

PERVASIVE E-EDUCATION SUPPORTS LIFE LONG LEARNING: SOME EXAMPLES OF X-MEDIA LEARNING OBJECTS

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In our information society the concept of Life Long Learning (LLL) is not a buzz word but a necessary fact. Pervasive e-Education is a challenging way to assist both Life Long Learning and Continuing Engineering Education (CEE). However, research in those areas must consider the whole educational processes including the new culture of learning which new media brings, consequently, analysis of psychological aspects of educational processes must be considered on three levels: Macro-, meso- and microlevel. This includes questions of effectivity and efficiency (cost-benefit ratio) which can be subsumed under the terminus "added value". Here, the interdisciplinary bridge between Psychology and Informatics is a necessity, due to the fact that not only research, but also development must be carried out together. However, pervasive e-Education requires a totally new media perspective on Learning Objects; instead of viewing handhelds or smart phones as minimized PCs they should be seen from the perspective of the notion of learning objects as active semiotics. However, whichever perspective you take into account, pervasive e-Education requires a complete independence of location – which is more than just being mobile. Text, audio, image, video on Desktop, Tablet PC, TV, iTV, PDA, iPod etc. – each and every medium and terminal has individual advantages and disadvantages. However, every LO must be adjusted to the needs and requirements of the learners: They must correspond to a model of psychological learning and motivation including cognitive style, learning strategy and most of all preliminary knowledge. In this paper, we concentrate on showing how different media – we call these X-Media – works together to assist learning in various LLL- and CEE-scenarios and how a standard Learning Management System (LMS – iXMedia based on Moodle) can deliver the X-Media content.

Curriculum Vitae

Andreas Holzinger: Currently Visiting Professor at Vienna University of Technology, Associate Professor of Information Processing at the Institute of Medical Informatics, Statistics and Documentation, Med. University Graz, Head of HCI&UE Group of the Austrian Computer Society.

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