

ABSTRAK

PENGEMBANGAN *PLATFORM LEARNING MANAGEMENT SYSTEM (LMS)* BERBASIS H5P DAN OAUTH 2.0 UNTUK MENINGKATKAN *ENGAGEMENT* PESERTA DIDIK DALAM PEMBELAJARAN DASAR-DASAR FOTOGRAFI MELALUI GAMIFIKASI

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Penelitian ini bertujuan untuk mengembangkan *Learning Management System* (LMS) berbasis H5P dan OAuth 2.0 guna meningkatkan *engagement* peserta didik dalam pembelajaran dasar-dasar fotografi melalui pendekatan gamifikasi. Pengembangan dilakukan menggunakan model *Research and Development* (R&D) mengacu pada langkah-langkah Borg and Gall, meliputi analisis kebutuhan, perancangan, pengembangan produk awal, validasi ahli, uji coba terbatas, revisi produk, dan uji lapangan. Subjek penelitian terdiri atas peserta didik kelas X Desain Komunikasi Visual (DKV) di SMK Negeri 1 Bandar Lampung. Data diperoleh melalui aktivitas *log* pada LMS Moodle, kuesioner *engagement*, dan hasil evaluasi pembelajaran. Hasil validasi ahli media, ahli materi, dan ahli bahasa menunjukkan bahwa LMS yang dikembangkan memiliki tingkat kelayakan sangat layak dengan nilai r hitung $> 0,70$ dan reliabilitas Cronbach Alpha $> 0,94$.

Hasil uji coba lapangan menunjukkan bahwa penerapan elemen gamifikasi seperti *experience points* (XP), *leaderboard*, dan sertifikat digital mampu meningkatkan motivasi, kenyamanan, serta keterlibatan peserta didik secara signifikan. Analisis statistik menggunakan SPSS menunjukkan peningkatan positif pada aspek *behavioral*, *emotional*, dan *cognitive engagement* setelah penerapan LMS berbasis H5P dan OAuth 2.0. Dengan demikian, LMS yang dikembangkan terbukti efektif sebagai media pembelajaran interaktif yang tidak hanya memperkuat motivasi belajar, tetapi juga mendorong partisipasi aktif peserta didik dalam pembelajaran berbasis teknologi.

Kata Kunci: LMS, H5P, OAuth 2.0, *gamifikasi*, *engagement*, *dasar-dasar fotografi*.

ABSTRACT

DEVELOPMENT OF AN H5P AND OAUTH 2.0-BASED LEARNING MANAGEMENT SYSTEM (LMS) PLATFORM TO ENHANCE STUDENT ENGAGEMENT IN BASIC PHOTOGRAPHY LEARNING THROUGH GAMIFICATION

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This research aims to develop an H5P and OAuth 2.0-based Learning Management System (LMS) to enhance student engagement in Basic Photography learning through a gamification approach. Development was carried out using the Research and Development (R&D) model, referring to the steps outlined by Borg and Gall, including needs analysis, design, initial product development, expert validation, limited testing, product revision, and field testing. The research subjects consisted of 10th-grade students in Visual Communication Design (DKV) at SMK Negeri 1 Bandar Lampung. Data was obtained through log activity on the Moodle LMS, an engagement questionnaire, and learning evaluation results. The validation results from media experts, content experts, and language experts indicate that the developed LMS is highly feasible, with a calculated r-value > 0.70 and a Cronbach Alpha reliability > 0.94 .

Field trial results show that implementing gamification elements such as experience points (XP), leaderboards, and digital certificates can significantly increase student motivation, comfort, and engagement. Statistical analysis using SPSS showed a positive increase in behavioural, emotional, and cognitive engagement after implementing an LMS based on H5P and OAuth 2.0. Therefore, the developed LMS proved effective as an interactive learning medium that not only strengthened learning motivation but also encouraged active student participation in technology-based learning.

Keywords: LMS, H5P, OAuth 2.0, gamification, engagement, basic photography.