ABSTRACT

Mathematics is often regarded as one of the subjects that is difficult and less appealing to students in Indonesia. This perception leads to low interest and proficiency among students in solving mathematical problems. This study aims to integrate technology favored by the current generation, specifically Virtual Reality (VR), into mathematics education. The hope is that this approach can increase student interest and reduce the negative stigma associated with mathematics. The scope of this research is limited to the use of VR technology as a medium in education.

The research proposes a solution by implementing the Game Development Life Cycle as a method to assist in the development process of this educational game. The development process of this application includes design, implementation, and testing. The specifications of this game application are based on technical and educational aspects, including object design, symbolic Artificial Intelligence implementation, sound design, and interest in subject learning. Verification was conducted against the specified criteria to analyze performance and ensure the application meets the established specifications.

The percentage index from the beta testing phase of this research reached 94.6%. This result indicates that the application falls into the "Highly Accepted" category based on the established feasibility criteria. Furthermore, during the alpha testing phase, the features of the application performed well. Feedback from respondents also indicated satisfaction with the application and interest in the implementation of VR technology in mathematics education. Overall, the findings of this research support that integrating VR technology into mathematics education can enhance student interest in learning mathematics.

Keywords: Mathematics, Virtual Reality, Educational Games, Technology.