

ABSTRAK

Fadhila, Muhammad Yuhdi 2025. *Pengembangan Media Pembelajaran GEO AR Berbantuan Smart Geo Card Pada Materi Bangun Ruang Untuk Menunjang Konsep*. Skripsi. Pendidikan Matematika, Universitas Peradaban. Pembimbing: Sofri Rizka Amalia, M.Pd.

Materi bangun ruang dalam pembelajaran matematika sering dianggap abstrak sehingga menyulitkan siswa dalam memahami konsep-konsepnya. Penelitian ini bertujuan mengembangkan media pembelajaran berbasis *Augmented Reality* (AR) bernama *GEO AR* yang didukung dengan *Smart Geo Card* guna meningkatkan pemahaman siswa terhadap bangun ruang. Penelitian menggunakan metode *Research and Development* (R&D) dengan model pengembangan ADDIE, yang dilaksanakan sampai tahap implementasi dengan subjek siswa kelas VIII SMP Islam Ta'alumul Huda Bumiayu. Tahapan penelitian mencakup analisis kebutuhan, perancangan media, pembuatan aplikasi *GEO AR*, serta implementasi melalui uji validitas dan uji kepraktisan. Instrumen penelitian berupa angket validasi ahli media dan materi, serta angket respon guru dan siswa. Hasil penelitian menunjukkan bahwa *GEO AR* berbantuan *Smart Geo Card* dinilai sangat valid oleh para ahli dan sangat praktis berdasarkan uji coba, sehingga media ini layak dijadikan alternatif inovatif untuk mendukung pembelajaran bangun ruang, khususnya dalam mempermudah siswa memahami konsep abstrak melalui visualisasi interaktif tiga dimensi.

Kata kunci: Media Pembelajaran, *Augmented Reality*, *GEO AR*, *Smart Geo Card*, Bangun Ruang, ADDIE.

ABSTRAC

Fadhila, Muhammad Yuhdi 2025. *Development of GEO AR Learning Media Assisted by Smart Geo Card on solid geometry material to support the concept*. Undergraduate Thesis. Mathematics Education Department. Universitas Peradaban. Advisor: Sofri Rizka Amalia, M.Pd.

Mathematics learning, especially in solid geometry, is often perceived as abstract, making it challenging for students to grasp the concepts. This research seeks to create an Augmented Reality (AR)-based learning medium named GEO AR, supported by the Smart Geo Card, to enhance students' understanding of solid geometry. The study applied a Research and Development (R&D) approach with the ADDIE model, carried out up to the implementation stage, involving eighth-grade students of SMP Islam Ta'alumul Huda Bumiayu as participants. The research steps included conducting a needs analysis, designing the media, developing the GEO AR application, and implementing it through validity and practicality testing. Data collection instruments consisted of expert validation questionnaires for media and material, along with teacher and student response questionnaires. The findings indicated that the GEO AR media assisted by Smart Geo Card was categorized as highly valid by experts and highly practical in classroom trials, demonstrating its feasibility as an innovative alternative for teaching solid geometry, particularly in supporting students' comprehension of abstract concepts through interactive three-dimensional visualization.

Keywords: *Learning Media, Augmented Reality, GEO AR, Smart Geo Card, Solid Geometry, ADDIE.*