

Integrating Technology in Physics and Math Instruction: A Pedagogical Approach

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Abstract: *This study examines the integration of technology in college-level physics and math instruction, assessing its impact on learning outcomes and engagement among students. Given the challenge of engaging digitally native learners, innovative pedagogies are crucial. Employing a mixed-methods approach, the research analyzes quantitative and qualitative data to uncover the influence of technology-enhanced instruction. Results demonstrate enhanced student performance after technology integration, reflected in improved test scores and deeper comprehension. Qualitative insights highlight increased student engagement and motivation during technology-infused lessons. Challenges like technical issues and resistance to technology adoption are identified, underscoring the need for robust support. This study contributes to the ongoing discourse on technology's educational role, offering insights for educators and institutions seeking to leverage technology for enriched student learning experiences.*

Keywords: Physics and Math Instruction, Technology

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