

## Introduction: Future trends and directions in Learning, Technology and Standards

The future of learning, and the impact of technology and standards on learning and teaching have been hotly debated issues. Some envision this all as leading to a day when every person on the planet is able to experience personalized learning at any time. This would take the form of adaptive "meLearning" where learning material would be selected, modified and delivered using sophisticated metadata and content infrastructures. This vision is based on emerging solutions from the worlds of information technology, nanotechnology and biotechnology, combined with the latest developments in cognitive and learning sciences. Others see this grand, technology-intensive vision as being neither possible nor desirable: What is questionable is not only the power of the relevant science and technology; the very idea of a universal technical solution for issues as inextricably local as education --and as complex as globalization and poverty-- is arguably and perhaps fatally out of character for these problems. Of course, there are many middle or mediating positions possible in any thoughtful consideration of the future of learning. Such understandings, for example, would view standards and technology as being significant for education but also as being uncertain in their potential impact on learning generally.

This panel will offer an interactive exploration of perspectives of this kind. The panel consists of a number of individuals who are leaders in the areas of learning technologies and in e-learning standards, and who will discuss their personal perspectives on these issues. No single solution will be offered; but instead, attendees will be in a much better position to determine their directions and plans as a result of hearing and discussing the thoughtful alternatives presented.

The panelists will include:

**xxx** is Canada Research Chair in Philosophy of Technology in the School of Communication, Simon Fraser University. He has also taught at for many years in the Philosophy Department at San Diego State University, and at Duke University, the State University of New York at Buffalo, the Universities of California, San Diego and Irvine, the Sorbonne, the University of Paris -Dauphine, the Ecole des Hautes Etudes en Sciences Sociales, and the University of Tokyo. His most recent books include *Modernity and Technology* (MIT Press, 2003), and *Community in the Digital Age* (Rowman and Littlefield, 2004), *Heidegger and Marcuse: The Catastrophe and Redemption of History* (Routledge, 2005).

**yyy** has been developing and studying Web technologies in educational contexts since 1995. yyy is currently Director of the CanCore Learning Object Metadata Initiative, a project whose technical recommendations have been adopted internationally. yyy is also a Postdoctoral fellow at the School of Communication at Simon Fraser University. In addition to authoring dozens of articles and reports on the politics and practicalities e-learning standardization and technologies, yyy has produced several editions of books on WebCT and metadata implementation.

**zzz** is the Strategic Futurist, and Director of Worldwide Learning Strategies for Autodesk Inc. He is Past President and Strategic Advisor to the Board of the Computer Education Management Association and Chair of the IEEE Learning Technology Standards Committee for Learning Object Metadata. At Autodesk, zzz is responsible for increasing human performance among employees, partners & customers) using what he refers to as Learnativity. As President & Co-founder of The Learnativity Alliance, zzz works at the intersection of learning, productivity, and creativity to actively leverage inflection points in the Learning Economy for win-win-win solutions.

**aaa** is Senior researcher in the Educational Technology Unit at the University of Turku. He is also head of the Finnish delegation to SC36 and participating in work done by CEN/ISSS WS-LT and IEEE LTSC. aaa is an expert in educational technology, especially user interface design, metadata and higher education institutions' data exchange specifications.

**Panel Organization:**

The panel will consist of four presenters, each presenting prepared presentations taking only about 5-7 minutes each. These brief presentations will be delivered at the beginning of the session. The focus in the subsequent discussion will be on specific and practical applications and designs of e-learning technologies and standards --following from the general principals and visions initially outlined by each presenter. The session is intended to be lively, constructive and highly interactive.