

# The Need of Lifelong Learning and Digital Citizenship

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# The problem: lifelong learning in relation to **digitalisation**



# Overview

- **Changes** of behaviour by digitalisation
- What are important **trends**?
- **Challenges and myths** in the context of digitalisation
- Philosophical **interlude**
- **Proposals**

# CHANGE

# The wind of change: Death of John Paul II (2005)



# The wind of change: Habemus papam - Pope Francis (2013)



# How to discover world in a new way



**STRONGER  
TOGETHER**

# Who we are



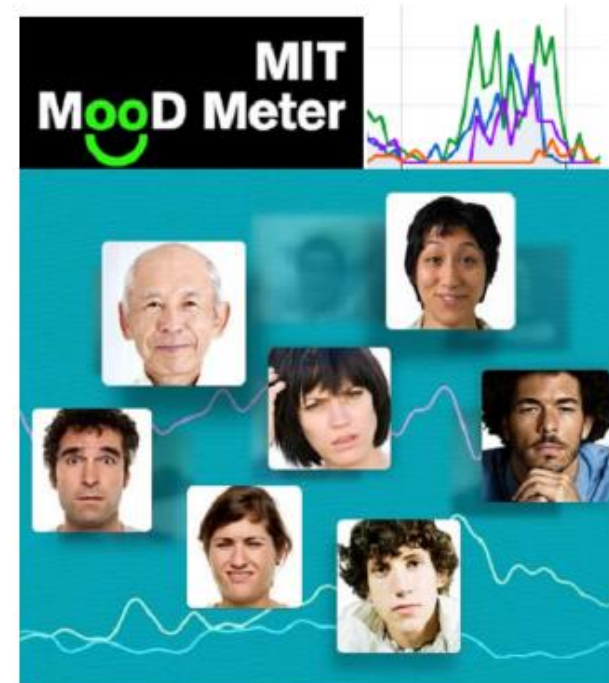
<http://elisabeth-selbert-gemeinschaftsschule.de/index.php/organisation/digitales-lernen/unsere-ipad-klasse>



