Analisis regresi linier sederhana menghasilkan persamaan  $Y = 5,767 + 1,021X$  dengan koefisien determinasi  $R^2 = 0,878$ , yang berarti pembelajaran berbasis AI Gemini memberikan kontribusi sebesar 87,8% terhadap keterampilan fotografi siswa. Dengan demikian, dapat disimpulkan bahwa pembelajaran berbasis AI Gemini efektif dalam meningkatkan keterampilan fotografi siswa, terutama pada aspek pemahaman segitiga eksposur (ISO, shutter speed, aperture), komposisi gambar, dan teknik pencahayaan.

Kata Kunci: AI Gemini, fotografi, keterampilan, efektivitas pembelajaran