

# E-Learning in Learning, Teaching, Work and Knowledge Processes

## Citation for published version (APA):

Greller, W. (2012). *E-Learning in Learning, Teaching, Work and Knowledge Processes*.

## Document status and date:

Published: 29/01/2012

## Document Version:

Peer reviewed version

## Document license:

CC BY

## Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

## General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

<https://www.ou.nl/taverne-agreement>

## Take down policy

If you believe that this document breaches copyright please contact us at:

[pure-support@ou.nl](mailto:pure-support@ou.nl)

providing details and we will investigate your claim.

Downloaded from <https://research.ou.nl/> on date: 08 Sep. 2020

Open Universiteit  
[www.ou.nl](http://www.ou.nl)



# E-Learning in Learning, Teaching, Work and Knowledge Processes:



Potential and Challenges

**Dr Wolfgang Greller**  
**Centre for Learning Sciences and Technologies**  
**Open Universiteit Nederland**

**Hagenberg, 16 Juni 2011**

# Profile

- Associate Professor
- Researcher
- Project Manager
- EU Evaluator
- E-Learning Manager
- Flexible Networker
- Lifelong Learner



shapeCollage.com

# CELSTEC



**Centre for Learning Sciences and Technologies**  
[celstec.org](http://celstec.org)

**Research, Development, Innovation in  
Technology Enhanced Learning**

- **Learning & Cognition**
- **Learning Networks**
- **Learning Media**

# Shift in e-Learning



## **Centralised**

Focus on institution



## **Decentralised**

Learner-focussed

## **Platform** (VLE/LMS)

Traditional curriculum

Classes & cohorts

Online lecture notes



## **PLE**

Open lifelong learning

Open Learning Networks

Adaptive Environments

## **Content**

Learning objects

Consumption

Instructor

Certification



## **Process**

Pedagogic design (LD)

Creation

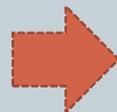
Mentor, Moderator, Orchestrator

Competences

## **Industrialisation**

Scalability

Outreach, equal opportunities



## **Individualisation**

Personalisation

Context (Work, Play, Leisure)

# Knowledge Acquisition



consume  
transfer  
transmit  
certify



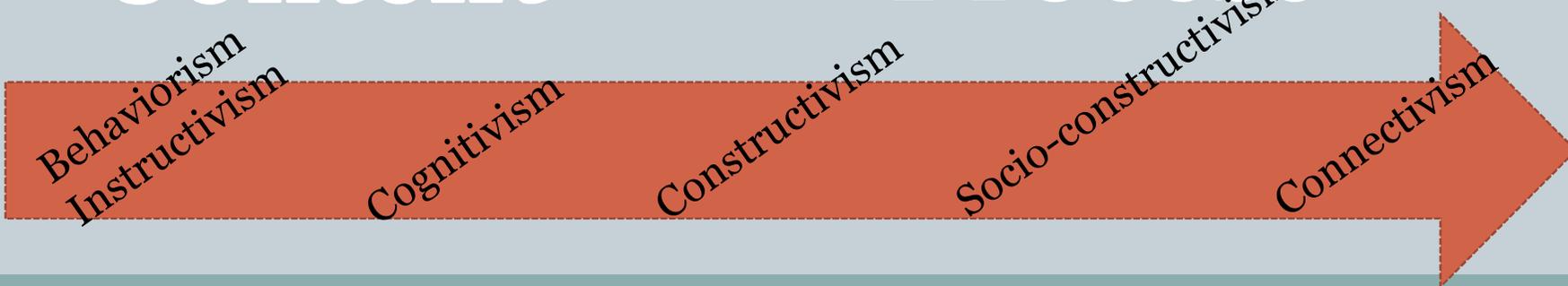
create, form, share  
participate  
reflekt  
evidence