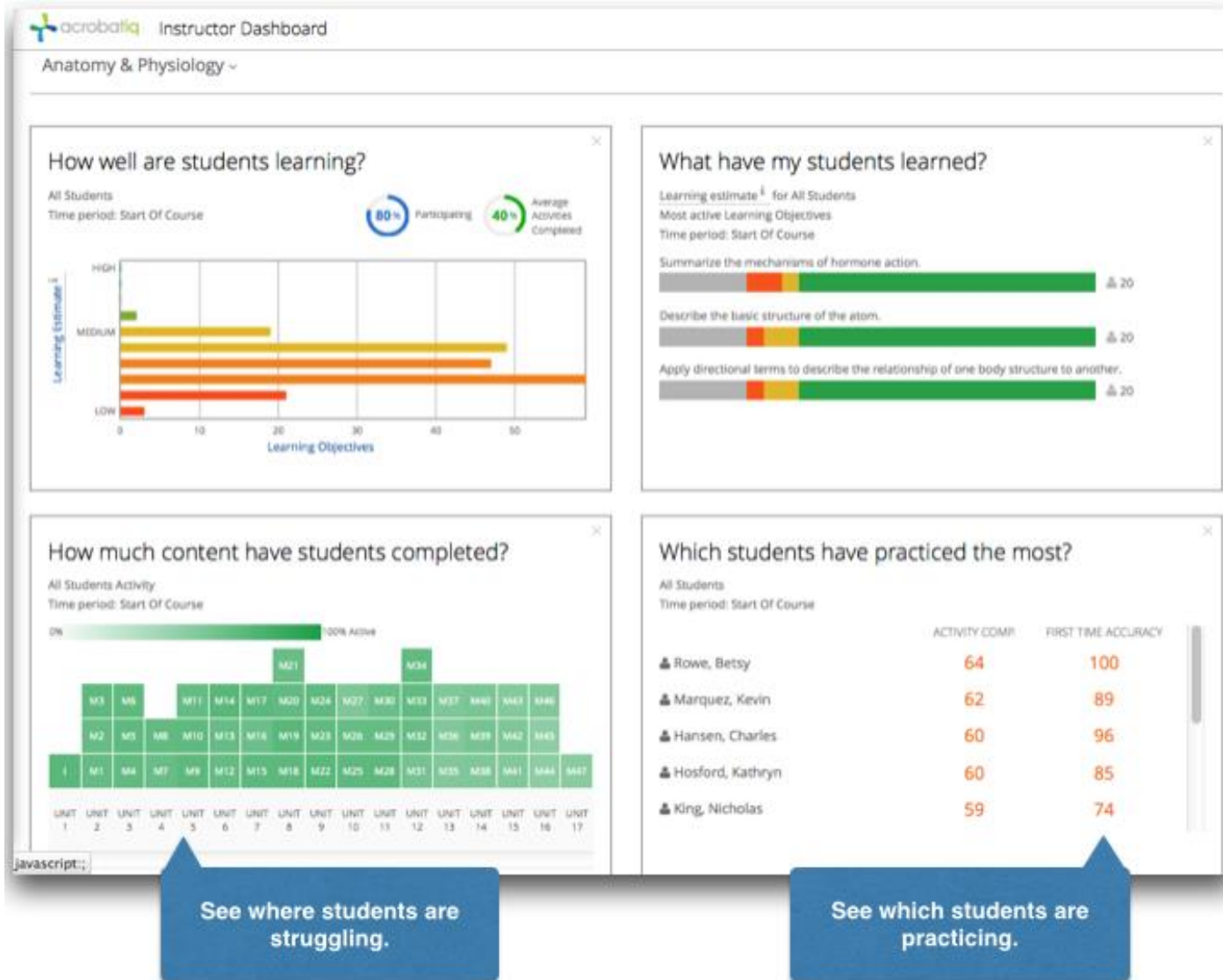
# TRENDS

## New Learning

- Outcome oriented
- Blended Learning
- Self-Diagnostic
- Adaptivity
- ...



