

# **Examining the Role of Technology Integration in Advancing Educational Opportunities**

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DEGREE OF MASTER OF SCIENCE IN INFORMATION MANAGEMENT

I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Science.



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#### **DECLARATION**

This is to certify that the work is entirely my own and not of any other person unless explicitly acknowledged (including citation of published and unpublished sources). The work has yet to be submitted in any form to the Sri Lanka Institute of Information Technology or any other institution for assessment for any other purpose.

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#### **ABSTRACT**

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The integration of technology in education has emerged as a transformative force, reshaping traditional teaching and learning paradigms across all levels of schooling. This study examines the relationship between technology integration and specific educational outcomes, including student achievement, engagement, and skill development in higher education settings. The research addresses the gap between theoretical models of technology integration and their practical implementation in educational contexts. Through a comprehensive literature review and analysis of existing research, this study investigates key factors contributing to successful technology integration and their influence on educational outcomes. The research draws upon established theories such as Social Cognitive Theory and the Technology Acceptance Model to provide a theoretical foundation for understanding technology adoption in educational settings. The study's significance lies in its potential to inform evidence-based strategies for leveraging technology to enhance learning experiences and outcomes. It aims to provide insights for policymakers, educators, and educational technology developers to make informed decisions regarding resource allocation, professional development, and the design of educational tools. Key findings highlight the importance of factors such as teacher training, institutional support, and infrastructure in successful technology integration. The research also addresses challenges related to equity and access, emphasizing the need for strategies to overcome the digital divide and provide technologyenhanced learning opportunities to all students. This study contributes to the growing body of knowledge on educational technology and offers practical implications for improving technology integration in higher education. By synthesizing current research and identifying trends and gaps, this work lays the groundwork for future investigations into the rapidly evolving field of educational technology.

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