ISNM INTERNATIONAL SCHOOL OF NEW MEDIA
at the University of Lübeck

The Web 2.0 way of learning with technologies

::Reading No.2::

By

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Winter 2007:: Social Software's & Web 2.0

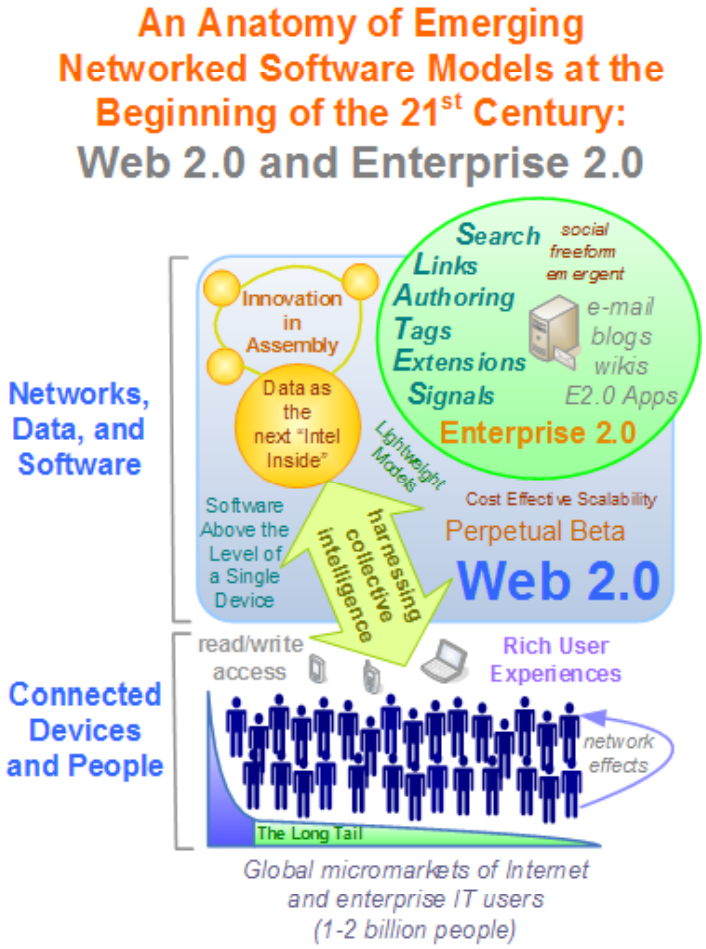
Key elements

- The background of Web 2.0
- The implications for knowledge transfer.
- Web 2.0 in eLearning contexts by short scenarios.

