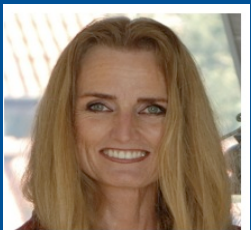


DESIGN OF DISTRIBUTED NETWORKED LEARNING FOR INTERCULTURAL INNOVATION: AN OPEN DIALOGIC APPROACH

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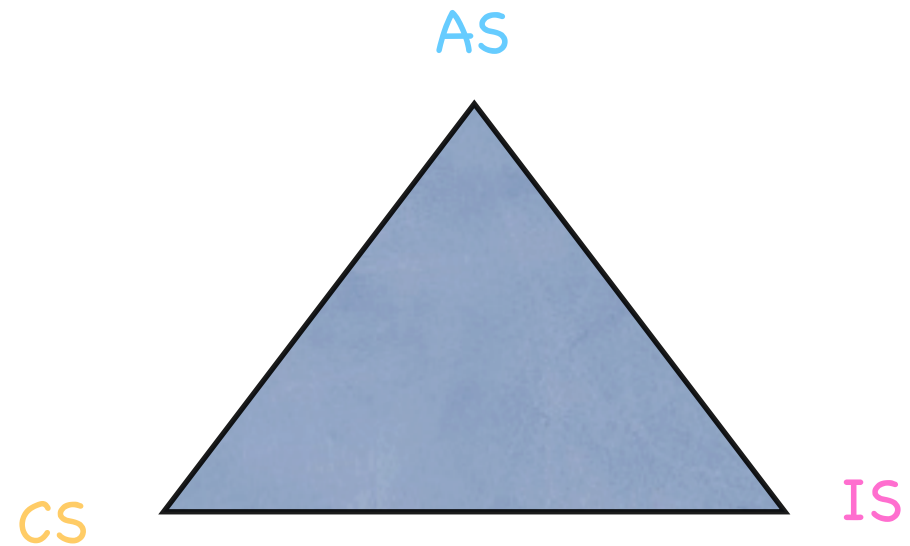


About me

- AU Herning, Business & Social Sciences, Aarhus University, Denmark
- MS in ICT & Learning (delivered online): <http://www.mil.aau.dk>
- Doctoral level:
International Leadership in Educational Technology (ILET):
<http://www.iastate.edu/~ilet/homepage.html>
- Research interests: How to design for teaching/learning in virtual and blended environments:
 - establishment of collaboration, reflection, and collaborative knowledge building (CKB) online
 - enhancing the quality of online CKB dialogue
 - assessment of online CKB
 - project work online
 - virtual portfolios as tools for enhancing online CKB
 - learning designs
 - dialogic design
 - Etc.

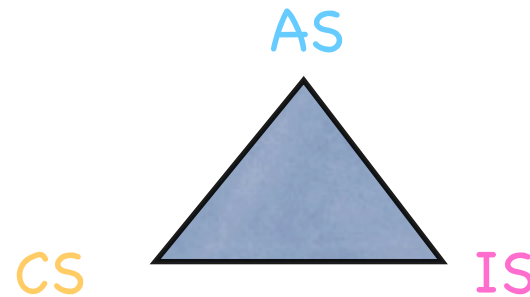
Presentation model

- Where are we now – and how did we get there?
- What is the vision?
- How do we get there?



Skovsmose, O. & Borba, M. (2000): Research Methodology and Critical Mathematics Education

Outline



1. The development of MIL (organization and sustained dialogic model) **CS**
 - › Thoughts and experiences
2. Designing for the future – what matters?
3. The vision for future learning designs – a theoretical model **IS**
 - › Transdisciplinarity, intercultural collaboration, learners as prosumers,
 - › Design for dialogic participation in bridge building activities
4. How do we arrange for learning in the future?
 - › Experiment mindfully together – teachers, learners and practice - in dialogue
5. Suggestion for future designs: Project "NorDigiLearn" **AS**
 - › Transdisciplinarity, intercultural collaboration, learners as prosumers
 - › Design for dialogic participation in bridge building activities – mediated by Open Educational Resources (OERs)



1.

THE DEVELOPMENT OF
MIL – ORGANIZATION
AND SUSTAINED
DIALOGIC MODEL?

Thoughts and experiences

CS



HOME

OM MIL

NYHEDER

NY STUDERENDE? ▾

UDDANNELSEN ▾

faMILien ▾

RESSOURCER ▾

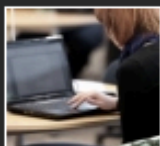
KONTAKT



Studerende siger

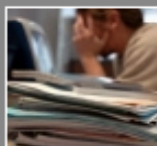
Gennem MILs levetid har vi haft mange forskellige typer af studerende fra en lang række af virksomheder...

Velkommen til de nye studerende



Det er med stor glæde, at vi kan byde dig velkommen som studerende på vores Masteruddannelse i ikt og...