# Learning Analytics

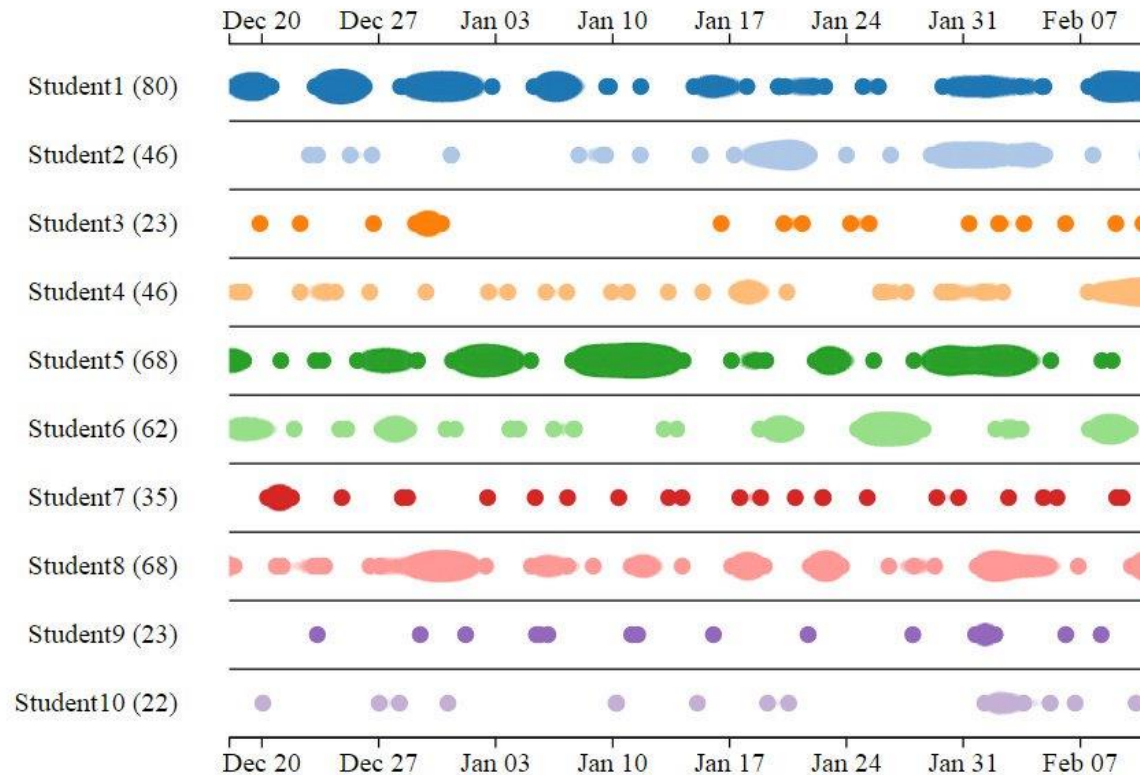


<https://thefotosgratis.eu/learner-analytics-dashboard.html>

# Learning Analytics

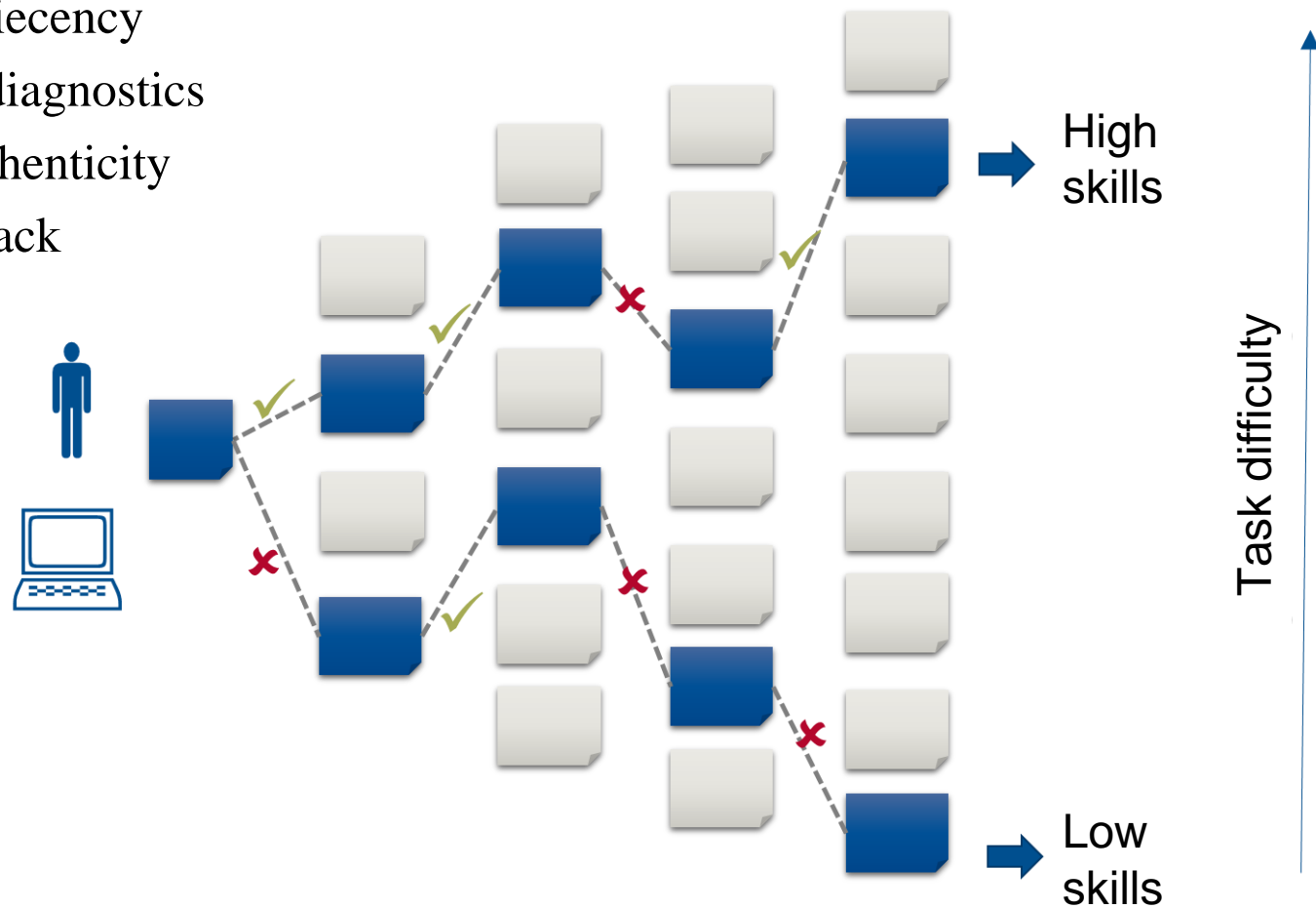
## - individual and adaptive

### Student Activity Pulse



# Computer-based adaptive Testing

- Higher efficiency
- Adaptive diagnostics
- Higher authenticity
- Fast feedback



# Blended Learning

<http://www.24x7learning.com/images/blended-learning-methodolog.jpg>



Traditional media of instruction

Traditional teaching

**The idea: mutual optimizing via „Blended Learning“**

# CHALLENGES AND MYTHS

# Empirical Check of „digital myths“

- Internet and the reduction of social interaction
- Internet and the reduction of social participation
- Loneliness through internet usage
- Computer games make you fat, stupid, lazy and violent

- **Social commitment even correlates positively with internet use**
- **Demonizing Digital Media**
- **No long-term consequences detectable**

Appel & Schreiner, 2014, 2016



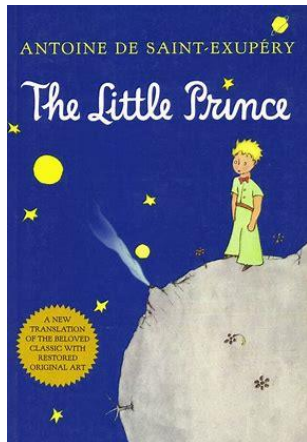
## Real risk: Multitasking

But our working memory can only handle a limited amount of information. ... But that does not just apply to the handling of digital media. If someone cooks at the same time, makes phone calls, admonishes the children and sends out the dog, then cooking is also negatively affected.