Web 2.0 by design pattern

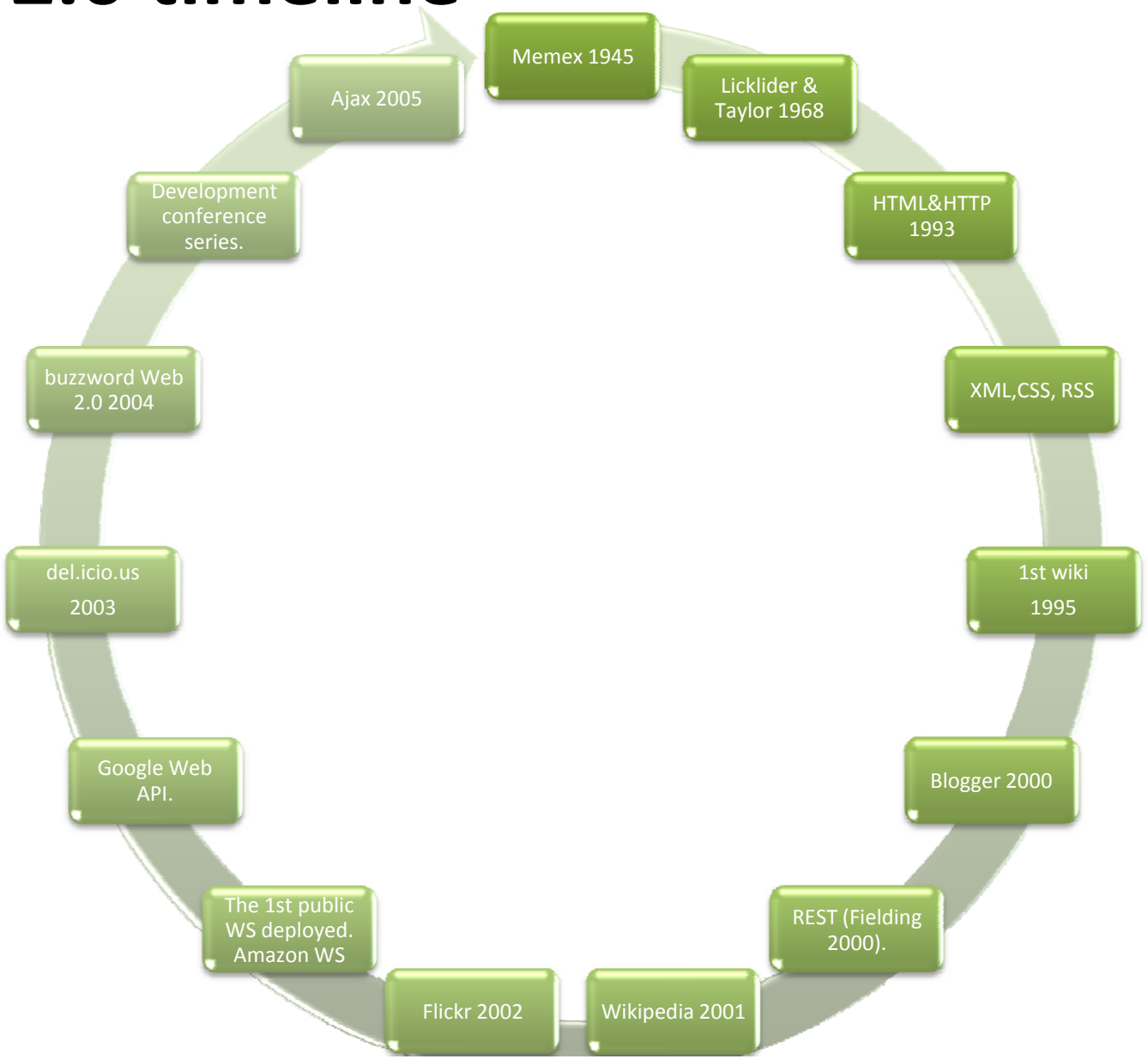
O'Reilly in 2006:

- Long tail.
- Data is the Next Intel Inside: data (Less is more + Simplicity and efficiency)> rich interface.
- Users Add Value: peer production (specifically) and co-creation (more generally)
- Network Effects by Default: reaching a critical mass of users.
- Rights Reserved: legal remixability, transformation of contents, and microcontent .
- Perpetual Beta.
- Cooperate, Don't Control: Users expect to be treated with respect, and being open outside.
- Software Above the Level of a Single Device.