Årets gang



Se her for en oversigt om årets gang på Master i ikt og læring.

MEST LÆSTE



Årets gang



Velkommen til de nye studerende



Valgmoduler efteråret 2011



Velkommen til Master i ikt og læring



Ikt som drivkraft i inklusionsprocesser og specialundervisning



Videokonferencens didaktik



3D remediering af virtuel pædagogisk praksis

Pioneer education

- New subject and area in DK
- Five institutions with different/diverse cultures
- Full scale project – blended educational milieu
- Pioneer spirit – establishment of a dynamic learning network between university, research and practice
- Virtual research laboratory



Education – trans!

Strengths and challenges

- Research based education and education based research
- Pedagogy and content mirror traditions and approaches of each institution
- Political attention – and attention from institutions
 - Collaboration instead of competition



MIL - Focus areas

- Ict-based learning processes
- Ict-based interaction design
- Ict and organizational learning processes
- Ict and didactic design



The MIL Community

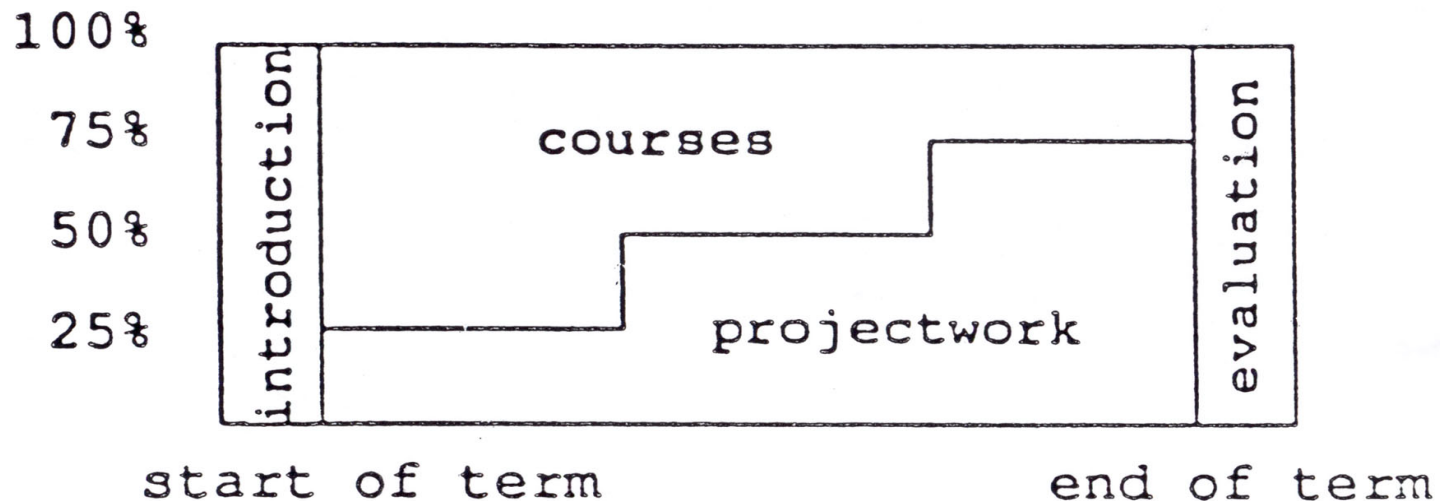
- Part-time student
- Full-time students
- Modules (core modules)
- Elective modules
- Special profiles
 - Ict, subject and primary schools
 - Special electives (authentic action learning)

The MIL Model

- Problem Based Learning
 - Based on real-life problems
- Education organized as projects
 - Project work supported by lecture courses
- Group Work
 - groups of students
 - supervised by the professors
- Interdisciplinary Studies
 - Integration of theory and practice
 - Focus on Learning to Learn and methodological skills

Lecture Courses and Project Work

- 50 % project work work: a major assignment within a given subject-related framework determined for each semester.
- 25 % project related courses supporting the project work
Evaluated as oral examinations based on the project report.
- 25 % mandatory courses relating to the overall academic profile of the curriculum.
Evaluated through individual written or oral examinations.



Kernemoduler

- Modul 1: Ikt-baserede læreprocesser**
- Modul 2: Ikt og interaktionsdesign**
- Modul 3: Ikt og læring i organisationer**
- Modul 4: Ikt og didaktisk design**
- 1. års projekt**
- Masterprojekt**
- Seminar**

Home > Kernemoduler

Semesterplan

	1. semester (Efterår)			2. semester (Forår)
1. år MIL1	K1 Ikt-baserede læreprocesser 5 ECTS	K2 Ikt og interaktionsdesign 5 ECTS	V1 ? 5 ECTS	1. års projekt Ikt i læreprocesser - brug og betydning 10 ECTS
				V2 ? 5 ECTS
	3. semester (Efterår)			4. semester (Forår)
2. år MIL2	K3 Ikt og organisatoriske læreprocesser 5 ECTS	K4 Ikt og didaktisk design 5 ECTS	V3 ? 5 ECTS	Masterprojekt 15 ECTS
	Seminar1	Seminar2	Seminar3	Opponent



