

Universal Access and Pervasive e-Education: Enabling Life-Long Learning

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Dr.Andreas HOLZINGER

Associate Professor of Information Processing

Institute of Medical Informatics, Statistics & Documentation (IMI)

andreas.holzinger@meduni-graz.at

Abstract:

Universal Access to knowledge within the learning community aspires both to enable access to information within every environment and to meet exactly the needs and demands of the end-users in order to provide clear benefits. Consequently, research and development in the area of pervasive e-Education must take the whole educational process, including the context and culture of learning which new media brings, into consideration. For example: Learning Objects must be adjusted to correspond to a model of psychological learning and motivation, including cognitive style, learning strategies and, most of all, considering the individual preliminary knowledge. However, a great deal of research is necessary in the future to ensure that design and development are based on both the psychological and educational needs of the individual end-users and not simply on what the technology or the programmer is capable of doing. This talk shows some examples of e-Education specially designed for children and for senior citizens and will address both research and development issues in order to bridge Psychology and Computer Science and to provoke contemplation and cooperation. Finally, we must bear in mind, that education cannot be replaced by technology, however, it can be supplemented in a meaningful and efficient way, in order to make e-Education not only useable but useful to all.

Biographical Information:

Andreas Holzinger is currently working at the Medical University Graz, he was Visiting Professor at Vienna University of Technology, Institute for Software Technology and Interactive Systems (IFS) in 2005/06, Visiting Professor at Innsbruck University, Institute for Organization and Learning (IOL) in winter term 2004/05 and Visiting Lecturer at NHC in Berlin, Germany (2002 and 2003). He is Consultant for the Austrian and German Ministry of Science, National expert and IST evaluator in the EC, Industrial Consultant, member of the European Research Consortium in Informatics and Mathematics (ERCIM). He is elected chair of the WG HCI&UE of the Austrian Computer Society and founder and leader of the SIG "HCI4EDU" in order to bring together Psychologists, Educationalists and Engineers. Holzinger started his career as apprentice in IT in 1978, finishing as Radio- and Television Technician (1981); Foreman in Industrial Electronics (1983); College of Further Education Bournemouth (UK) with honors in Computer Science (1985/86); After extensive industrial experience, during which he attended evening classes, he was awarded Chartered Engineer for Communications (CEng, 1990); Diploma as Lecturer for Adult Education (DipEd, 1992); Studies of Communication Engineering (BEng, 1993), Physics and Psychology (MSc, 1995) as well as Media Pedagogy and Sociology (MPh, 1996) at Graz University of Technology and Graz University. Doctoral promotion with summa cum laude in Cognitive Science (PhD, 1997); Venia Docendi (Univ.-Doz., Associate Professor, 2003) in Applied Information Processing. To date 148 publications and 99 lectures and talks. More Information: www.basiswissen-multimedia.at (click on Holzinger Home).