


Integrated Microlearning – Concepts, Cases, and Scenarios




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Outline

- Introduction – Towards a Mobile Society?
- Mediality, Mobility, and Micro-Topics
- Defining Microlearning
- Integrated Microlearning –
Conceptual Aspects, Cases, and Scenarios
- Conclusions

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Introduction

- „societies tbd“ - widely discussed trends, society-descriptions and diagnoses of time
- mobile society – just another description in terms of social theory?
- boom conditions for media and educational recession?
- need of thinking and bringing together cultural, educational, social, organizational and technological dimensions
- need of “moving” academic cultures in view of mobile communications and “moving cultures” (L. Caronia 2008)



Mediality, Mobility, and Micro-Topics

- media as „add-ons“ or the „Mediation of Everything“?

“No part of the world, no human activity, is untouched by the new media. Societies worldwide are being reshaped, for better or for worse, by changes in the global media and information environment.” L. Lievrouw & S. Livingstone, *Major Works in New Media* (forthcoming)
- mediation, medialization, and mediality

“The evolution of the total media system of modern media-culture societies from writing to the Internet has fundamentally changed our relation to the world and our modes of communication. This change can be described as [a] transition from communicativity to mediality.” (S.J. Schmidt 2008, p. 95)
- mobility and mobile communication is not just a matter of technology

→ material, cognitive, emotional, social mobility – anthropological dimensions
- examples for micro-topics:

microteaching, microcontent, micromedia, microeconomy, microworld, microcredit

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Defining Microlearning

- deals with relatively small learning units and short-term learning activities
- relational concept depending on frames and domains of reference
- metaphorical characteristics
 - a variety of learning concepts and models
 - learning environments, arrangements, settings, design patterns, didactical orientations, models and concepts
- e-learning 1.x, e-learning 2.7, m-learning 0.9, m-learning 1.4, etc. also: distributed education, networked learning, distance learning
- microlearning as a new paradigmatic perspective on learning processes in mediated environments on micro levels ?

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Just Bits & Pieces Loosely Joined?

- critical voices (examples)
 - technologically driven developments
 - increasing digital divide dynamics
 - trivialization of knowledge processes
 - „blackboardization“
 - "Flickering Minds" (Oppenheimer 2003)
 - „edutainment“
 - lack of media literacy and promotion of „computer literacy“ or „digital fluency“
 - ...
- Microlearning: Old wine in new pipes?
 "Learning by small units in small steps has a tradition, which reaches beyond the documented development of civilization." (Hierdeis 2007, p. 48)

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Flexible Perspectives on Microlearning

- ...in memoriam Nelson Goodman: There are many microlearning concepts, if any!
- towards a relational concept of microlearning, mesolearning and macrolearning

| | Example 1 <i>Linguistics</i> | Example 2 <i>Course structure</i> | Example 3 <i>Sociology</i> |
|-------------|---|--------------------------------------|--|
| micro level | single letters | learning objects | individualized learning |
| meso level | words, letter-figure combinations, sentences | topics, lessons | group learning or organizational learning |
| macro level | texts, conversation, linguistic communication | courses, curricular structures | learning of generations, learning of societies |

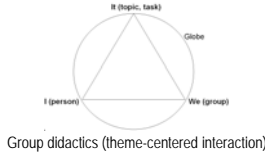
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As to Microlearning Didactics ...


- diversity of microlearning didactics according to various traditions
 - didactical models (German-speaking traditions)
 - structured and discovery approaches in instructional design
- topography of microlearning: further ways of conceptualizing, analyzing and designing didactics referring to
 - aggregation models
 - conglomeration models
 - emergence models
 - single-/multiple-loop designs
 - framing concepts




Group didactics (theme-centered interaction)



A Typical Instructional Design Model



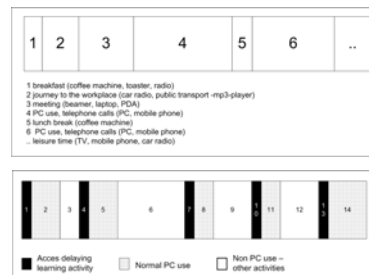


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Integrated Microlearning I

- development of the Austrian Research Centers (Studio eLearning Environments) in cooperation with the Institute of Educational Sciences at the University of Innsbruck
- search of alternatives to the well known „one-way-streets“ in e-education
 - LMS filled with PDF- and PPT-collections
 - high drop-out-rates
 - „Shelfware“
 - old pedagogy and new media
 - e-Teaching / e-Learning as „foreign elements“ in workflow or lifestream
 - cultural lags and competence gaps
- characteristics:
 - a concept of access delays
 - „push-approach“