Opslagstavle

- Modulbeskrivelser 2010:
- Samlet oversigt over litteratur**
- Modul 1**
 - Modul 2**
 - Modul 3**
 - Modul 4**
 - 1. års projekt**
 - Masterprojekt**

Online Learning: Theory and practice (OL)

- A 5 week course, including 2 weeks of preparation and 3 weeks of debate.
- The 2-week preparation period:
 - Individual reading course literature (3 themes)
 - Preparation in small virtual groups (each group focusing on one of the three themes)
 - Distribute roles in small groups (presenter, opponent, moderator)
 - Meta-reflect (in meta-forum)
- The 3-week debate period:
 - Present, in one of the three theme/plenum fora, a relevant problem drawing on both own experiences, literature and learning theory
 - The group initiate, stimulate, guide and synthesize discussion
 - Use of roles in plenum debate
 - Meta-reflect (in meta-forum)

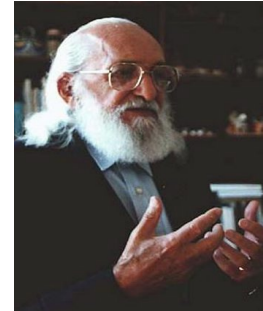
Quality Creativity

*The NOW is where time touches eternity
(Kierkegaard)*

- Linked to
 - Improvisation
 - Imagination
 - Orchestration
 - Contextual sensitivity/intuition
 - Situatedness (the NOW!)



Empowerment



- Paulo Freire (1921-1997)
 - Education as liberation
 - Authentic dialogue involving practice
- Paulsen's (1993) theory of cooperative freedom:
 - Freedom of space
 - Freedom of pace
 - Freedom of time
 - Freedom of media
 - Freedom of content
 - Freedom of access



"I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!"

Democratic attitudes

- Linked to
 - Society
 - Citizenship
 - Values
 - Ethics
 - Inclusion

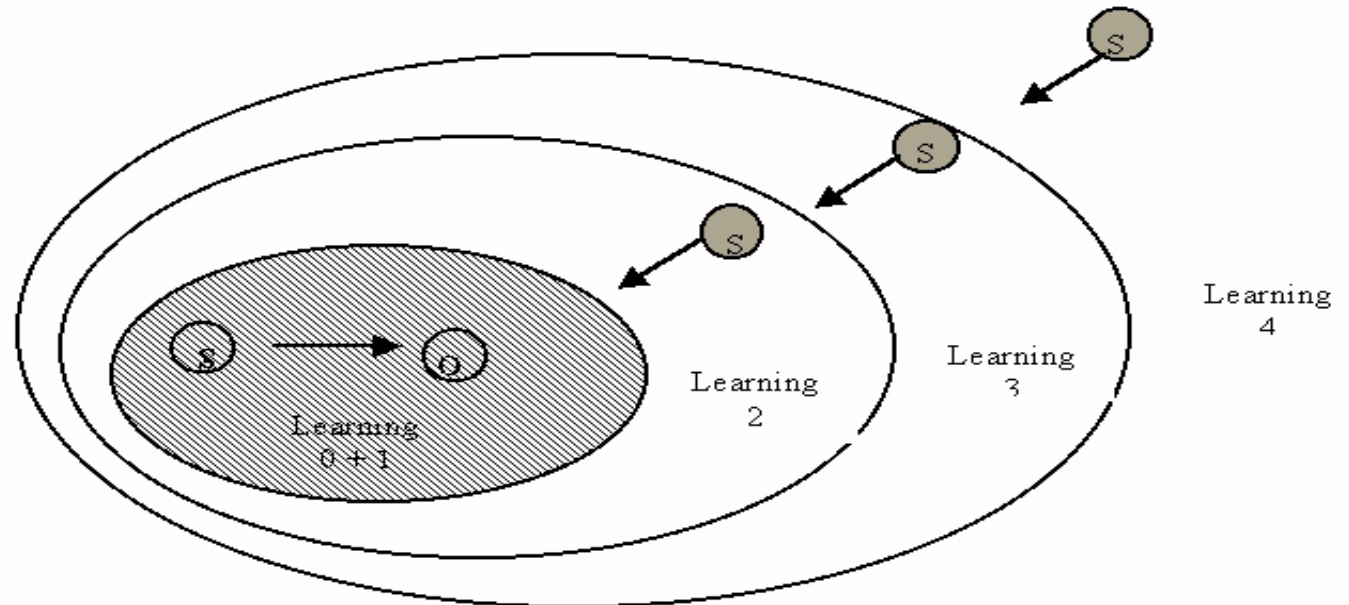
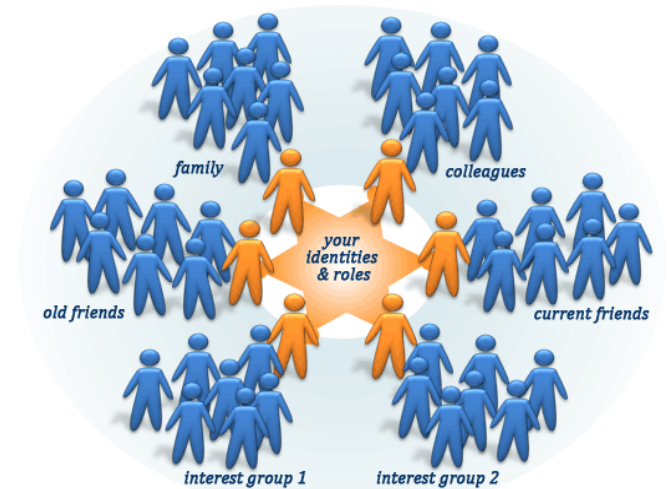
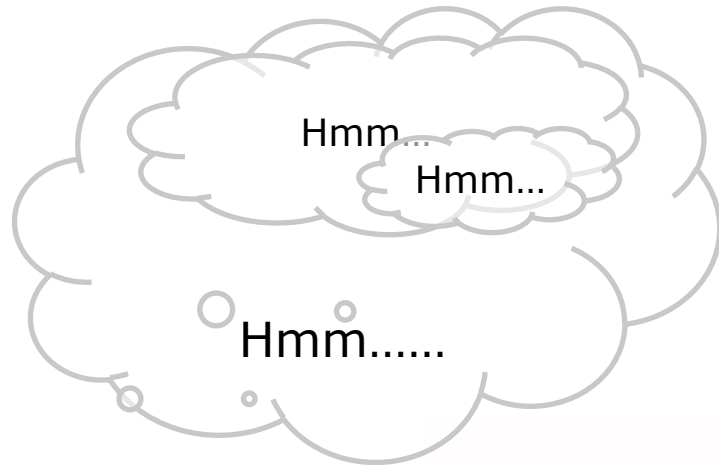


