

ABSTRAK

Pengembangan Media Pembelajaran Renang Berbasis *Augmented Reality* (AR) Untuk Hasil Belajar

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Latar Belakang: Pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan pada materi renang saat ini masih menggunakan metode konvensional dengan mengandalkan buku dan alat bantu sederhana. Media pembelajaran interaktif berbasis teknologi dapat mendukung proses belajar yang lebih menarik dan efektif. Penelitian ini bertujuan untuk mengembangkan media pembelajaran interaktif berbasis *Augmented Reality* yang diharapkan dapat meningkatkan hasil belajar siswa secara signifikan.

Metodologi: Penelitian ini menggunakan metode *Research and Development* (R&D) dengan model pengembangan Sugiyono. Tahapan pengembangan meliputi identifikasi masalah, pengumpulan informasi, desain produk, validasi ahli, uji coba produk, revisi, uji coba pemakaian, dan uji efektivitas. Penelitian melibatkan sampel siswa kelas VII dari SMP Negeri 1 Purwokerto dan SMP Negeri 9 Purwokerto. Instrumen penelitian untuk media dikumpulkan melalui angket validasi serta penilaian dari siswa dan guru, sementara aspek kognitif diukur menggunakan soal-soal yang telah melalui uji validitas. Data dianalisis menggunakan uji validitas, reliabilitas, serta uji efektivitas dengan metode kuasi-eksperimen untuk mengevaluasi pengaruh media pembelajaran berbasis *Augmented Reality* terhadap hasil belajar siswa.

Hasil Penelitian: Hasil validasi menunjukkan bahwa media pembelajaran berbasis *Augmented Reality* ini sangat layak digunakan, dengan penilaian dari ahli materi sebesar 88%, ahli media 86,67%, dan ahli bahasa 100%. Penilaian dari siswa mencapai 93,46%, sedangkan penilaian dari guru sebesar 96%. Hasil penelitian menunjukkan adanya peningkatan signifikan pada kedua kelompok siswa. Uji efektivitas mengungkapkan bahwa media ini memberikan peningkatan signifikan terhadap hasil belajar siswa, dengan nilai signifikansi 0,000. Media ini terbukti efektif dalam meningkatkan hasil belajar siswa, khususnya pada materi renang.

Kesimpulan: Media pembelajaran berbasis *Augmented Reality* (AR) merupakan solusi inovatif yang mampu meningkatkan hasil belajar siswa dengan menciptakan pengalaman belajar yang lebih menarik, interaktif, dan relevan dengan kebutuhan pendidikan di era digital.

Kata Kunci: *Augmented Reality*, media pembelajaran, renang, hasil belajar, pendidikan jasmani

ABSTRACT

Development of Augmented Reality (AR) Based Learning Media for Swimming to Enhance Learning Outcomes

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Background: The teaching of Physical Education, Sports, and Health for swimming materials currently relies on conventional methods, such as textbooks and simple teaching aids. Interactive, technology-based learning media have not yet been implemented to support a more engaging and effective learning process. This study aims to develop interactive learning media based on Augmented Reality (AR) that is expected to significantly improve students' learning outcomes.

Methodology: This research employed the Research and Development (R&D) method with the Sugiyono development model. The development stages included problem identification, information gathering, product design, expert validation, product trials, revisions, usage trials, and effectiveness testing. The study involved Grade VII students from SMP Negeri 1 Purwokerto and SMP Negeri 9 Purwokerto as the sample. Research instruments for the media were collected through validation questionnaires and evaluations from students and teachers, while cognitive aspects were assessed using validated test items. Data were analyzed using validity and reliability tests, as well as effectiveness testing through a quasi-experimental method to evaluate the impact of Augmented Reality-based learning media on students' learning outcomes.

Results: Validation results showed that the Augmented Reality-based learning media is highly feasible for use, with ratings from subject matter experts at 88%, media experts at 86.67%, and language experts at 100%. Student evaluations reached 93.46%, while teacher evaluations scored 96%. The findings indicated a significant improvement in learning outcomes for both student groups. The effectiveness test revealed that the media significantly enhanced students' learning outcomes, with a significance value of 0.000. This media was proven effective, particularly in improving learning outcomes in swimming.

Conclusion: Augmented Reality (AR)-based learning media is an innovative solution capable of enhancing students' learning outcomes by providing a more engaging, interactive, and relevant learning experience tailored to the needs of education in the digital era.

Keywords: Augmented Reality, learning media, swimming, learning outcomes, physical education