



**DEVELOPING AN INTERACTIVE ROBLOX HORROR GAME TO
SENIOR HIGH SCHOOL STUDENTS FOR COLLEGE
ENTRANCE EXAM PROFICIENCY**

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ABSTRACT

This research focuses on developing an interactive horror game on ROBLOX to Senior High School (SHS) students enhance College Entrance Exam proficiency. The researchers used Lua as the programming platform and Roblox Studio as the development environment in creating a game that combines problem-solving with frightening horror elements to appeal to players. The process of development in creating this game followed the process indicated such as the installation of required software, scripting the AI pathfinding monster, creating the main gameplay, compiling math problems, constructing the user interface, incorporating sound and visual effects, and testing and debugging. The final product was a horror-survival game in which players had to solve math problems under time pressure with a twist of an AI pathfinding monster lurking around the area. The game had different levels of difficulty, covering topics like logical reasoning, algebra, and basic mathematics. The testing revealed that the game successfully increased student motivation and engagement, rendering math more fun and interactive. The horror factor ensured players stayed focused, and the stress of

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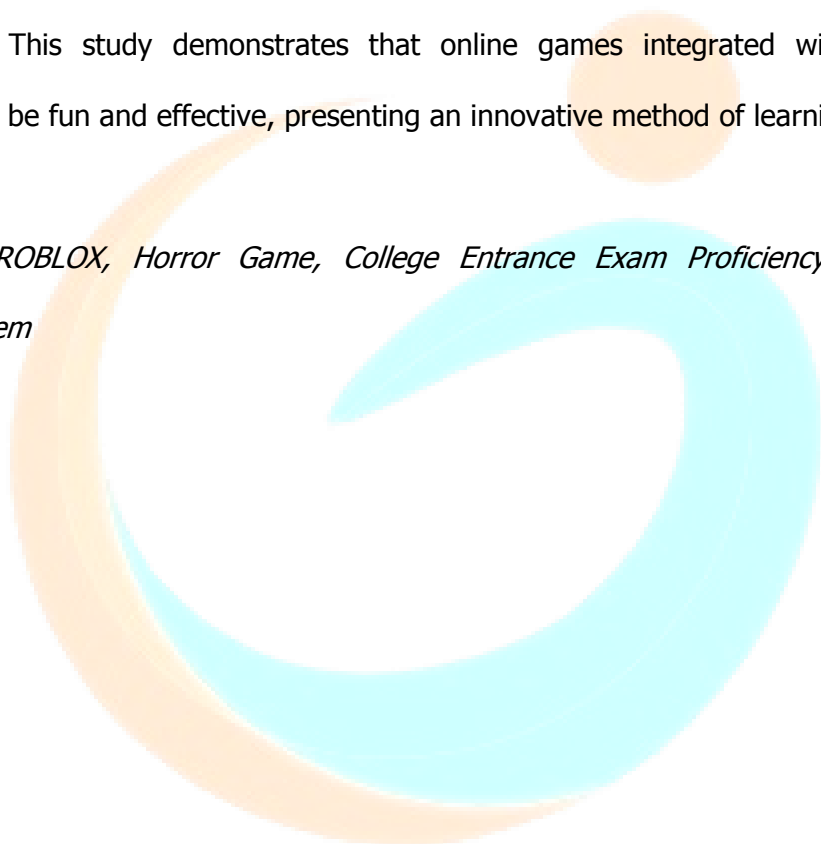
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solving math problems improved their problem-solving skills. Future developments may include broadening the game to encompass more topics, enhancing AI performance, adjusting difficulty levels for a flexible learning style, and lastly expand the area of learning to other subtest including science and language proficiency. In conclusion, the study highlights the potential of game-based learning as an effective tool for teaching complicated topics such as mathematics. This study demonstrates that online games integrated with educational objectives can be fun and effective, presenting an innovative method of learning.

Keywords: *ROBLOX, Horror Game, College Entrance Exam Proficiency, Game-Based Learning System*



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