Quality: “Local – Global



- Linked to:
- Culture
 - Diversity

Strategy/methodology: Participatory and meta reflective dialogue

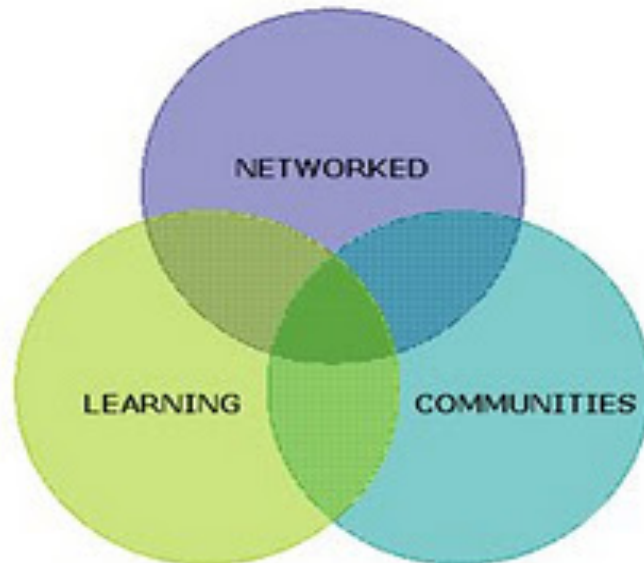


Bateson's learning model (Hermansen 1996)

Quality Personal/collaborative/networks

Linked to:

- Building of identity (personal/collaborative)



Theoretical and Pedagogic Design Elements

Support the establishment of communities of practice through CKB process	Wenger, 1998	Overall didactic design, focus on “participation”
Emphasize reflective elements in CKB process	Bateson, 1976	Didactic implementation of meta-reflection self-reflection
Acknowledge that the reflective nature of the online environment creates need for meta-instructive elements in CKB process (Sorensen, 1999)	Stahl, 1999	Implementation of supporting meta-categories
Acknowledge the need for harmony between expectations and assessment	Sorensen & Takle, 2001 & 2002	Assessing CKB process

