

## Digital Resource Management and Gamification: Strategies for Building an Immersive Language Learning Environment for Millennial Students Through the Metaverse Platform

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### ABSTRACT

Digital transformation requires Islamic boarding schools to innovate in order to meet the learning needs of millennial students who are digital natives. This study aims to formulate a comprehensive strategy for building an immersive language learning environment for millennial students through the integration of digital resource management and gamification on the metaverse platform. The research method used is library research with a qualitative approach. Data were collected from secondary sources such as books, scientific journal articles, and research reports, then analyzed using qualitative content analysis techniques. The results of the study indicate that effective strategies are built on four main pillars. First, the reconstruction of the learning ecosystem that transforms Islamic boarding schools into unlimited classrooms in the metaverse, shifting the role of educators to facilitators and curators of digital content. Second, the development of interactive and contextual digital content architecture, where language material is designed as 3D objects that can be manipulated in scenario-based simulation environments. Third, the integration of gamification mechanisms consisting of reward systems, progression mapping, and immersive storytelling to increase intrinsic motivation and memory retention. Fourth, the creation of immersiveness through avatars and socio-cultural simulations that build authentic and safe language practice communities. The synthesis of these four pillars produces a strategic framework that emphasizes that successful implementation depends on the digital leadership of Islamic boarding schools, santri-centered design, and alignment with Islamic boarding school values.

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