(R. Bromme; 2012, CEO of DFG-SPP „Science and the public“)

## Real Risk : Immersivity

The higher the adaptivity, realism and interactivity of media content the greater the potential for experiencing immersiveness.



# INTERLUDE

# What is the peculiarity of BIG DATA?

## A change in the perception of Time

*... a more philosophical and theological reflection*

„φύσις κρύπτεσθαι φιλεῖ.“ Heraklit,  
frgm 123

- (1) The transformation from analogical to digital entities offers the persistency of what is stored in the networks: we can't lose or forget anything  
(things: IoT, persons: social media networks).
- (2) Being net-habitants we gain „full-presence“. — We are no longer distracted by making all efforts to remember or waiting for future.
- (3) Just do it now — and not later!
- (4) Everything is in stand-by-position.
- (5) We are confronted with the unlimited availability.



# What is the peculiarity of BIG DATA?

## A change in the perception of Time

*Interlude: ... a more philosophical and theological reflection*

„We now name **that challenging claim**

which **gathers** man thither to order

the self-revealing **as standing-reserve: Enframing.**“ [Ge-stell]

„Maintenant cet appel pro-voquant

qui rassemble l'homme (autour de la tâche) de commettre comme fonds ce qui se dévoile, nous l'appelons — l'Arraînement.“