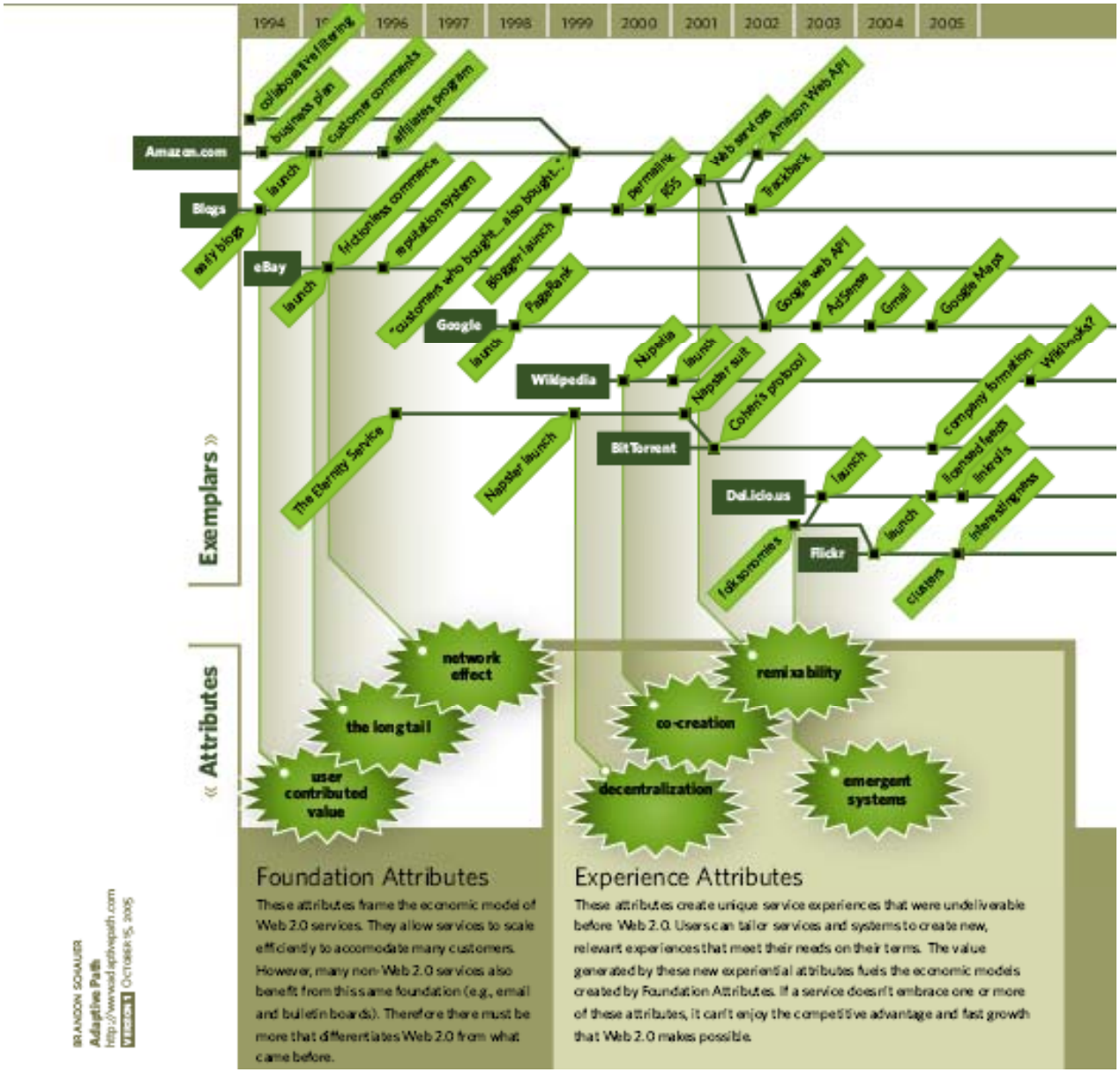


Source: http://blogs.zdnet.com/Hinchcliffe/images/web20matures.png

Web 2.0 timeline



Web 2.0 timeline



Source: http://www.techuncut.com/2006/02/web-20-timeline/

Web 2.0 demo

Microsoft Live Labs™

Microsoft Live Labs Photosynth™

Source: http://labs.live.com/photosynth/view.html?collection=sanmarco/index1.sxs

Social software&Web 2.0 applications

- *AJAX* (Asynchronous JavaScript and XML) is the most prominent technology.
- AJAX communication is done using XML.
- Communication relies on the *REST* model.
- Syndication and remixing of content is usually accomplished by using feeds offered in Atom (XML based) or RSS formats (based on RDF).

AJAX example

Source: http://us.ajax13.com/en/

Web 2.0 and the Semantic Web

"The Web isn't about what you can do with computers. It's people and, yes, they are connected by computers. But computer science, as the study of what happens in a computer, doesn't tell you about what happens on the Web."

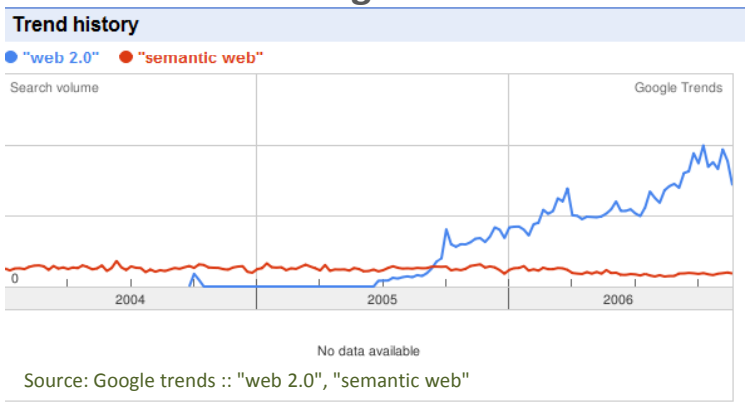
Tim Berners-Lee, NY Times, Nov 2, 2006

"Web 2.0 Is Much More About A Change In People and Society Than Technology"