Integrated Microlearning II

- further developments and formation of a limited company (www.yocomo.at)
- creating a fully scalable mobile application (J2ME Midlet) following principles of simplicity
- ASP infrastructure including
 - a webbased content management system
 - a billing solution
 - a distribution service and
 - a training solution for mobile devices
- easy to install by sending a SMS to +43 680 200 87 87 and entering your code
- depending on the storage of your device multiple courses can be installed




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mTrainer - A Mobile Training Solution


- the webbased CMS is feeded with excel files
- instructions and vouchers are available
- after installation of the application on the mobile device data are processed by a special learning-algorithm supporting the learning process (slip box model).



Frage

Sehr erfreut!


Antwort Optionen



Frage Antwort

¡Encantado/a!

¡Correcto! ¡Falso!



Frage

Zurück


Statistik

Arbeitsauftrag

Informationen

Beenden

Wählen




Statistik der aktuell aktiven Kurse:

Programmanfrage: 4

Beantwortete Fragen: 3

davon falsch: 1


Zurück zum Lernen



- course statistics are available for the user on a running basis


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Integrated Microlearning – Use Cases

- International Language Center at the University of Innsbruck (<http://www.uibk.ac.at/isi/>)
 - Spanish language course (basic level I)
 - a group with 18 learners, 16 using the mTrainer
 - installation of the tool was easy for 12 of them, the others needed help (provider configuration, very old mobile phones)
 - all of the users thought it a very useful tool and the costs adequate
 - some used it often, others just once or twice a week



- Wifi Vorarlberg – A Section of the Austrian Federal Economic Chamber acting as an institution for advanced vocational training (<http://www.vlbg.wifi.at/>)
 - 200 users have just started using the mTrainer
 - subject: law for entrepreneurs to be

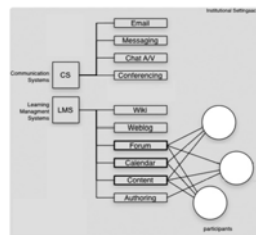


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Scenarios in Institutional and in Personal Settings

- institutional and corporate applications, centralized systems, constrained and standardized forms of communication and learning
- personal learning environments, individualized sets of connections and socio-technical developments, learners control the tools and services and integrate them into their personal workflows



"Institutional Setting"
(cf. Fiedler & Kieslinger, 2006, p. 80)



"Individual Setting"
(cf. Fiedler & Kieslinger, 2006, p. 81)



Education based on Principles of Bricolage

| | Education as the competence of plurality | Education as reflective ability to learn | Education as "antagonistic education" |
|---------------------------|--|---|--|
| Explanation | transversal competence, qualification to sensibly deal with and intervene in plural situations | qualification to reflect processes of learning from several perspectives | overcoming discursive constraints, abdication of harmonising ideals |
| Thematic relevance | dealing with lifeworlds as mediated worlds, metaphorical competence | (re-)organisation of learning processes, media, affect and attention management | reference modalities, modularisation and modalization of the experience of reality |
| therefore | Education as media education – education with media instead of against them Education in learning cultures of deliberation Education as the ability and qualification to manage differences | | |



Conclusions

- motto „making use of the use of media for educational purposes“
- allow for episodic structures of learning processes
- sound out limits of utilization of game based approaches and playful elements in the context of intentional didactical purposes and political goals in terms of democracy
- fruitful perspectives of bridging popular culture and school environment, lifeworld and technology, informal and formal learning
- Is there a “tertium datur” in view of the opposition of reliable long-term knowledge and harmonious ideals of education vs. technologically driven “digital fluency” or the production of “Flickering Minds” (Oppenheimer 2003)?
- education as bricolage



Thank you!

P.S.: Want to learn more?



Weblink: www.yocomo.at

Hug, Theo (Ed.): *Didactics of Microlearning*.
Münster et al: Waxmann, 2007