Use of Meta-Categories in Assessment

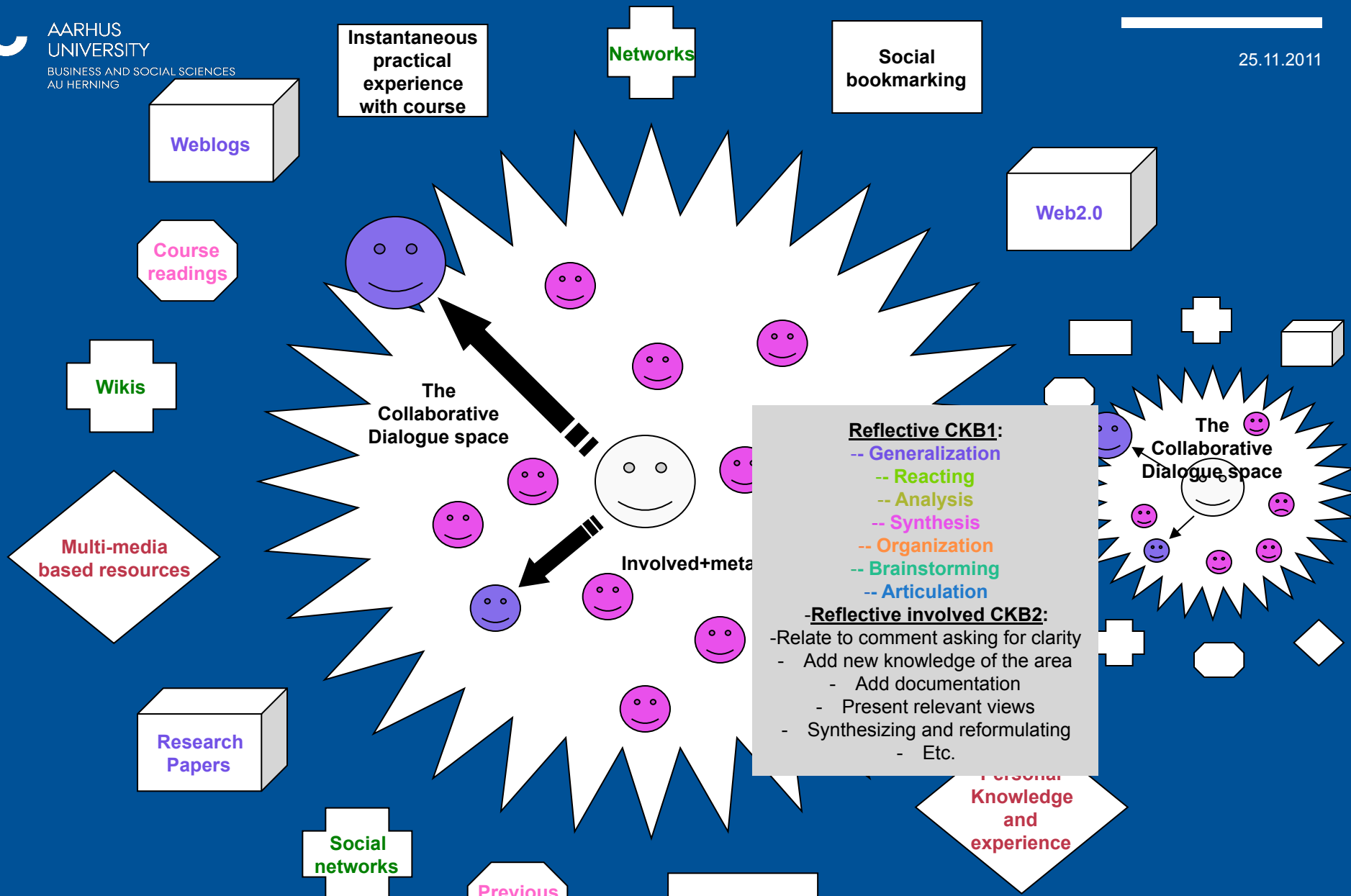
Use of meta-categories as criteria of Quality

Content oriented (Stahl, 1999):

- Brainstorming (new ideas and perspectives)
- Articulating (explaining concepts)
- Reacting (an alternative or amplified perspective)
- Organizing (assembling perspectives to a new perspective)
- Analyzing (comparing, contrasting, and putting new understanding)
- Generalizing (expanding comments to a broader set of conditions)

Socially oriented (Sorensen & Takle, 2002):

- Requesting clarification
- Adding new knowledge
- Providing relevant associations
- Organizing and promoting argumentation
- Synthesizing previous points of view
- Pointing to new directions
- Concluding
- Providing further visions



- Reflective CKB1:**
- Generalization
 - Reacting
 - Analysis
 - Synthesis
 - Organization
 - Brainstorming
 - Articulation
- Reflective involved CKB2:**
- Relate to comment asking for clarity
 - Add new knowledge of the area
 - Add documentation
 - Present relevant views
 - Synthesizing and reformulating
 - Etc.

The MMD Model - A Collaborative Dialogue Space



2.

DESIGNING FOR THE
FUTURE – WHAT MATTERS?

Thinking....towards the future!

“There appears to have been remarkable coincidence between the development of more open systems of knowledge production and the growth of complexity in society - and the increase of uncertainty in both. The climax of high modernity with its unshakeable belief in planning (in society) and predictability (in science) is long past. Gone too is the belief in simple cause-effect relationships often embodying implicit assumptions about their underlying linearity; in their place is an acknowledgement that many – perhaps most – relationships are non-linear and subject to ever changing patterns of unpredictability (Nowotny, 2005:16).