socialise  
connect  
create (together)  
collaborate  
recognise

## Content

## Process



# Advantages



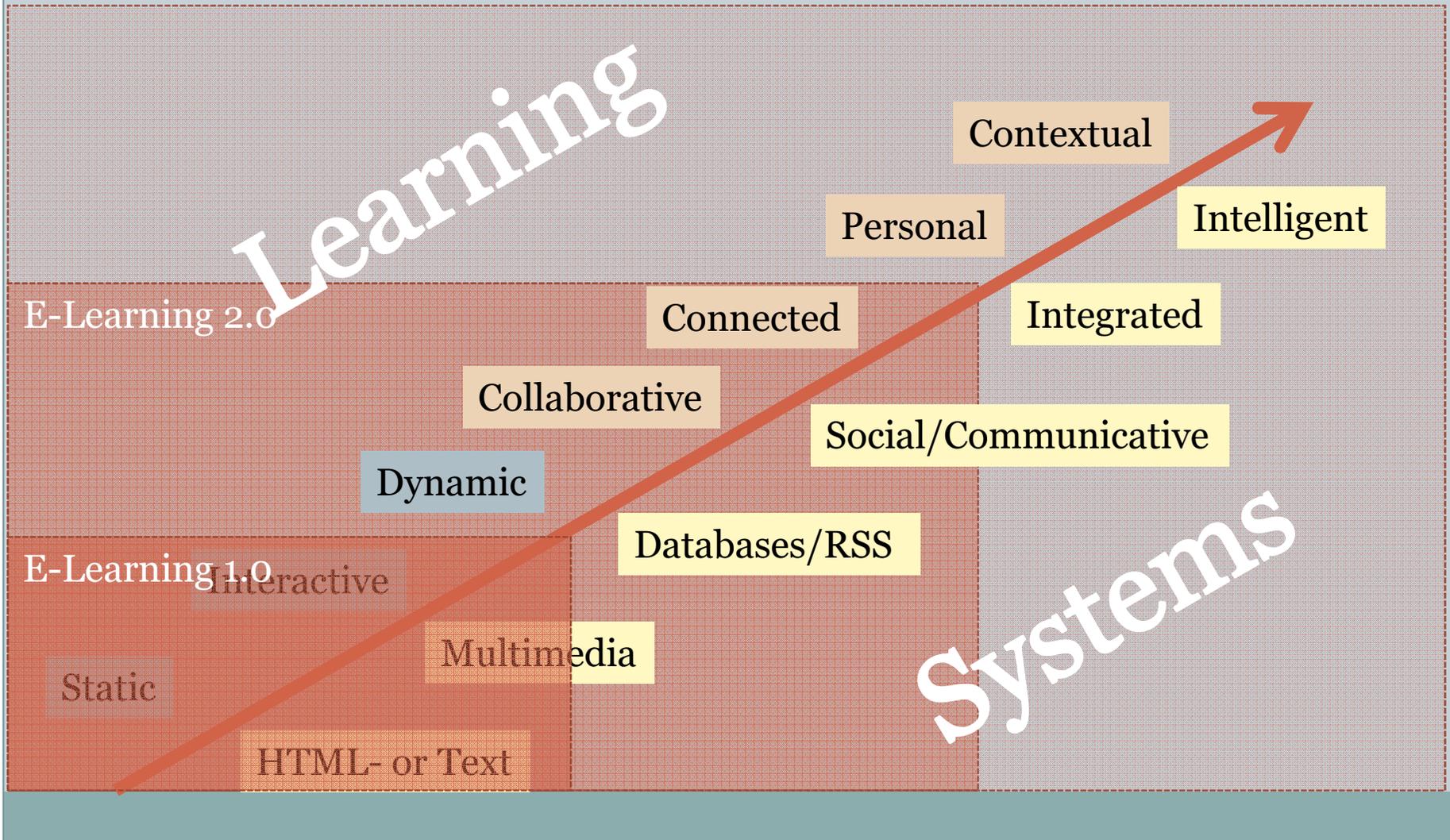
**Short Head:**  
Traditional Teaching  
Masseducation  
e-Learning 1.0

**Long Tail:**  
Learning niches  
e-Learning 2.0

- Flexibility
- Breaks down time- & location barriers
- Extends existing course structures
- Continuous Learning: LLL, professional development, situated learning, micro learning, learning networks
- New Business Models

