

INTISARI

Pembelajaran alat musik tradisional Indonesia pada mata pelajaran Seni Budaya di sekolah dasar sesuai capaian pembelajaran kurikulum masih menghadapi kendala, seperti keterbatasan alat musik fisik dan rendahnya pengalaman praktik siswa sehingga pemahaman siswa belum optimal. Penelitian ini bertujuan mengembangkan aplikasi pembelajaran berbasis *Augmented Reality* (AR) dengan simulasi *Virtual Playing* dan kuis gamifikasi untuk meningkatkan pemahaman siswa kelas VI di MI Muhammadiyah Ajibarang Kulon. Metode penelitian menggunakan model pengembangan *Waterfall* yang meliputi analisis kebutuhan, perancangan sistem, implementasi, dan pengujian. Pengujian dilakukan melalui *Black Box Testing*, pengujian pengguna menggunakan kuesioner, serta analisis efektivitas melalui *Pre-test* dan *Post-test*. Hasil pengujian menunjukkan aplikasi berjalan dengan baik dan memperoleh respon positif dari pengguna. Selain itu, nilai rata-rata siswa meningkat dari 78,4 menjadi 94,6 dengan nilai N-Gain 0,75 (kategori tinggi). Hasil tersebut menunjukkan bahwa aplikasi efektif meningkatkan pemahaman siswa terhadap alat musik tradisional.

Kata kunci: *Augmented Reality*, *Virtual Playing*, Gamifikasi Kuis, Alat Musik Tradisional Indonesia, Pembelajaran Interaktif

ABSTRACT

The teaching of traditional Indonesian musical instruments in elementary school arts and culture classes in accordance with curriculum learning outcomes still faces obstacles, such as limited physical musical instruments and low student practice experience, resulting in suboptimal student understanding. This study aims to develop an Augmented Reality (AR)-based learning application with Virtual Playing simulations and gamified quizzes to improve the understanding of sixth-grade students at MI Muhammadiyah Ajibarang Kulon. The research method used the Waterfall development model, which includes needs analysis, system design, implementation, and Testing. Testing was conducted through Black Box Testing, user Testing using questionnaires, and effectiveness analysis through Pre-tests and Post-tests. The test results showed that the application ran well and received positive responses from users. Additionally, the students' average score increased from 78.4 to 94.6 with an N-Gain value of 0.75 (high category). These results indicate that the application is effective in improving students' understanding of traditional musical instruments.

Keywords: Augmented Reality, Virtual Playing, Gamified Quiz, Traditional Indonesian Musical Instruments, Interactive Learning