Dion Hinchcliffe, tech blogger

"The central principle behind the success of the giants born in the Web 1.0 era who have survived to lead the Web 2.0 era appears to be this, that they have embraced the power of the web to **harness collective intelligence**"

Tim O'Reilly, 2006, on Web 2.0



Source: Google trends :: "web 2.0", "semantic web"

Source: http://www.ibiblio.org/pioneers/images/pics/bernerslee.gif
http://web2.wsj2.com/
http://www.w3.org/2004/Talks/w3c10-WebOfMeaning/TimOReilly.jpg

Web 2.0 and the Semantic Web

"Well, Web 2.0 fans, builders, and advocates need more love from SW fans, builders, and advocates. These two worlds really belong together."

Kendall Clark, the Managing Editor of XML.com

"The Web is real. The Semantic Web is an idea and Web 2.0 is a marketing concept used by venture capitalists and conference promoters to try to call another bubble into existence. The hype is treating "Web 2.0" as more and more real, and the hypesters are getting further and further out on a limb. "

Dave Winer responded to Kendall's post

Source: http://www.w3.org/TR/2005/WD-rdf-sparql-protocol-20050914/
http://en.wikipedia.org/wiki/Dave_Winer

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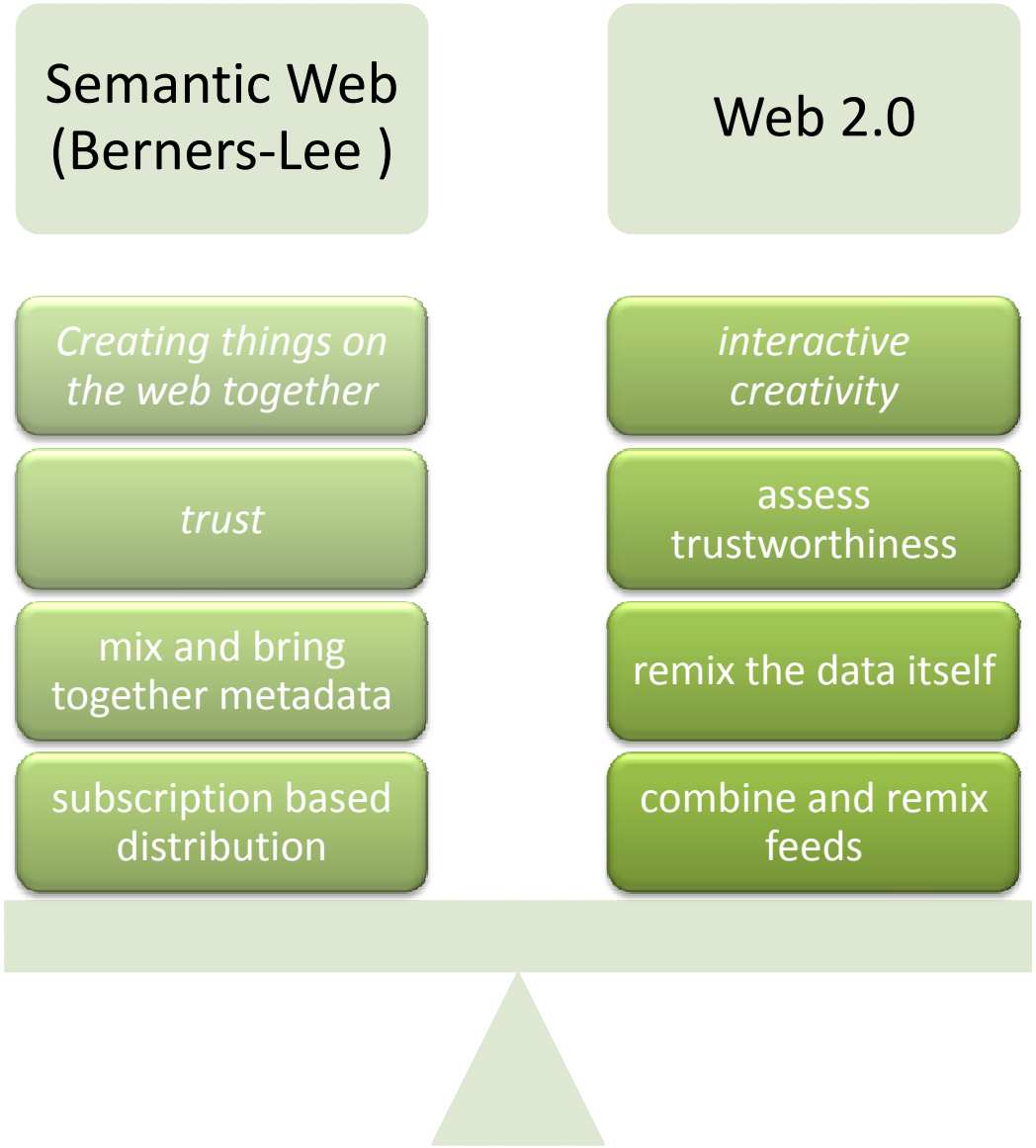
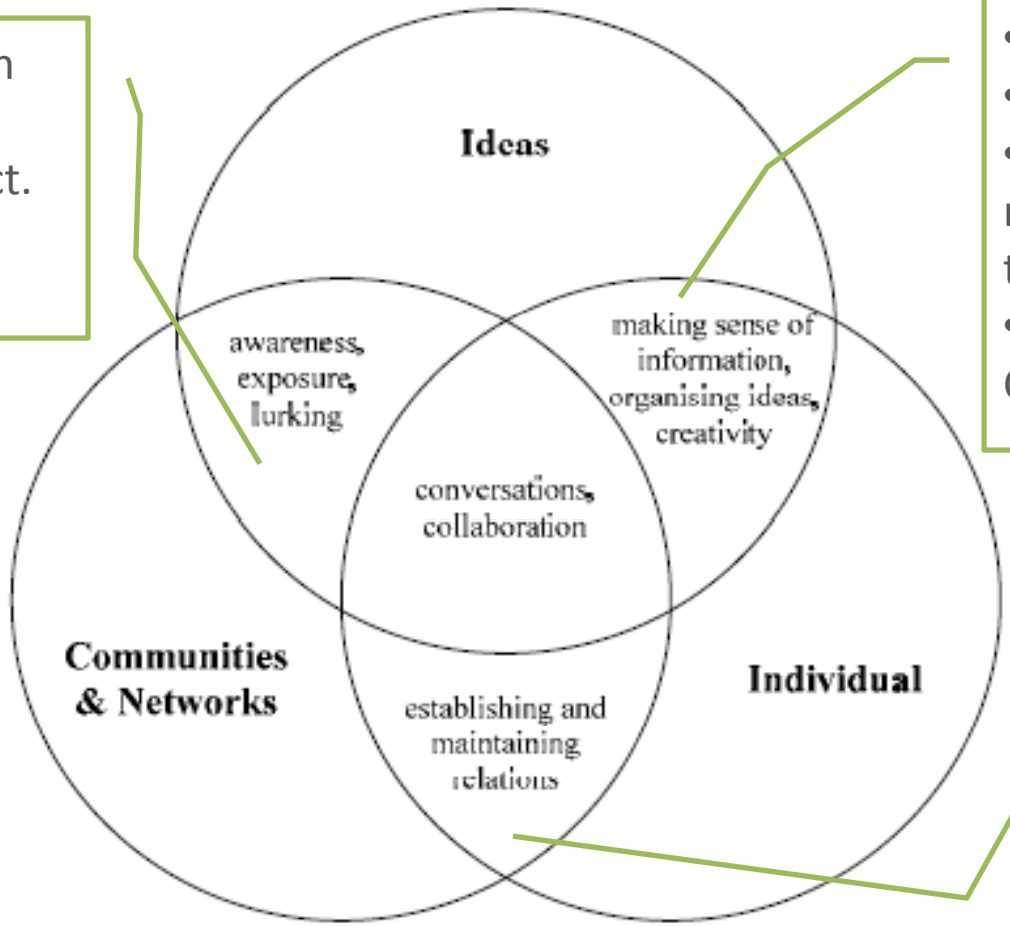


Web 2.0 for knowledge transfer

Figure 1 Framework for knowledge work analysis according to Efimova (2004)

Emergence arises in two forms:
•The creative aspect.
•Establishment of common ideas.