Learning through collaborative “emergent interfaces” (transdisciplinarity) (Nowotny, 2005)

Design of education for the future

A process of identification in the intersection of collaborative knowledge building (Østergaard & Sorensen, 2011).

- Four macro cultural trends interact with each other and affect the educational world. The four trends are (Wiedemann, 2011):
 - 1) Globalization
 - 2) Transition to the knowledge society
 - 3) The public sector development
 - 4) Late modernity, including changed circumstances of the individual's identity formation.
- Challenges for educational institutions

Design of education for the future

A process of identification in the intersection of collaborative knowledge building

- Regardless of development of new learning goals (e.g. creativity), educational systems seem to focus on:
 - Standardization, testing, and benchmarking, all of which points in the direction of the (known and measurable skills and competences)
- Creativity/innovation represent *the new, the unknown and therefore that which is not readily measurable.*
- Learning = a collaborative “process of identification”
- The digital dimension

An emergent model of learning

Domain	Traditional	Emergent
Study	Education	Learning
Locale	School/other institution	Everywhere - work, home etc
Time	Childhood/early adulthood	Lifelong & life-wide
Style	Teacher centred	Learner-driven
Delivery	Face-to-face	Distance & 'e'
Target Group	Universal to max school age -elite	Specific & mass
Curriculum	Expert/professional	Joint production & user generated
Focus	Theory/abstract	Practice
Discipline	Single	Multi-disciplinary
Mode	Learning by rote	Reflective
Form	Instructional	Constructivist
Purpose	Qualification	Action/application

..... about change



Actual problem in relation to learning design

“Parallel to societal changes taking place through reforms (and not revolutions), it still seems widely accepted that education sticks to old, past and traditional types of learning goals, while at the same time stronger attention is given to new and future innovative goals. In relation to objectives of competencies, attention is given to creative, innovative and action-oriented types.” (Østergaard & Sorensen 2011).

Learning competence for the emerging future

Knowledge building in the context of emergent interfaces (fostering creativity, awareness)

Acquisition of skills	<ul style="list-style-type: none">• Learn HOW TO
Acquisition of knowledge	<ul style="list-style-type: none">• Learn ABOUT
Ability to SELECT and APPLY skills and knowledge (in practice contexts)	<ul style="list-style-type: none">• Learn how to CHOOSE and USE
Create new – innovate (in emerging interfaces)	<ul style="list-style-type: none">• Learn to IDENTIFY, CONCEPTUALIZE and IMPLEMENT:<ul style="list-style-type: none">• Meta Learning• Collaboration• Inter/trans-disciplinarity• Identify strategies
Bildung – what guides attitudes	<ul style="list-style-type: none">• (inter-) CULTURAL and ETHICAL values

3.

THE VISION FOR FUTURE
LEARNING DESIGNS – A
THEORETICAL MODEL?

Trans-disciplinarity, intercultural collaboration, learners as prosumers.

