



# Didactics of Microlearning – Mobile Examples

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#### **Overview**

- Points of Departure
- Paradoxes and Ambivalences
- Microlearning Conceptual and Didactical Aspects
- Mobile Examples "Flocabulary", Vocabulary, History and the "Dr Who Principle"
- Conclusion

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## **Points of Departure**

- Common trends such as
  - increasing technological investments
  - digital divide policy
  - fragmentation of knowledge ("Instant Knowledge"), formats, audiences, life ...



- Variety of Society-Descriptions Media Generations
- Mediatic Turn ?





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#### **Paradoxes and Ambivalences**

- Europeanization and Internationalization of education reform resistency
- Economic performance justice of chances
- Commercialization of knowledge knowledge obligation to the community
- Trivialization of knowledge new forms, structures and modalities
- Edutainment Media Education and Media Literacy
- Narration and Playful Identities
   (J. Raessens et al, R. Leschke et al)

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#### **Microlearning**

- deals with relatively small learning units and short-term learning activities
- relational concept depending on frames and domains of reference
- metaphorical characteristics it works with
  - a variety of learning concepts and models
  - learning environments, arrangements, settings, design patterns, didactical orientations, models and concepts
- A new paradigmatic perspective on learning processes in mediated environments on micro levels?

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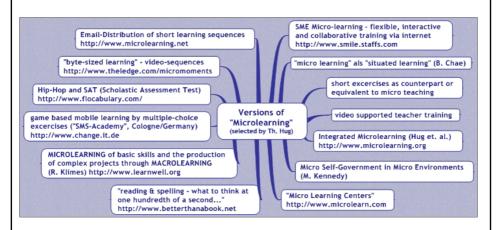
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## **Concepts and Versions of Microlearning**



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#### Mobile Examples 1 - "Flocabulary"

Bringing hip-hop music into high school classrooms to teach SAT vocabulary and history (M. Payne et al)

- Rhythm and mnemonic rhymes
- URL: www.flocabulary.com









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# Mobile Examples 2 – "Knowledge Pulse™" (KP)

- Integrating small learning-activities in everyday routines
- Everyday Use of Media: Using Gaps and Breaks in Workflows and Multitasking



Fig. 1: Daily routines - Schematically

A Concept of Access Delays

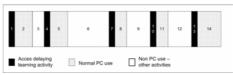


Figure 2: PC-workplace as example for Integrated Microlearning

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#### **Characteristics**

"push-approach"







- Concomitant learning
- open, flexible and modular ... but also: Learning Management
- Embedded in workflow and daily life ... but: Knowledge Architecture
- Short learning sequences are initiated according to the use of media and the client settings
- Small units are delivered automatically ("push")
- So far: The next step is put forward by a Microstep Manager<sup>®</sup> (slip box system, file-card box)

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# Mobile Micro-Learning with the KP



So far, the information (false or right answers) is processed by a special learning-algorithm supporting the learning process (slip box model).

And from now on?

How can we make use of narrations and storytelling for educational purposes in the context of micro-learning arrangements?

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# Narration, Storytelling and Learning Options in the context of micro-learning arrangements

- Concepts of storytelling for didactical purposes are widespread on the level of primary schools, partly in second language learning as well (L2 learning).
- Narrative Forms of Psychotherapy (e.g. M. White / D. Epston 1993; K. P. Grossmann 2003) and Elements of Hypno-Therapy (M. Erickson) and Neuro-Linguistic Programming (NLP) (R. Bandler / J. Grinder 1979)
- New forms (e.g. online collaborative storytelling platforms / blogs, narration and intermediality)
- Exploring options in the context of micro-learning arrangements examples:
  - Level 1: cartoon, caricature, elements of fabula (scenes, events, key statements), "one picture story" (single screens)
  - Level 2: sequences, arranged elements of fabula, "nested loops", comic strips (successions of pictures, text-image combinations)
  - Level 3: storyline concept (J. Creswell 1997), simulation globale (F. Debyser / J.-M. Caré 1984), (re-)framing and (re-)patterning strategies, postmodern versions (e.g. rhizomatic), narration & discourse concept (S.J. Schmidt 2004)

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#### Mobile Examples 3 – Episodic story-telling with Albert

- An example of game-playing, narrative and interactive learning content
- Technology: streaming video, podcasting and blogging technologies
- Gaming dimension: conversation with Albert, questions, challenges
- Dr Who Principle (K. Newman & R. Rigg 2007) "learning content should, where appropriate and feasible, be designed as episodic content and delivered at appropriate time intervals" (ibd.)
- URL: www.bikingbear.com



Website for Albert in the Land of the Vikings





#### Mobile Examples 4 - "Frequency 1550"

- Waag Society, a knowledge institute in Amsterdam it "wishes to make a contribution to the design of the information society. In this it doesn't let itself be lead by technology but instead looks at the possibilities of people, their creativity and culture. The interplay of technology and culture is the driving force of all Waag Society's activities" (www.waag.org)
- "Frequency 1550", a pilot (2005) together with the Amsterdam Montessori School
- mobile game experience which "fits with the traditional curriculum" (ibd.).
- Learning results (J. Raessens, 2007)
- URL: http://freg.1550.waag.org



Frequency 1550, February 10 2005

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## **Didactics of Microlearning - Conclusion**

- Making use of the use of media for educational purposes
- Limits of utilization of game-based approaches, playful identities and ludic cultures?
- Topography of micro-structures and its relation to media dynamics
- Descriptions of new forms of managing didactical complexity and contingency
- The narration of microlearning has no end in itself it offers new ways
  of bridging informal and (non-)formal learning in a mediated world