"What is Creativity – Innovation? Can it be learned?"

Niels Henrik Helms,
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ORIGIN mid 16th cent.: from Latin innovat- 'renewed, altered,' from verb innovare, from in- 'into' + novare 'make new (from novus 'new').

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- Background

- Creativity & Innovation - as a problem in education
- Creativity as a floating designator

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Beyond Understanding?

"On the relation of analytic psychology to poetic art," Carl Jung (1933) leaves open all definitional possibilities: Any reaction to stimulus may be causally explained; but the creative act, which is the absolute antithesis of mere reaction, **will forever elude the human understanding**.(p. 23)

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Definition:

Nonetheless, venturing a general definition of the concept of creativity, a tentative bid could be:

Turning potentials into accepted new form(s).

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Explained

Meaning that we do need to have something (potentials), which should be given form – This form should be new otherwise it might be appropriate but not creative. This form should then again be accepted. Accepted means not necessarily accepted as – but that this very form will be considered.

So..

- In short, we may characterize innovation as turning new forms into accepted new practices; or to put it more simply: innovation is turning creativity into new practice(s).

The Creative Set-Up

- A kind of practice
- How do we understand practice and learing
- How do we understand practice and creativity/innovation

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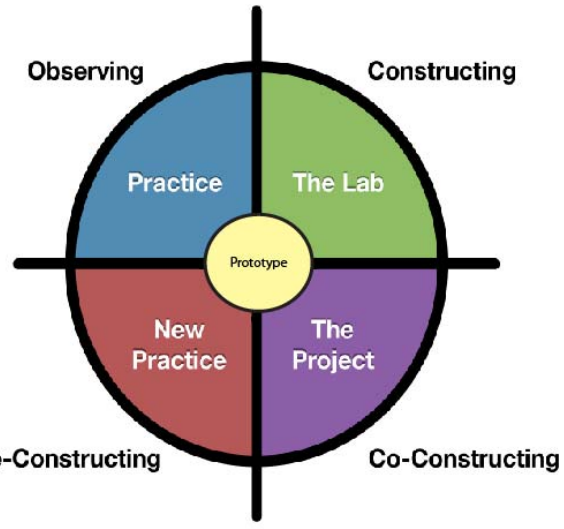
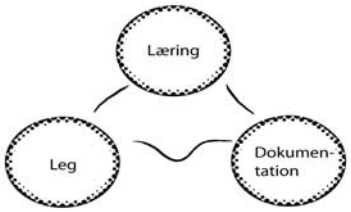


A Case Story



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Case Story

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Case Story

Communities of Practice(COP´s)

Lave and Wenger:

A community knitted together by:
- **Mutual engagement, Joint Enterprise and Shared Repertoire**

Sensemaking thorough:
- **Participating(Socializing) and Reification (stabilizing)**

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Legitimate Peripheral participation

These practices reduce complexities, they move towards sameness

A way of doing sustained by canons of good practice (a normative accountability) (Gherardi 2009)

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Vs Communities of Interest (COI's)

- They are looser, and they are also characterized by difference rather by uniformity. From the outset, the participants are embedded in different domains (or COI's)
- they come together mobilized by the challenge of developing newness - This newness and the challenge, which in the different domains will be interpreted in different ways, generate the need for a conceptualization distinct from that of communities of practice.

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Not Cross Diciplinarity

- **Rather speaking about *multi-disciplinarity,* using differences, rather than cross-disciplinarity, which would mean focusing on sameness.**
- **When actors work together in zones in the intersection of domains in a special creative and innovative context, we need materiality or mediating artefacts.**

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Communities of Interest

Based on Difference

Transforming Complexity

An Ontological Endeavour

Performative Practice

– a Performative Cannon (vs. a normative accountability)

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Selve procesen
Opservationsdag
Spilledag
Ideudviklingsmøde
Videreudvikling af spil + fremstilling af spil
Fremlæggelser

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Concluding -1

- Legitimate Participants
- Authentic Settings
- Authentic Evaluation
- Empowerment through Competence

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Innovation and Creativity is learned through

Participatation

Authentic Settings

Constraints – The Design

Outcome:

A product or response will judged as creative to the extent that (a) it is both anovel or valuable response to the task at hand, and (b) the task is heuristic rather than algortimic (Amabile p. 35)

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In this Project

- **The participants were working in DESIGN MODE**
- **When in design mode, we are concerned with the usefulness, adequacy, improvability, and developmental potential of ideas – THIS ONLY HAPPENS TO A LIMITED DEGREE IN EDUCATION**

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VS. Belief Mode

- **In education belief mode is on the agenda, we are concerned with what we and other people believe or ought to believe**
- **SCHOOLS/EDUCATION IS VERY GOOD AT THIS**
- **EDUCATION IN THE KNOWLEDGE SOCIETY MUST WORK IN DUAL MODE – GENERATING DUAL COMPETENCIES**

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Into the Heart of Education

” Activity in the design mode is not absent from schools. It is to be found in crafts, dramatic productions, creative writing, and the increasingly ubiquitous “project.” In many of these the focus is on creating artifacts, but the artifacts are not *conceptual* artifacts..”