•Simplicity
•Convenient
•Remixing, microcontent, and transformation
•Creative Commons licenses

•social software
•Network effects

Web 2.0 in an eLearning scenario

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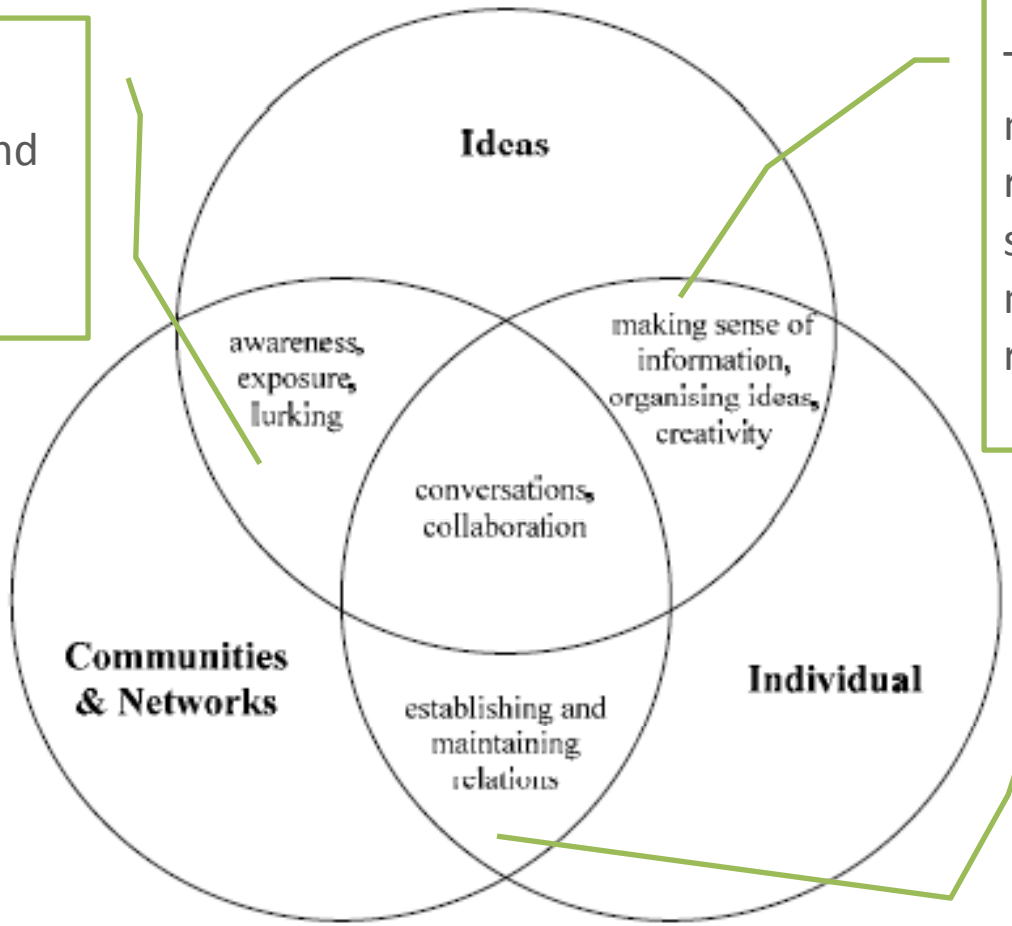


Class of students and teaching material

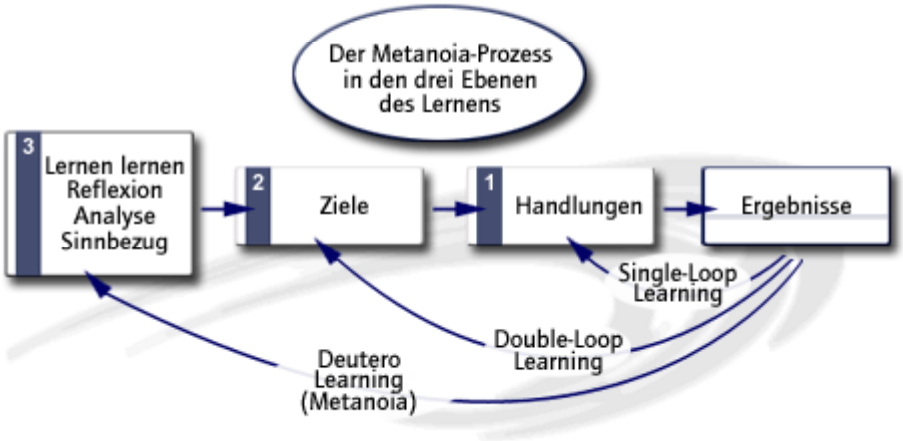
Teacher-teaching material relationship and student-teaching material relationship

