An integrated model for measuring the impacts of e-learning on students' achievement in developing countries

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Abstract

Information and Communication Technologies have influenced the landscape of education sector by changing the way various education activities are being conducted. From the perspectives of Tanzania, this paper provides an integrated model for measuring the impact of e-learning on students' achievements in universities. A Mixed method research methodology involving survey questionnaires and interviews was employed in the collection of quantitative and qualitative data respectively for building the integrated model. Confirmatory factor analysis was used to evaluate the construct validity and internal reliability. Multiple regressions technique was used to analyse the hypothesised relationships conceptualised in the research model. The model was built and validated using structural equation modeling and Delphi technique respectively. Indicators such as student engagement, student cognitive, performance expectancy, students' control, student satisfaction, continue using, student enjoyment, students' self-esteem, students' confidence on e-learning system have positive significance relationship with students' achievement. The integrated model has the potential to policy makers, universities and other stakeholder to understand the impacts of e-learning after implementation in order to justify the total investment based on that technology. The novelty of this research lies in the extension of the findings in literature with new integrated variables including frequency use and intention to use e-learning.

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