

# **Impact of Using Simulation in Project Management Courses: A Case Study in Higher Education**

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## **Abstract**

This study investigates the impact of using simulations in project management courses through a mixed methods approach, focusing on student perceptions and learning outcomes. Drawing from an extensive literature review, simulations are positioned as an active learning method essential for bridging theoretical concepts with real-world applications. The study assesses the efficacy of simulation-based learning in enhancing student engagement, skill acquisition, and understanding of project management principles. Utilizing sentiment analysis alongside human evaluation, the research delves into student feedback to discern the benefits and challenges associated with simulation-based pedagogy. Findings reveal a generally positive reception towards simulations, emphasizing their role in fostering critical thinking, problem-solving, and decision-making skills. However, challenges such as complexity and technical issues are also acknowledged. The study underscores the importance of considering student perceptions in simulation design and implementation to optimize learning outcomes. Future research avenues are suggested to explore the effectiveness of simulations across diverse project management contexts and the role of feedback in enhancing student engagement and learning outcomes. Ultimately, this research contributes to a nuanced understanding of the role of simulations in project management

education, offering insights for educators to design more effective and engaging pedagogical approaches.

Keywords: Project Management, Sentiment Analysis, Simulations