

**PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS AUGMENTED
REALITY PADA SUB MATERI PRINSIP KERJA SISTEM PENGAPIAN
UNTUK MANAJEMEN KELAS TEKNIK KENDARAAN RINGAN**

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ABSTRAK

Riset pengembangan ini mempunyai tujuan agar bisa mengetahui proses pengembangan, kelayakan serta kepraktisan dari perangkat pembelajaran berbasis *Augmented Reality* pada sub materi prinsip kerja sistem pengapian untuk manajemen kelas teknik kendaraan ringan. Adapun Subjek dari kajian ini yang melakukan uji lapangan adalah 2 orang pakar materi, 2 orang pakar media, dan 30 orang peserta didik kelas XI TKR 1 SMK Negeri 3 Singaraja. Digunakan model 4-D (*Define, Design, Develop, Disseminate*) pada kajian ini karena terdapat urutan yang terstruktur serta bisa bertumpu pada landasan teori desain pembelajaran. Penelitian ini memakai metode observasi, wawancara, studi dokumen, dan kuesioner. Kajian pengembangan ini mendapat hasil bahwa Validitas dari perangkat pembelajaran berbasis *Augmented Reality* pada sub materi prinsip kerja sistem pengapian memperoleh kualifikasi sangat layak dengan skor persentase dari pakar materi senilai 97,5%, serta pakar media mendapat persentase senilai 96,5%. Selanjutnya, untuk hasil pengujian di lapangan yaitu pada kelompok kecil memperoleh persentase 94,4%, serta hasil pengujian kelompok besar senilai 94,6% dan didapatkan kualifikasi sangat praktis, serta implementasi manajemen kelas mendapat persentase dari pengamat senilai 94,5%.

Kata kunci: *Augmented Reality*, Manajemen Kelas, Media Pembelajaran, Prinsip Kerja Sistem Pengapian.

**DEVELOPMENT OF AUGMENTED REALITY-BASED LEARNING MEDIA
ON THE SUB-MATERIAL OF THE WORKING PRINCIPLE OF THE
IGNITION SYSTEM FOR CLASS MANAGEMENT OF LIGHT VEHICLE
ENGINEERING**

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ABSTRACT

This development research aims to understand the development process, feasibility, and practicality of Augmented Reality-based learning devices on the sub-material of ignition system working principles for managing light vehicle engineering classes. The subjects of this study who conducted field tests are 2 material experts, 2 media experts, and 30 students from class XI TKR 1 of SMK Negeri 3 Singaraja. The 4-D model (Define, Design, Develop, Disseminate) is used in this study because it follows a structured sequence and can rely on the theoretical foundation of instructional design. This research uses observation, interviews, document studies, and questionnaires. The results of this development study indicate that the validity of the Augmented Reality-based learning device on the sub-material of the ignition system working principle received a very feasible qualification with a percentage score of 97.5% from content experts, and a percentage of 96.5% from media experts. Furthermore, the results of field testing in a small group obtained a percentage of 94.4%, and the results of a large group test were 94.6%, both with a very practical qualification, while classroom management implementation received a percentage of 94.5% from observers.

Keywords: *Augmented Reality, Classroom Management, Instructional Media, Working Principles of Ignition Systems.*