**Lifelong Learning**

# Evolution of Systems



# LLL: Work Situation



- Jobs increasingly mobile
- Hours increasingly flexible
- Times in one job become shorter
- Face-to-face training and one-fits-all courses lose importance

**Learning for the job ⇔ Learning is the job**

# Challenges



- **Learners:** Learning to learn, live with change, reflection
- **Teachers:** Role change, orchestration
- **Institutions:** Openness, quality assurance
- **Corporate Learning:** Change management, cultural change, learning organisation

## **Open Questions:**

Pedagogic efficiency: Blended Learning, orchestration, evidence

New key competences: e.g. reflection, interpretation, evaluation

New ethics, privacy/law/identity/ownership

Educational, access & technology standards: e.g. IMS LD, Open Data

# Technology Enhanced Learning (TEL)

## Themes over the last 5 years:

Competence development

**Learning networks**

Creativity, critical thinking

**Mobile learning** - ubiquity

Game mechanics

Mash-up PLEs

Innovation management

Integrated system architectures

Recommender systems

Context-aware systems

**Learning & Knowledge Analytics**

**Language Technologies**

**Open Practice**

e-Portfolios



# Learning Networks

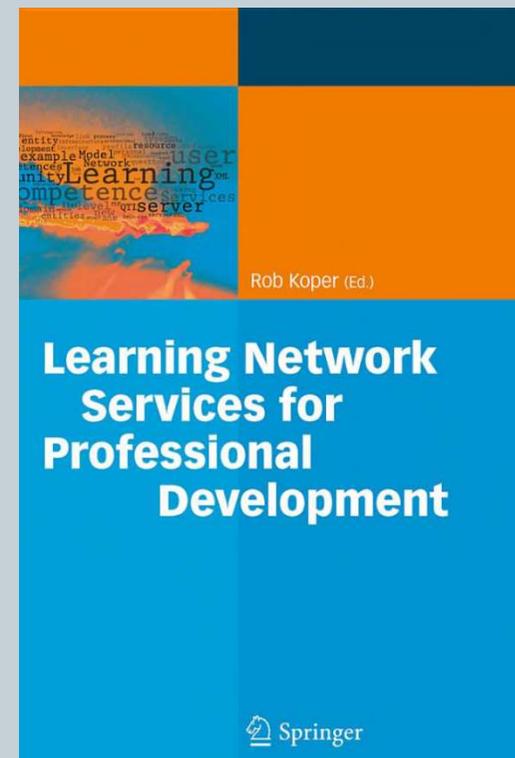


## Learning Networks:

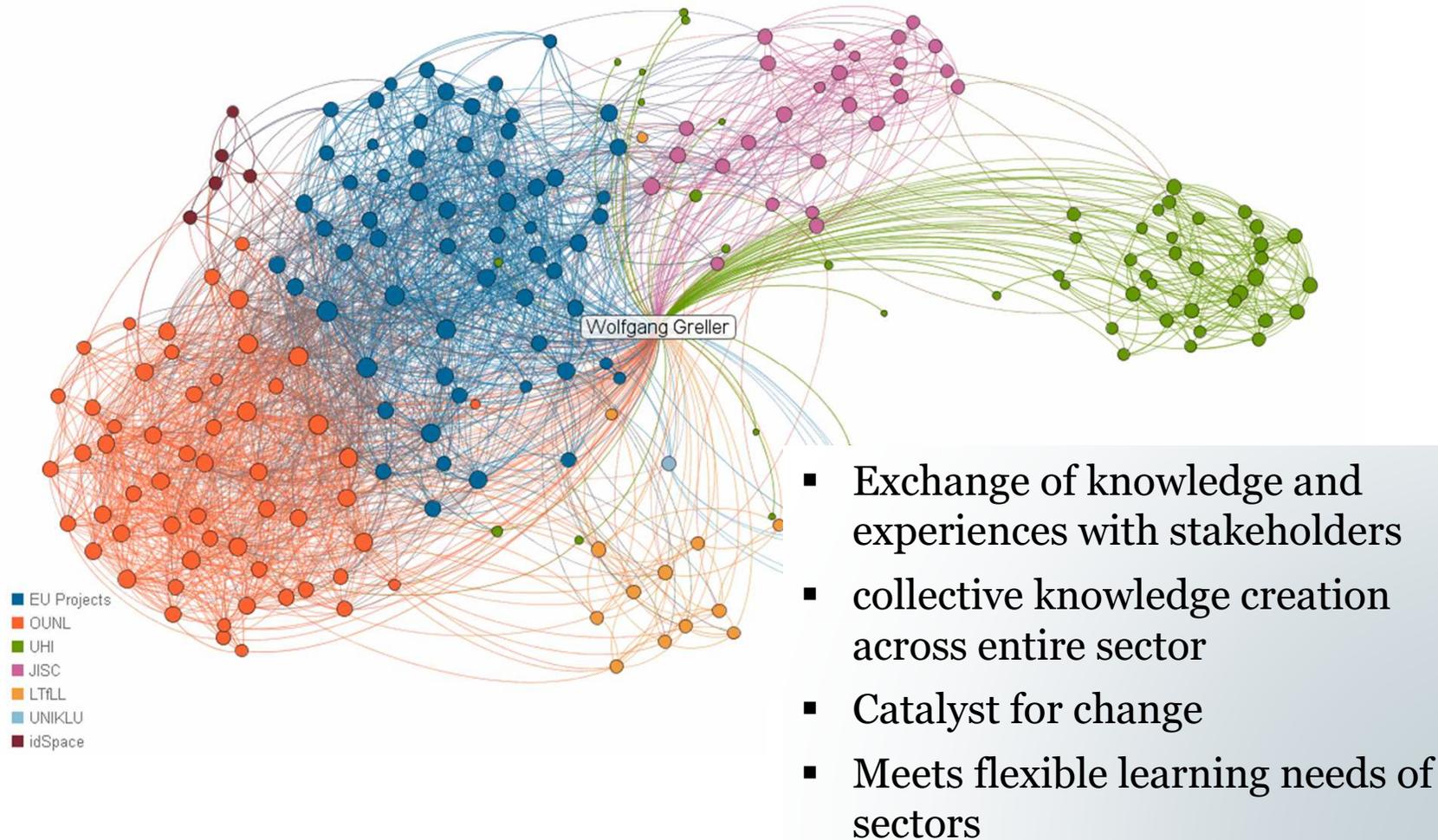
*“A Learning Network is a technology supported community of people who are helping each other to better understand and handle certain events and concepts in work or life” (Sloep, 2009)*

### **Problem oriented or theme oriented**

- Problem solution (ad hoc)
- Extension of existing learning structures
- Professional development
- Career and employability



# Learning Networks



# Sample Case: Libraries Limburg



Limburg's public libraries in the Netherlands have to reinvent their role in society and need to retrain their staff to meet these needs.

For their employees they create a learning network to restructure and innovate collaboratively their services and to update the competences of staff for the digital age.