Design for dialogic participation in bridge building activities

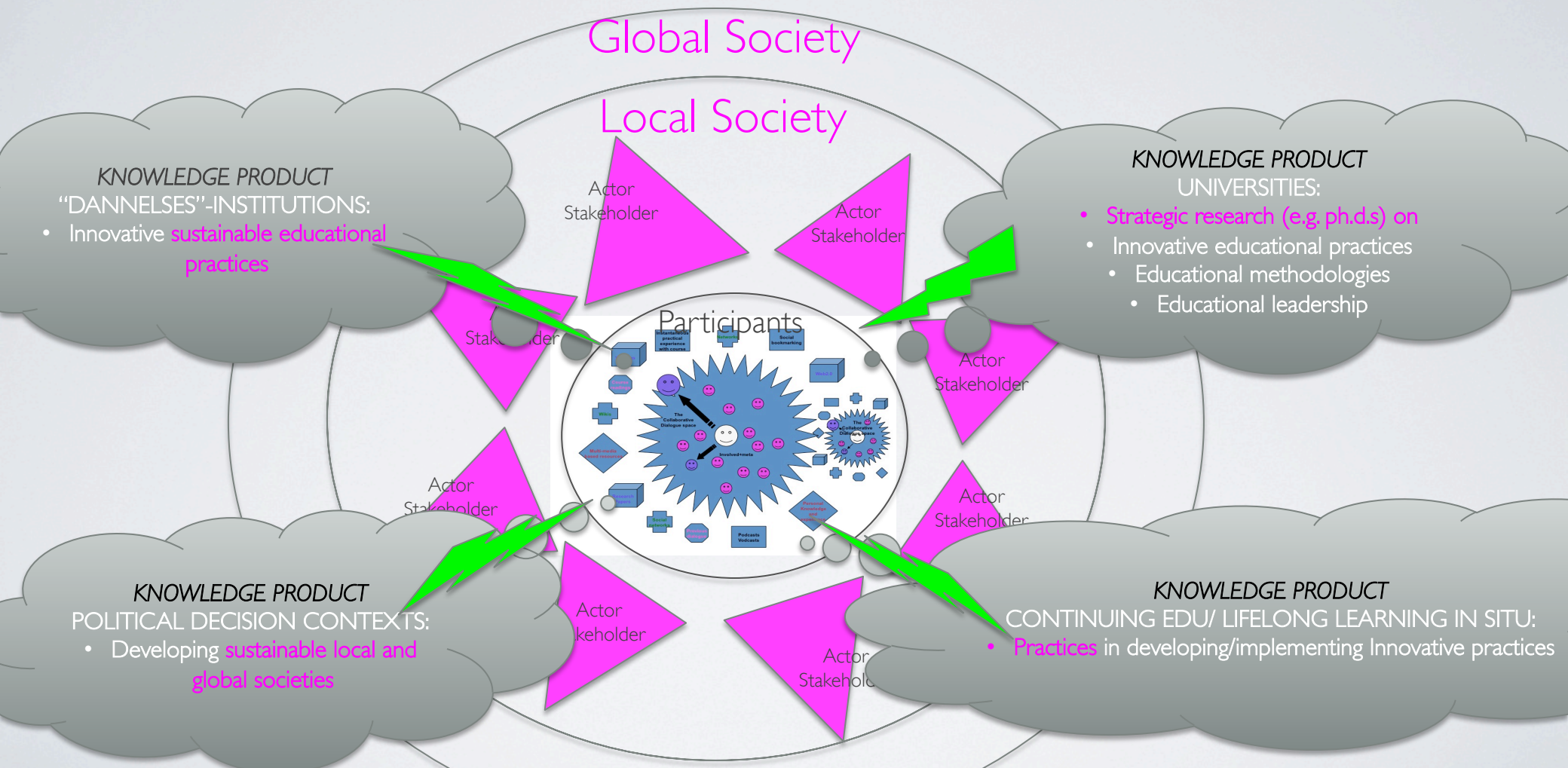
IS

Generic Bridge Building (mode2 + DBR)

Virtual Learning Communities of stakeholders (across disciplines and interests)

Ict Based Dialogic and Collaborative Learning Processes

Targeted towards INNOVATION + DATA GENERATION in CONTEXT



New Educational and Research Paradigms are Needed!

- Newer forms of education through networks do not always take advantages of sustained research
 - the potential contribution of networked learning is severely compromised
- We need to develop new research paradigms that bridge the gap research and education, and between scholarship and practice

Important quality criteria/contribution from model

- Newer forms of education through networks do not always take advantages of sustained research
 - the potential contribution of networked learning is severely compromised
- We need to develop new research paradigms that bridge the gap research and education, and between scholarship and practice
- The model contributes:
 - Practice
 - Prosumers
 - OERs



4.

THE VISION HOW DO WE
ARRANGE FOR LEARNING
IN THE FUTURE?

Experiment mindfully together – teachers, learners
and practice – in dialogue!

Design for the emerging future **while** it is emerging

- Identification, conceptualizing and explicitation of how to learn, mindfully, the new, which emerges in the intersections of the differences, and with significance for others
- Learning strategy
- Methods
- Digital dimension/OER

Principles for learning design

Design for learning:

- Digital dimension
- A matter of designing for learning in the view of well known objects and targets which can be measured in traditional ways AND a matter of designing for the “unpredictable new” - including learners creative and innovative attitudes.
- This “new” has to be validated in the light of those values which are desirable to cultivate intentionally in future society
- The learning context then has to be transparent not only for learners and educators but also for “outcomers” – the individuals or organizations to which the product of innovative learning is intended to add value.
- The context must offer opportunity for unpredictable non-linear learning pathways which among others include access to flexible learning resources.

Openness is a “must”

- When learning processes are unpredictable it is not possible to know in advance which resources are relevant.
 - › This means that access to open and flexible learning resources is necessary in order to create, participate and reify the learning process.
- Openness in relation to the surrounding society, with a possibility for engaging in actual authentic dialogue and in order to align set of values and strategies.
 - › Openness in order to continuously be in contact with different kinds of human networks.
- Openness provides opportunity for timing and intervention
- Openness within and outside the formal learning community invites inter- and trans-disciplinarity.