Teacher-class relationship and student-class relationship

Web 2.0 applications in educational settings

Scenario “documentation”: student-ideas relationship

Hypothesis 1: The use of blogs in educational settings increases the ability of students for 1) single loop, 2) double loop and 3) deutero learning (Argyris & Schoen 1995) compared to traditional eLMS.



/www.meta-noia.de/images/pic_lernprozesse.gif

Web 2.0 applications in educational settings

Scenario “communication”: teacher-class relationship

Hypothesis 2: The use of blogs in educational settings enables novel feedback loops which contribute to a higher degree of satisfaction among 1) teachers and 2) students compared to traditional eLMS.

Source http:/marykreul.teacherhosting.com/blog/archives/cat_curriculum_highlights.php

Web 2.0 applications in educational settings

Scenario “coordination”: student-class relationship

Hypothesis 3: The use of Web 2.0 applications in educational settings makes coordination processes 1) more effective with respect to their outcome and 2) more efficient with respect to the necessary resources compared to traditional eLMS.

Scenario “participation”: community-ideas-student relations

Hypothesis 4: The use of Web 2.0 applications in educational settings increases student motivation and participation in learning processes compared to traditional eLMS.

Web 2.0 applications in educational settings

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Web 2.0 applications in educational settings

Source: http://coolcatteacher.blogspot.com/2006/07/chris-harbecks-class-blogging.html
http://sp841math.blogspot.com/2006_01_01_sp841math_archive.html

Potentials and pitfalls of Web 2.0 applications in educational settings

The four hypothisis= (Web 2.0 applications increase self-directness and responsibility of students, enables learning beyond the classroom, enhances the critical usage of internet resources and allows for cross-class and cross-school learning.)

But….

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Temp Conclusion

Applications and their functionalities might fit the goals of educational organisations, but it will be hard to transmit essential attributes of the Web 2.0 – trust, openness, voluntariness, and self-organisation – into many of the existing institutional contexts.

The greatest challenge will not consist in finding use cases and arranging applications, but rather in maintaining what really defines Web 2.0.

Learning and Social Software

Learning management systems have been slow to incorporate many of the improvements made in other types of social. (Not assume LMS are the only learning solutions.)

The normal e-learning model focuses on the individuals over the social. The benefit of social learning is the appliance of knowledge by social interaction. The social software is reintroducing the social back into the learning question (keeps what e-learning and flexible learning advantages.)

Learning as (Endless) Becoming

Social software can facilitate the shift:

- Learning about and Learning to

To

- learning as becoming (the work of nomads)

Re-evelation: We can make a new technology 'fit' the established pedagogical principles endorsed by our institutions.

pedagogical-technological perspective: to approached the framing of the tensions between pedagogy and technology.

Again! The people who make learning happen, not the technology

Social software: E-learning beyond LMS

Moving e-learning beyond learning management systems and engage students in an active use of the web as a resource for their self-governed, problem-based and collaborative activities.

Social software can help us re-situate learning in an open-ended social context to movie beyond the mere accessing of content (learning about) to the social application of knowledge in a constant process of re-orientation (learning as becoming).

Social software: E-learning beyond LMS

"The use of computers to assist learning also enables the formation of social contacts that would otherwise be impossible in learning. Students from widely dispersed groups are able to form online groups.“

Stephen Downes, 2004.

"Self-organised learning networks provide a base for the establishment of a form of education that goes beyond course and curriculum centric models, and envisions a learner-centred and learner controlled model of lifelong learning.“

Rop Koper, 2004, Open Universiteit Nederland.

Source: http://eml.ou.nl/_library/images/rob%20koper%20klein.jpg
http://www.eurodl.org/materials/contrib/2006/Christian_Dalsgaard.htm

Conclusion

> "Social software can positively impact pedagogy by inculcating a desire to reconnect to the world as a whole, not just the social parts that exist online."

Ulises Mejias, 2006

End

Source http://www.elamaule.cl/tmp_images/76/noticia_3797_normal.jpg