# Learning & Knowledge Analytics

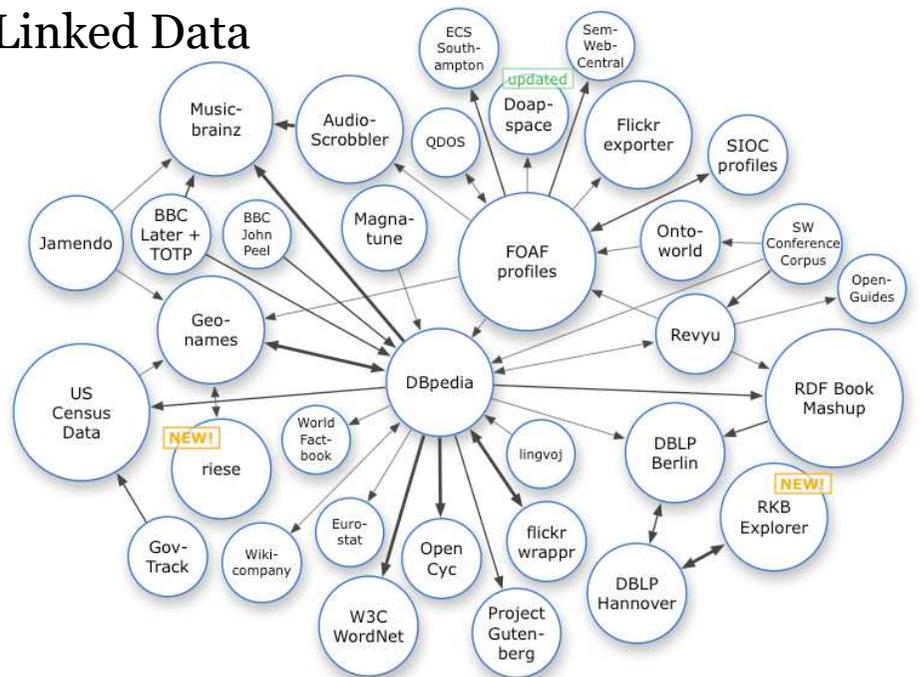


(Horizon 2011)

**Making use of abundant data :**

Knowledge Society  
Knowledge Workers

## Linked Data



T. Berners-Lee 2009



Knowledge



Information



Data

# Learning & Knowledge Analytics

- New insights from data
- Make invisibles visible
- Recommender systems & Personalisation
- Drop-out warnings

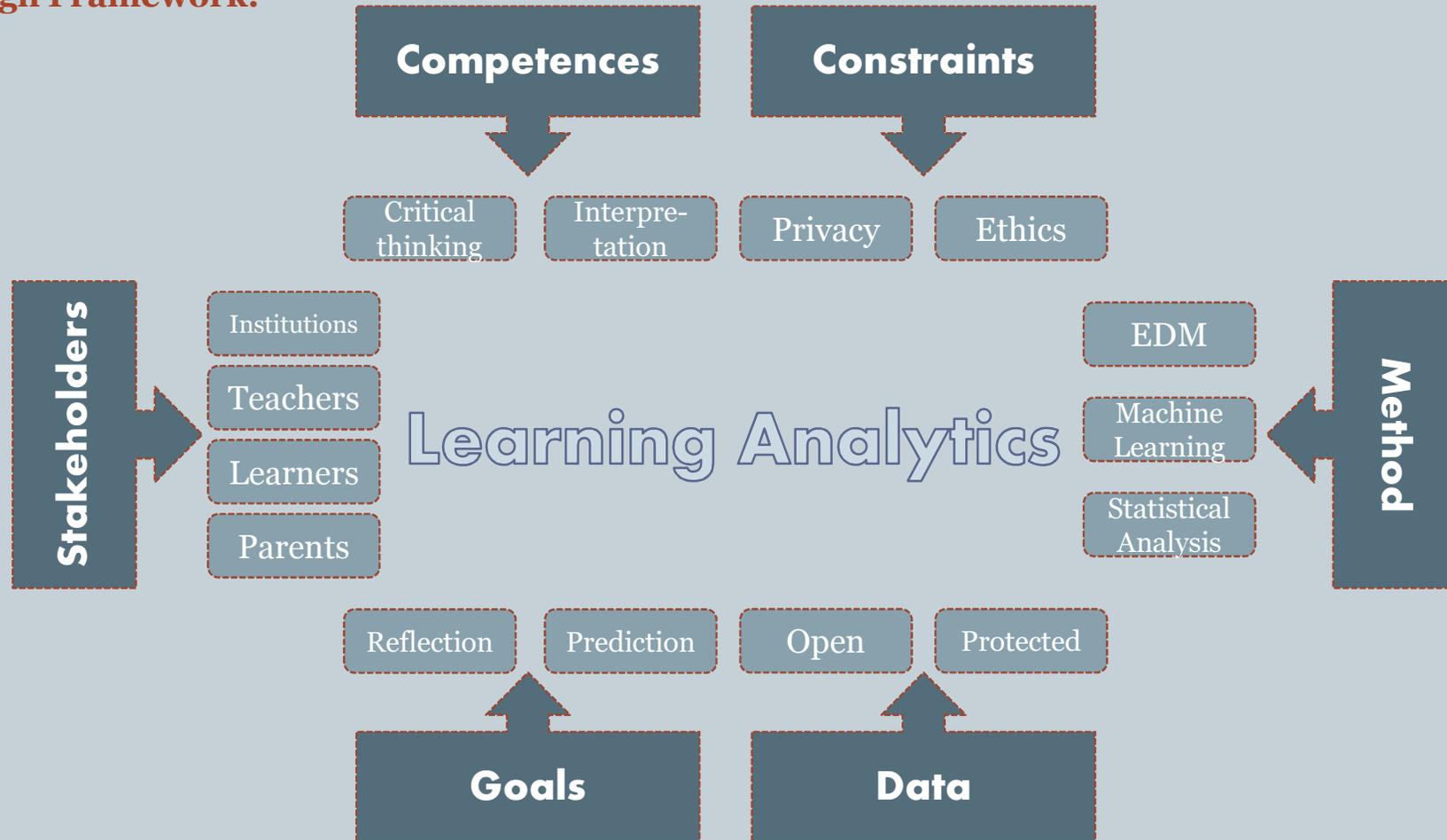
But!

