

Microlearning: A New Pedagogical Challenge (Introductory Note)

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The papers in this volume emerge from the conference *Microlearning2005 :: Learning & Working in New Media Environments*, held on June 23 - 24, 2005 in Innsbruck (Austria). This first international conference on microlearning was organized by the Research Studio eLearning Environments¹ in cooperation with the Institute of Educational Sciences at the University of Innsbruck. The conference aimed at creating a transdisciplinary, but clearly focused forum for exciting discussions between scholars and experts from quite different fields, like didactics and learning technology, academia and corporate training, instruction design, semantic metaweb technologies and studies in new media cultures. Academic perspectives on learning and pedagogy met market-oriented R&D approaches, heading for new concepts and applications. Both, contributors and participants accepted the invitation to build bridges, to bring forward cross-over orientations and to promote collaborations beyond common borders.²

So, what is it all about? What do “microlearning” and “microcontent” mean?

Looking at some spontaneous appraisals, there are optimistic and sceptical voices. When I spoke to some colleagues and e-learning experts last year, one said: “It’s too late for microlearning, you should think of something new – we have had microteaching since the late 60ies.” For those, who are not familiar with concepts of “microteaching” – it is a training concept that can be applied in various stages in the professional development of teachers. Basically, it means teaching a small group of peers for a relatively short period of 5 to 15 minutes and then giving and taking feedback on the performances. Microlearning in this context means the microteaching experience as a learning experience and a very effective method of learning for students, but also the counterpart process on the side of the pupils. Of course, there are more precise definitions and you can find many books on teacher training concepts in terms of microteaching. In my view, we can learn a lot from the experiences related to this field, but it would be a big mistake to reduce the question of microlearning to the questions of formal education, teacher training or pedagogical discourse horizons.

Another colleague said: “It’s too late for a conference of this format because economy has not only gained the precedence over politics but also over education and research. The only areas that are still researched and taught are those that can be used commercially. As a consequence, a

¹ The Research Studio eLearning Environments is one of currently five studios of the Research Studios Austria. Its projects are supported by the Federal Ministry of Economy and Employment (Austria) and also the Tyrolean Future Foundation (<http://ele.researchstudio.at>). The Research Studios Austria are a sub-division of ARC Seibersdorf research GmbH, Austria’s largest research institution for industrial research and development (<http://www.researchstudio.at>).

² For further information and an online version of the proceedings see <http://www.microlearning.org>.

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conference like this would have to be aimed directly and strictly at economy and the current market in order to be successful.” And a third one thought that it would be too early, because the new forms of microlearning are just evolving and we would have to focus on a few very special learning cultures in order to say something serious about the topic.

Well, in whatever way one sees the thesis of the commercialization of knowledge and the maybe pre-paradigmatic situation: I believe that the present moment is most appropriate for the conference and the questions of microlearning, microcontent and microknowledge.

It's not a well designed paradigm we have as a starting point – it's rather bits and pieces from different discourses and practices we are starting from. Therefore, the conference has a semi-structured and hopefully exhilarating character. We are going to explore the field, figure out crucial topics, present work in progress and sound out the situation and perspectives of learning and living in mediated environments. The discourse backgrounds may refer to

- the process of medialization, mediation, transformation and order of knowledge (especially questions of fragmentation of knowledge, bricolage and micro-aspects of meaning and sensemaking)
- the relation of changing media and changing learning cultures
- the relation of new media and new markets
- challenges in the context of Lifelong Learning and e-inclusion policy
- anthropological dimensions (homo medialis) and the epistemological question of a “mediatic turn” (R. Margreiter) [1]
- and to other aspects and related dimensions.

Let's have a look at the microlearning discourse as it is represented currently. If you start a search, you'll find quite a lot of concepts and versions of microlearning. Here are some selected examples:

