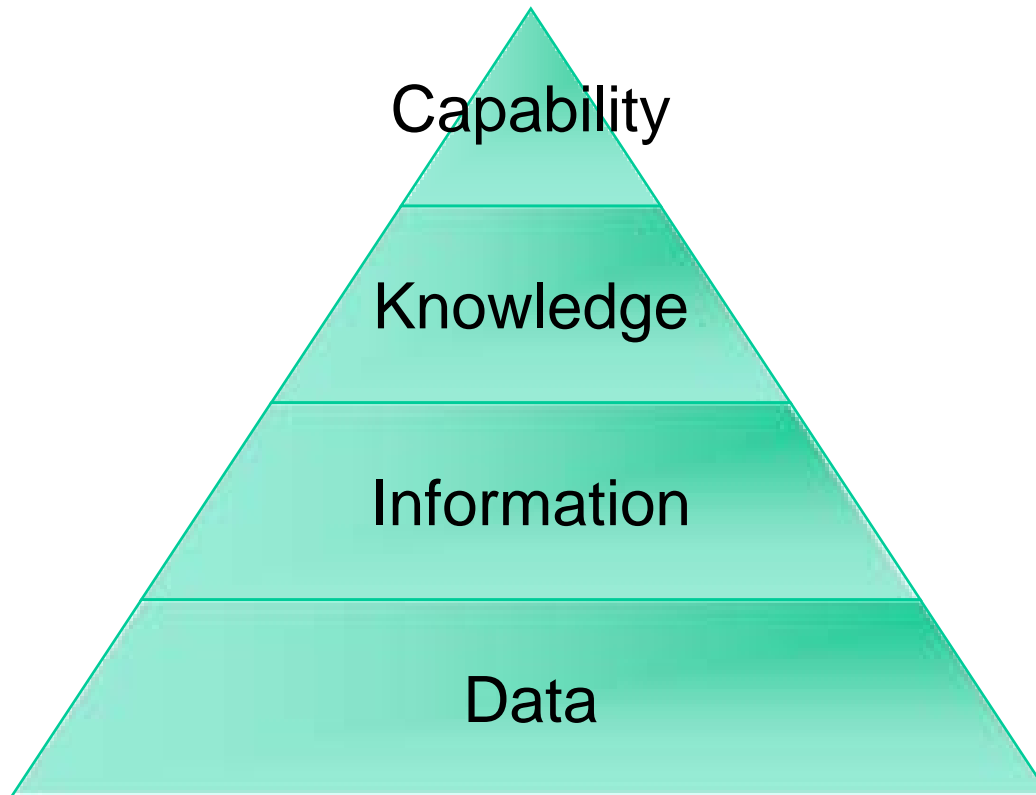


The Future of Learning and Teaching

Udo Bleimann

Director Center for Advanced Learning, Media and Simulation
University of Applied Sciences Darmstadt, Germany
udo.bleimann@h-da.de

Knowledge Society



Knowledge Pyramide

What does this mean?

- Fast change, rapid development
- Intangibles have become more important than tangibles
- The shelf life of a degree in Engineering is about 3 years
- Learning in advance is no longer sufficient
- Life Long Learning is the only way to keep up
- We need to learn how to deal with the unknown

Educational background - how to learn?

- Confucius: “I hear and I forget. I see and I remember. I do and I understand.”
- Aristotle: “What we have to learn to do, we learn by doing.”
- Aristotle added “We cannot learn without pain.”
- Einstein: “The only source of knowledge is experience.”
- ... a person teaching understands even better

Surprise

What do we learn from brain research?

- Attention follows surprise
- We give attention to things we need in life
- Support autodidactic (self-education) rather than optimize teaching material (“infusion pedagogy“)
- Learning is networking



Learning could be seen as the “Change of the quality connections between neurons”

Some educational facts 1

- Disturbance engages mind and senses
- Uncertainty engages
- Learning means: try, fail, succeed, and try again
- We learn with and from other people
- We learn by doing
- Self-directed learning is effective – the learner is responsible
- Informal learning is personal and relevant

Educational facts ... 2

- In place of memorization today's learners need
 - search skills,
 - conceptualization,
 - analysis,
 - reasoning,
 - decision making,
 - emotional intelligence
- Learning is a whole body experience
- Learners go with the flow
- Peer-to-peer learning replaces top-down learning

Educational facts ... 3

- Learning happens outside your comfort zone – being exposed to new things
- Learning is not content - Learning is not infrastructure
- We learn through construction (“constructivism“)
- Learning is an individual and active process
- Learning is trying out things, taking risks
- “Digital Natives” are autonomous learners

How do **You** learn best ?



start

home

communication

messages [2]
contacts [0]

organisation

tasks [1]
appointments [0]

collaboration

modules
workgroups
groups of interest

utilities

material [1]
bookmarks [0]
subscriptions [1]
portfolio

search



workgroups

my workgroups

all workgroups

arrange infoboxes

my walk: [my_home](#)

my workgroups

change view

examination prep: IPBL

incorporator: Oliver Schneider
host university: UPLYM
date: 2006/09/12-2007/02/15, members: 22
tags: IPBL, testing, research, practice, ...