Wir nennen jetzt jenen

**herausfordernden Anspruch,**

der den Menschen dahin **versammelt,**

das **Sichentbergende**

**als Bestand zu bestellen -**

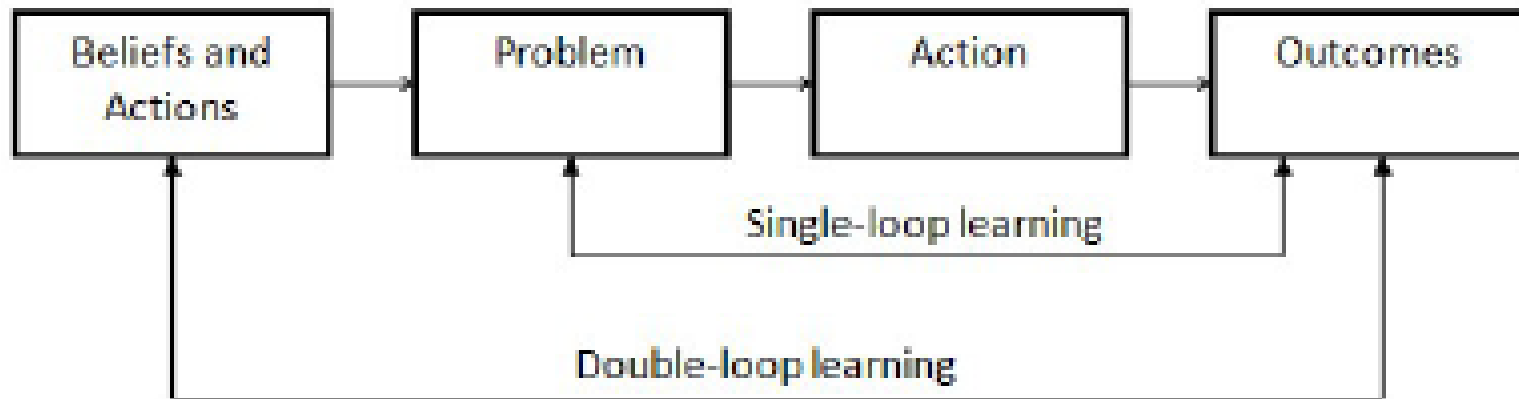
das Ge-stell.“

Heidegger, Vorträge und Aufsätze, S. 27



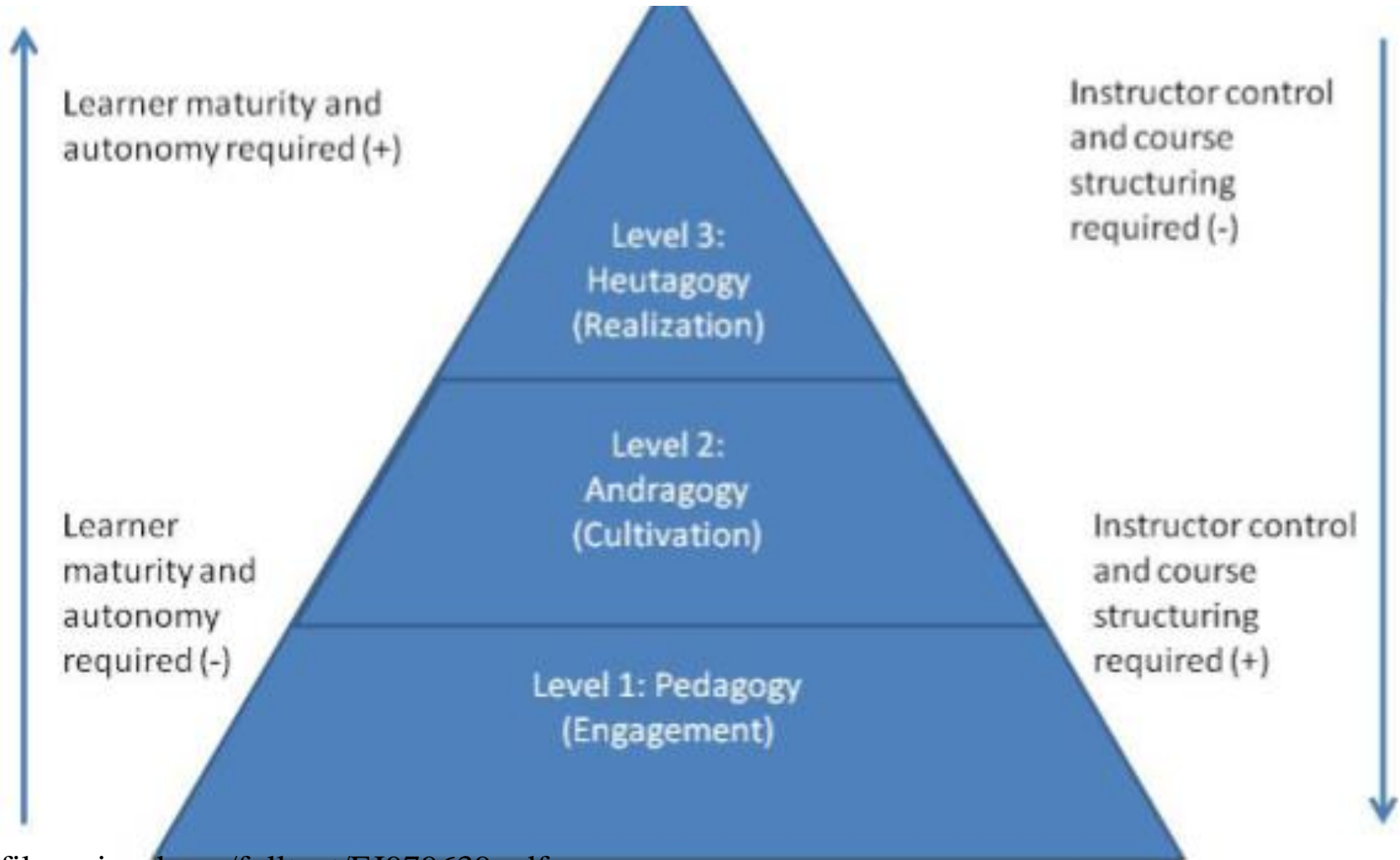
# PROPOSAL

# Heutagogy



<https://files.eric.ed.gov/fulltext/EJ979639.pdf>

# Progression from pedagogy to andragogy then to heutagogy



<https://files.eric.ed.gov/fulltext/EJ979639.pdf>



# From pedagogics, androgagics and further education to learning in context of **self-determination**

Learning under  
**„Brick and mortan“**  
conditions

**Heutagogy:**  
Net-based Learning

Single-loop learning	▶	Double-loop learning
Competency development	▶	Capability development
Linear design and learning approach	▶	Non-linear design and learning approach
Instructor-learner directed	▶	Learner-directed
Getting students to learn (content)	▶	Getting students to understand how they learn (process)

<https://files.eric.ed.gov/fulltext/EJ979639.pdf>

# What let us hope...

The „brain of 20th Century“ has been lost forever —  
and in consequence the ways of learning of 20th Century.

We cannot stop digitalisation  
in addition to „Digital Citizenship“ we need

**„digital  
incompetence-  
compensations-  
competence“**



(Odo Marquard, 1928-2015)

*Thank you for your attention*