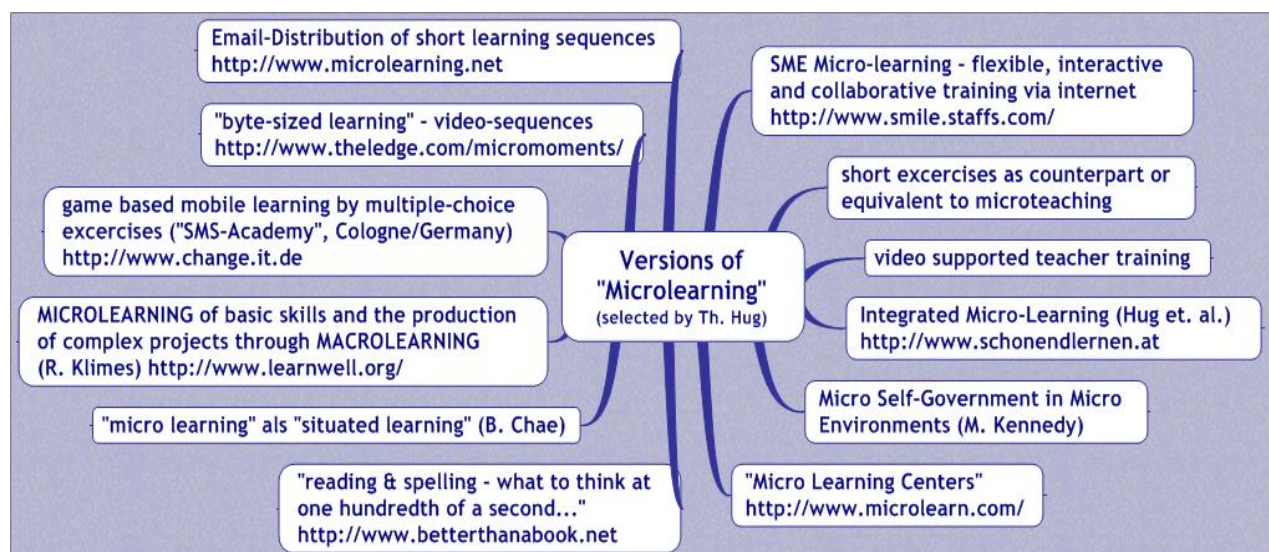


Fig. 1: Concepts and Versions of Microlearning – Mindmap

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There is not one precise definition which covers all the different concepts. In my view there are versions which are brought forth by different interpretations of particular dimensions such as:

- **Time:** relatively short effort, operating expense, degree of time consumption, measurable time, subjective time, etc.
- **Content:** small or very small units, narrow topics, rather simplex issues, etc.
- **Curriculum:** part of curricular setting, parts of modules, elements of informal learning, etc.
- **Form:** fragments, facets, episodes, „knowledge nuggets“, skill elements, etc.
- **Process:** separate, concomitant or actual, situated or integrated activities, iterative method, attention management, awareness (getting into or being in a process), etc.
- **Mediality:** face-to-face, mono-media vs. multi-media, (inter-)mediated, information objects or learning objects, symbolic value, cultural capital, etc.
- **Learning type:** repetitive, activist, reflective, pragmatist, conceptionalist, constructivist, connectivist, behaviourist, learning by example, task or exercise, goal- or problem-oriented, „along the way“, action learning, classroom learning, corporate learning, conscious vs. unconscious, etc.

The various versions of microlearning can be analyzed by looking at the explicit or implicit comprehension of these dimensions and their interplay. This preliminary framework makes clear that the general term microlearning is used as a metaphor referring to a set of models of learning.

In addition to that, all these versions correspond with certain versions of meso-learning and macro-learning. For example, if single letters are part of the micro level, words and sentences may refer to the meso level and linguistic communication to the macro level. If the micro level is characterized by vocables and phrases, situations and episodes may refer to the meso level and socio-cultural specifics and complex semantics to the macro level.

It is similar with the term ‘microcontent’: It can refer, for example, to small, granular pieces of content, to simplex semantic units or to small-sized semiotic entities.

What are the challenges for pedagogy and educational sciences?

Let me give you a few examples:

- Developing a generational awareness with regard to new media cultures, technologies, and forms of knowledge and learning
- Investigating the interplay of symbolic and techno-material aspects of media in processes of learning, education and socialization
- Developing concepts and methods for the future of learning by integrating formal, non-formal and informal aspects and micro-, meso- and macro-levels
- Creating learning spaces in relation to cultural, historical, commercial, technological, networked and ludic spaces

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- Rethinking knowledge and learning in the context of mobile devices, new global public spheres (I. Volkmer) [2] and metaweb developments (N. Spivack) [3].

Needless to say, that this selection of challenges is strongly related to societal and technological dynamics and that you will encounter more challenges when reading the papers in this volume.

Digital technologies and media institutions have transformed knowledge structures as well as processes of knowledge distribution and knowledge acquisition. In this situation, we have to rethink classical models of distributing learning and to investigate new learning spaces. Concepts of microlearning, microcontent and microknowledge offer flexible and dynamic alternatives which are needed in view of medial, societal and environmental changes. The following articles present a wide range of theoretical and practical options focussing on learning theories for the digital age, pedagogical learning and teaching models, approaches to learning with microcontent, frameworks for small learning groups, mobile learning environments, questions of interaction design, web-based metadata repositories, and on rather new developments such as RSS feeds, Blogs and Podcasts.

Obviously, proceedings like these and also the conference on microlearning are products of many people working together. My sincere thanks go to

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References

[1] Cf. Margreiter, Reinhard (1999): Realität und Medialität. Zur Philosophie des 'Medial Turn'. In: Medien Journal. Zeitschrift für Kommunikationskultur, Jg. 23, H. 1, pp. 9 – 18.

[2] Cf. Volkmer, Ingrid (2003): The Global Network Society and the Global Public Sphere. In: Development, Vol. 46; Part 1, pp. 9-16.

[3] Cf.

http://novaspivack.typepad.com/nova_spivacks_weblog/the_metaweb/index.html;
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