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Information technology — Learning, education and training — Learning environment components for automated contents adaptation

Technologies·de·l'information· — ·Apprentissage,·éducation·et·for mation·--·Composantes d'un milieu propice à l'apprentissage pour l'adaptation des contenus automatisée

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Foreword

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 36, *Information technology for learning, education and training*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Mobile learning is a term used to describe education conducted via digital learning environments where mobile devices are used. It is an evolved form of education that exploits the functionality and convenience provided via computers and the Internet. Mobile learning allows students to participate in classes via various devices regardless of the student's location, free from traditional time constraints while engaged in daily life. Providing content optimized for the student is the most important element of mobile learning, however, there is an exponentially increasing amount of customized educational content, often with the same context available. This content is increasingly created and shared in mobile learning environments that need to support many different device types. Content providers should be aware of various characteristics of user devices and learning environments so that they can provide optimized content. In order to select content meeting the requirements of both the end users' devices and the learning environment, profile data and metadata that describes the characteristics of those devices and learning environments is used.

This document describes a learning environment profile to support the establishment of mobile learning environments and defines a standard set of terms used to express device information and learning environments for mobile learning. It aims to energize a mobile learning market that is tailored to meet individual student's needs by allowing them to receive recommendations on, and use suitable content for, both their devices and learning environments.

This document contains two methods:

— The profile expression method is a technical method of displaying device information language that includes definitions of schema and vocabulary.

— The profile grouping method is a technical method of grouping and displaying terminal information language that includes a group profile example.

The standards herein express basic information needed to function successfully across different devices and environments. These standards will help establish a foundation for successful delivery of mobile learning.