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Towards User Experience in Mobile Learning Applications

Title of the dissertation	From Usability to User Experience in Mobile Learning Applications
Contents of the dissertation	Mobile learning aims to overcome the constraints of traditional educational settings where learning and teaching happen in classrooms behind closed doors. However, utilizing smart devices for educational purposes is associated with several challenges including the usage of a small device with many limitations on display, keypad, and memory. Mobile learning applications also compete with students' time regarding other applications in the used device, including games. Often, m-learning applications tend to require continuous usage; therefore, sustainability plays an important role. A contextual analysis of user's relation to m-learning applications is one way to address the challenges. The research contributes to the exploration, design, and development of a usability and user experience framework for developing m-learning applications (mLUX). The mLUX is a UCD (User-Centred Design) based model which aims to help designers to come up with mobile learning applications that also engage users emotionally. The mLUX framework consists of three parts: identification of the role-players, definition of the context of use, and the processes applied to study these. Case studies were conducted to validate the mLUX framework. The mLUX validation criteria addressed the usability of the resulting m-learning applications; the performance of the applications based on educational components and user experience; and developer evaluations on the applicability of the framework. The results indicate that the applied user-centered design principles and methods ensure the usability of m-learning applications. As a concept, however, usability is not sufficient to address users' emotional engagement to m-learning applications. User experience related factors delightfulness, reliability, satisfaction, and adjustability should be considered as complementing factors when designing, developing, and implementing sustainable and continuous usage for any m-learning application.
Field of the dissertation	Usability engineering, user experience, mobile learning
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