International Collaboration in Research and Design - of ICT in education

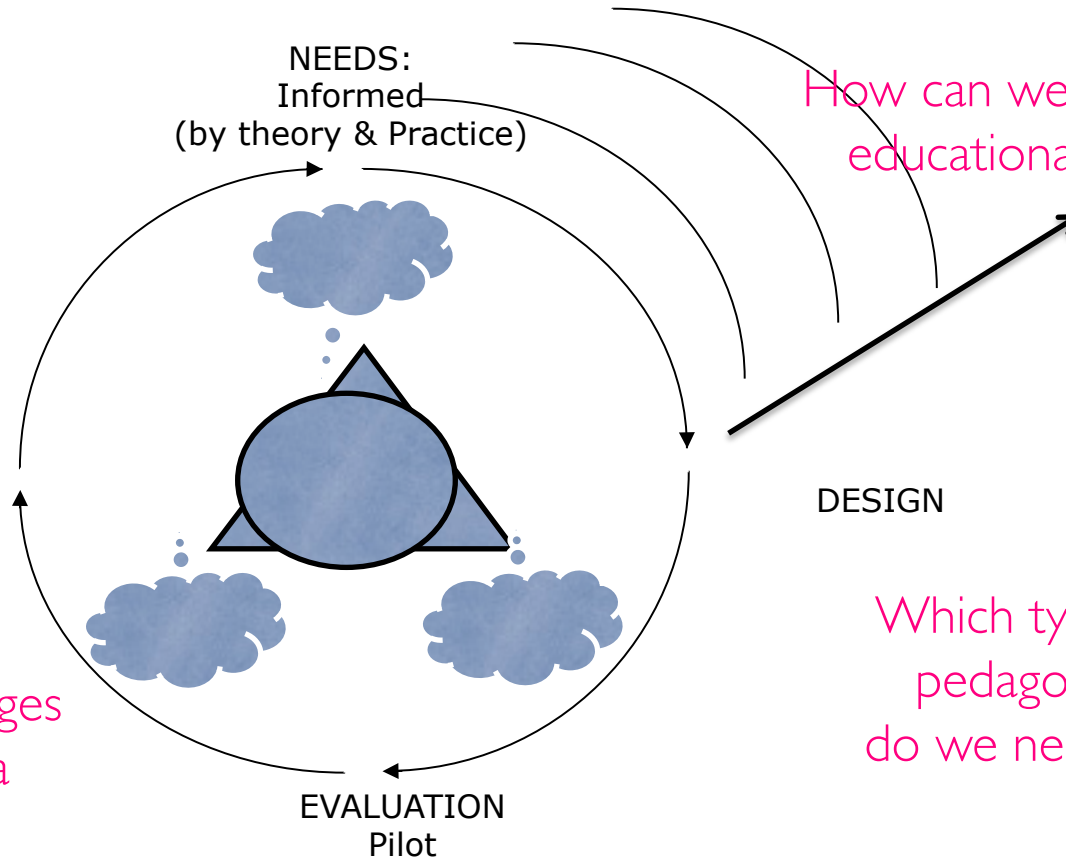
What constitutes quality?

Characteristics of learning processes in the 21st century?

How to understand changes in teaching/learning in a digital world?

How can we employ open educational resources?

Which types of ICT-based pedagogic approaches do we need for the future?



International collaboration (on design, practice and research) in relation to ICT-based global education?

5.

SUGGESTION FOR FUTURE
DESIGNS: PROJECT
"NorDigiLearn"

Trans-disciplinarity, intercultural collaboration, learners as prosumers, design for dialogic participation in bridge building activities – mediated by Open Educational Resources (OERs)

AS

NorDigiLearn (NordForsk project): A Nordic Research Based Generic Concept for Design of Innovative Learning in Digital Learning Contexts

- The objective of the project is to create knowledge for the benefit of qualifying future designs of innovative learning processes in digital learning contexts.
 - It aims at promoting genuine Nordic collaboration by using a collaborative participatory approach, where participants, educators and researchers within different disciplines and fields, through dialogic participation, promote and develop innovation competencies and produce innovation in the educational system.
- New knowledge, new products, new processes, new organization, and new models for cross-disciplinary and trans-disciplinary collaborative competence development that are relevant to the needs of society today and in the future, are produced.
- Digital environments and resources are pertinent as vehicles to build bridges across cultural borders in order to inspire intercultural processes and empower for the purpose of generating new knowledge.
- An intercultural ict-based Nordic research training track on innovative, collaborative pedagogic methodology is being developed (the project process itself being a demonstration of an innovative case).

THE VISION - NORDIGILEARN

INNOVATIVE
LEARNING
Islandian Design

INNOVATIVE
LEARNING
Danish Design

INNOVATIVE
LEARNING
Greenlandian Design

Developing
a sustainable model suitable for
**DESIGNING FOR INNOVATIVE
LEARNING IN WELFARE
EDUCATIONS**

*Bridge building and collaborative
knowledge building
between teachers and researchers*

INNOVATIVE
LEARNING
Swedish Design

INNOVATIVE
LEARNING
Fairy Island Design

INNOVATIVE
LEARNING
Norwegian Design

Thanks for your attention! 😊

If only we could, in a Greek manner, reinvent the dialogue, to try out what one knows and what one doesn't know, then all the pretense and the unnatural, the whole artificial, would disappear.

In the dialogical situation, all the focus on thinking would vanish.

(Kierkegaard)