“They must bring the design mode into the heart of the educational program instead of relegating it to extracurricular or peripheral activities” (Bereiter and Scardamalia 2003)

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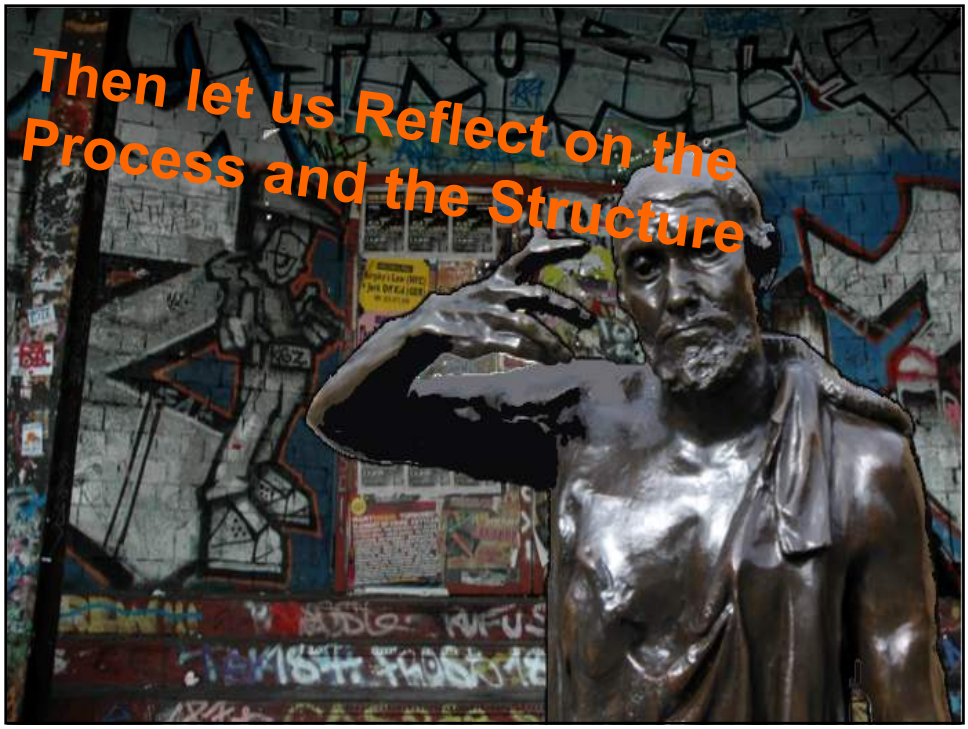
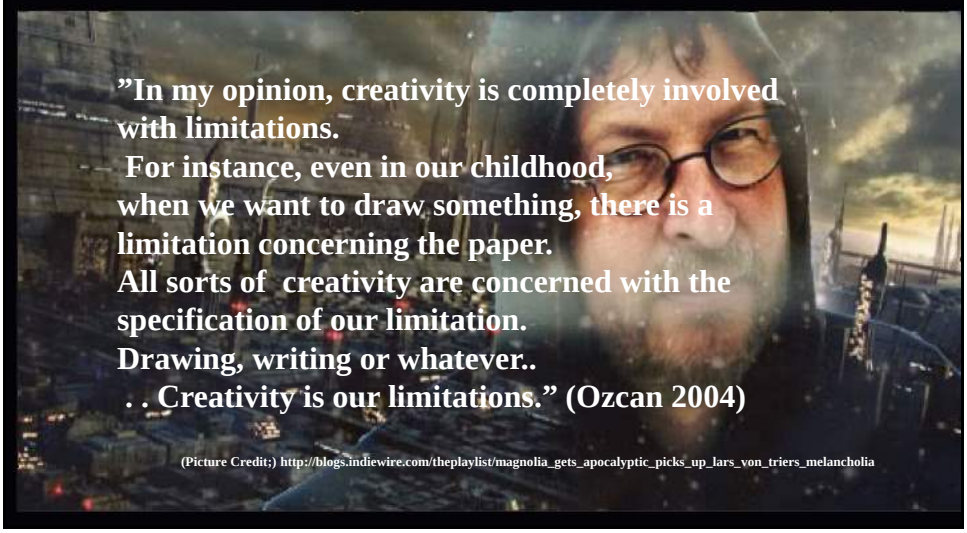


The Creative Genious?



- Mastery (ANDERS K ERICSSON)
- Estrangement - Biosociation (Koestler)
- Programme (Idiosyncrasy vs. isomorphic pressure)(Alvarez2005)
- Double double competence (Helms)

Tentative Components

- Ålen and von Trier Dogme/Zentropa
- René Redzepi and Claus Meyer :NOMA
- Mark Elliot Zuckerberg and Sean Parker :Face Book
- Olafur Eliasson and Einar Thorsteinn : Eliasson Studio

- Mastering
- The estrangement
- The programme
- The organisation
- Double competencies

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How does these four set ups avoid the isomorphic pressure

- Mastering
- The estrangement
- The programme
- The organisation
- Double competencies

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Different Contexts for Learning

- **Different Practiceses: Emphasize rules, values, criteria for evaluation – Contextmarkers**

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A School is a School is a School

- **Creating distinction to other contexts**
- **Developing a language for reflection on own practice through meeting otherness**
- **Immersion: Enabling non-reflection: doing, doing, doing – generating mastery**
- **Changing Contexts: Re-doing**

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Concluding

- Developing a living curriculum – challenging and directing and opening up for learning
- Change between different contexts for learning
- Empowering learners as authentic knowledge workers
- Change between belief mode and design mode
- Multi Disciplinarity
- Evaluation where scholastic as well as non-scholastc dimensions are involved

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Thank You:
www.knowledgelab.sdu.dk
http://www.slideshare.net/helms

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