- ⚠ Privacy?!
- ⚠ Equity?!
- ⚠ Impact?!
- ⚠ Dependency on method?!



# Learning & Knowledge Analytics

## Design Framework:



# Mobile Learning



- Ubiquitous access to learning, e.g. e-books, content
- Contextualisation
- Authentic learning, localised learning
- Sensors, Channels, AR
- Reflection amplifiers: in situ reflection
- Microlearning

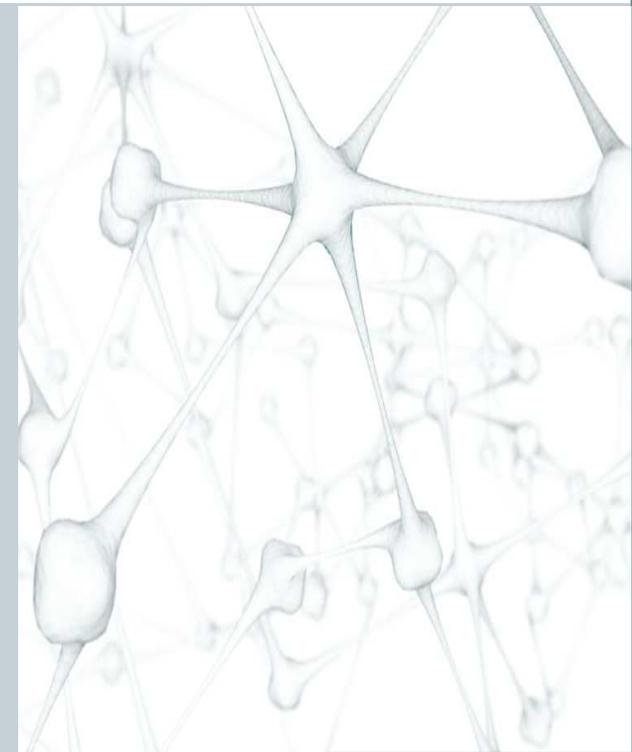




# Openness

## New Openness concepts:

- Open Educational Resources (tangible/intangible)
- Open Practice (open processes)
- Open (Peer) Assessment
- Open Innovation
- Open Data



 creative commons



Open  
Educational  
Resources

# FP7 Call8



## **Objective 8.1 Technology-Enhanced Learning**

- (a) Technology-enhanced systems endowed with capabilities of human tutors
- (b) Educational technologies for Science, Technology and Maths
- (c) Advanced solutions for fast and flexible deployment of learning opportunities at the workplace
- (d) Computational tools fostering creativity in learning processes
- (e) Exploratory activities for fundamentally new forms of learning through ICT