

Context-Aware Adaptive M-Learning: Implicit Indicators of Learning Performance, Perceived Usefulness, and Willingness to Use

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Abstract

Mobile Learning tools suffer from low engagement, and lack of content personalization and adaptation. This empirical study investigates the possible effect on learning performance; perceive usefulness, and willingness to use of undergraduate students when they use an adaptive m-learning tool that personalizes learning material format to the user and device contexts. Assessment was done using implicit measure (dwell time), explicit measure (satisfaction questionnaire), and learning assessment (post test). An experiment was conducted with 31 Egyptian students using the traditional school e-learning system, while half of them were asked to use the context-aware adaptive learning tool. Results suggest that context-based adaptive mobile-learning tools can significantly improved perceived usefulness of learning materials, as well as learners' willing to use the tools. Practical and theoretical implications were suggested.

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