

Learning in Micromedia Environments? (Introductory Note)

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Like last year, *Microlearning2006* has been a quite an unusual event again: A conference not building on an existing institutional network or a long established discourse, bringing together people from very different fields that rarely have contact: Software developers and academic educators, researchers representatives from big corporations (Intel, Nokia, IBM) and small innovative start-ups.

In this case actually the Common Denominator is a specific subject: The new micro-content-based environments that have been emerging in the last 5, 6 years are now calling for new ways of learning and acquiring information. This is both true for the PC/WWW-platform system and, increasingly, for mobile devices and especially mobile phones. Even now, in a global perspective more people are already accessing the Internet with mobile phones than with PCs. In the near future this will sharply accelerate the current trend towards micromedia, microcontent and microlearning.

We have to learn to live in a new digital microcosm. Work, knowledge, communications ... all is falling into small digital fragments, loosely joined and permanently rearranging to form a multitude of new patterns, tasks and threads. And this is true not only for the "digital natives" and the early adopters, but also for the digital mainstream relying on e-mails, Google and mobile telephony, and increasingly even for the globally and socially underprivileged people who in the age of the desktop PC would have failed to jump over the Digital Divide, but now are embracing the mobile phone as a powerful tool to access networked data.

“Microcontent” stands for self-contained and “meme-sized chunks” of data that are individually addressable and processable both by computers and by humans¹. Initially, this trend has not even been linked to the use of handheld devices with micro-screens, though these became widely used exactly at the same time (in 2000/2001) when blogs and wikis laid the ground for the rapidly evolving microcontent infrastructure of today. The effects on learning practices and learning theory affect the new “Web 2.0” applications and practices “eLearning 2.0”² as well as new mobile data services (“m-learning”)³.

Microlearning is not something that has still to be invented. At an informal level, it is already being practiced by knowledge workers and ‘life long learners’ that have no choice but to try and get the information they need out of the World ‘Wild’ Web. In such a situation, traditional macro-sized eLearning has not only often proved to be too expensive, too static and too ineffective. It is also a matter of the ‘media experience’: It just doesn’t feel right to people used to the information snippets of Google and the e-mail inbox.

Now it is the challenge for educators and system designers to systematically develop new patterns and strategies for microlearning. This makes it necessary to understand the evolving new kinds of learning experiences, and to further enhance and enable them with the right tools, applications and contents.

The development has just about started, and we will see a lot of microlearning in the years to come, no matter whether is called by this name or not. This conference series

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- 1 For details on the definition of “microcontent” see: Lindner, M. (2006), Use These Tools, Your Mind Will Follow. Learning in Immersive Micromedia and Microknowledge Environments. ALT-C 2006 13th International Conference Research Proceedings, ALT Oxford (forthcoming).
Leene, A. (2005), Microcontent is Everywhere. Retrieved February 16, 2006 from <http://www.sivas.com/microcontent/microlearning2005/microlearning.pdf>; In this Proceedings volume, see the paper of Arnaud Leene on “The MicroWeb”.
 - 2 Downes, S. (2005), eLearning 2.0. eLearn Magazine, Online 10/17/2005. Retrieved 06/26/2006 from <http://elearnmag.org/subpage.cfm?section=articles&article=29-1>
 - 3 Alexander, B. (2006), Web 2.0: A New Wave of Innovation for Teaching and Learning? *Educause Review*, 41, 2 (March/April 2006), 32–44. In this Proceedings volume, see the paper of Fiedler/Kieslinger and the short papers of Molnar and Krieg.
 - 3 Alexander, Bryan (2004b), Going Nomadic: Mobile Learning in Higher Education, *Educause Review* September/October 2004, 39, 5, 28–35
Alexander (2004a), M-Learning: Emergent Pedagogical and Campus Issues in the Mobile Learning Environment, *EDUCAUSE Center for Applied Research Bulletin*, vol. 2004, no. 16 (August 2004); See also in this Proceedings volume the papers of Miettunen/Mattila, Gugerbauer, Frankl, Ketterl u.a.

is not about creating buzzwords. It is about a fundamental change in the underlying structure of our digital environment, and its possible and necessary consequences.

At *Microlearning2006* invited speakers gave an overview of the the new microcontent ecologies and “InfoClouds” (Thomas Vander Wal, Arnaud Leene), of new mobile technologies for making information “ubiquitous” (Roger Fischer, Simo Hoikka), of new ways of learning (Stephen Downes, David Smith, Michael Kerres) and new types of knowledge (George Siemens),

And as you can see in this proceedings volume, our call for papers has been answered with a lot of significant, high-quality contributions, with a scope of subjects from practical to theoretical approaches on innovative eLearning and m-learning, from papers approaching the subject from a humanities perspective to papers discussing the usage of Semantic Web technologies fro microlearning and microinformation infrastructures.