media organisation

comments: 29, page: views 271,
MSD diploma thesis 2005 (module),
2005/02/15-2005/08/15, Simon Brückner,
tags: Atlantis-University, learner type...

my workgroups

examination prep: IPBL

about

operating process

members

group organisation

group utilities

invite new members
new profile of result

next tasks

assignment 1

prepare modell 1
Simone Düll

prepare modell 2
Oliver Schneider

find solutions to 1-10
Christina Nenke

more...

best matches of compared learner types // 1 - 4 of 4

my learner types: **constructor, organiser**

select by ABC...

sort by name | status | university | study course



Simeon Ludwig

master-student | h_da | MSC Computing

learner types: constructor, organiser



Simone Düll

diploma-student | h_da | media system design

learner types: perceptor, constructor



Oliver Schneider

Part Time Mphil/PhD | UPLYM | computer science

learner type: communicator, constructor



Manuel Pieke

master-student | h_da | computer science

learner types: analyst, constructor

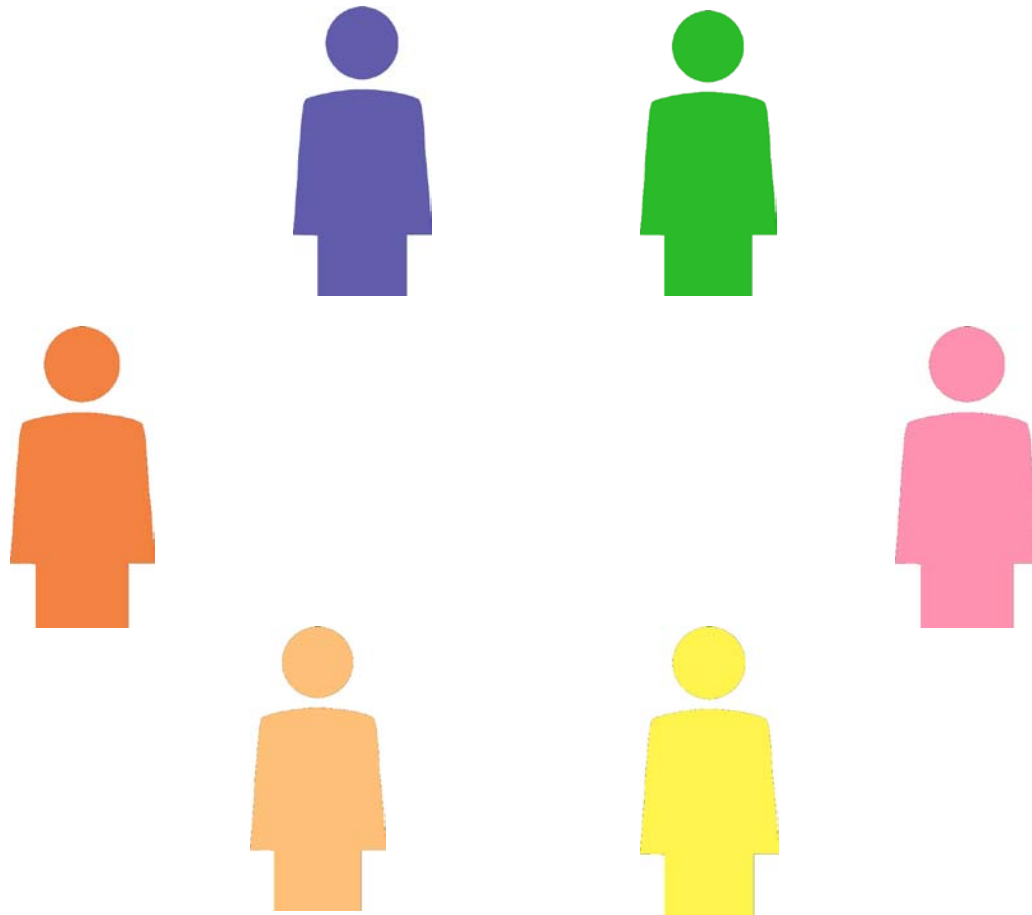
back

tagcloud of this workgroup

e-learning concept darmstadt
documentmanagement face-to-
face-learning international
work master-thesis
livelink LMS moodle
pedagogical background Plymouth
projectbased learning pre-
sentation protocols
tools videoconference

Or ... ?

Learn your own way



Learn your own way

- Offering content depending on 6 different learner preferences
 - Analyst
 - Constructor
 - Organiser
 - Perceiver
 - Communicator
 - Creator
- Most persons have two (out of 6) strong and two weak preferences



Learning by Contribution

- Contribution by tutors and learners
- Cooperative content production
- Knowledge is co-created, so we must keep the individual an equal partner, not a “recipient”
- Examples: Wikis (Wikipedia), Blogs
- Contribution is part of assessment

From “Assessment of Learning”
to “Assessment for Learning”

Project-based Learning



The Future of Learning and Teaching

?

Udo Bleimann
udo.bleimann@h-da.de