DIRECTEDNESS AS ANALYTICAL CONCEPT

*Technology in
Teacher Education*

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TECHNUCATION

› Studying Technological Literacy and New Employee Driven Innovation through Education – Led by professor Cathrine Hasse

› Period: 2011-2015

› www.technucation.dk/en

› PhD project is about technology in Teacher Education

BACKGROUND

› Political vision for more digital technology on all educational levels – especially primary & secondary school

› Digital technology as a tool for enhanced learning and preparation for the future ('21st century skills').

› Technology is not used adequately in teacher education *(e.g. Danish Technological Institute, 2012)*

› Pre-service teachers are not prepare on teaching with digital technologies

RESEARCH QUESTIONS

› What are the differences in directedness in respect to (primarily digital) technology on a societal, institutional and social level in the teaching situations in teacher education in Denmark?

› How does the individual teacher's different directedness'es impact technology as a mediating artefact?

ETHNOGRAPHICAL STUDY

› 6 professors, 6 classes/groups of students
› Participant observations of teaching/lectures in teacher education (1st semester)
› Interviews with both professors and students (2nd semester)
› Participant observations in student Facebook groups

› Objective: to see how technology is integrated and used in the teaching in teacher education.

HEDEGAARDS ANALYTICAL MODEL

Structure	Process	Dynamic
Society	Tradition	Conditions
Institution	Practice	Values/motives
Activity setting	Social situation	Motivation
Person	Activity	Motives/engagement/intentions
Human biology	Neurophysiologic processes	Primary needs/drives

COLE – CONCENTRIC CIRCLES
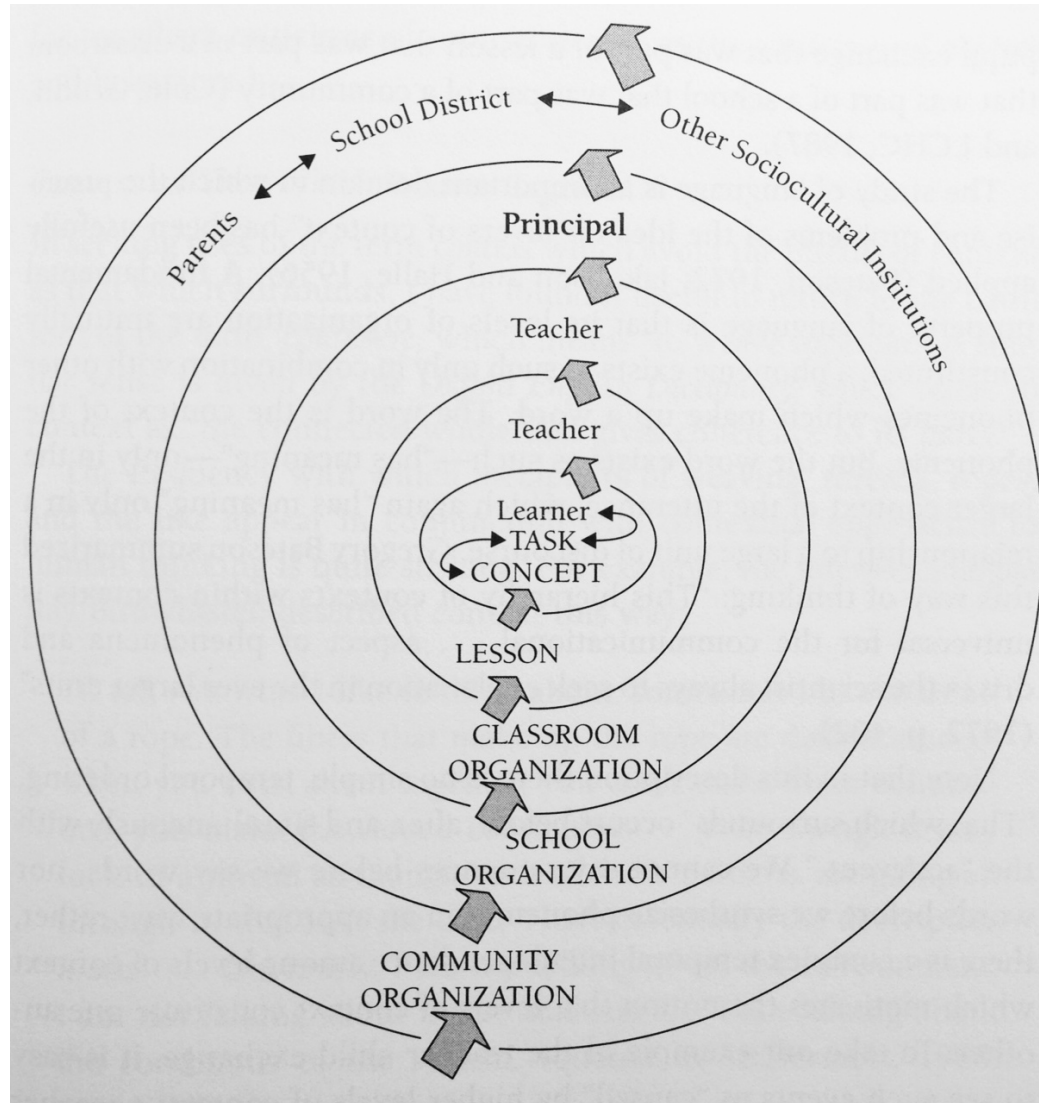
ANALYTICAL MODEL FOR DISSERTATION
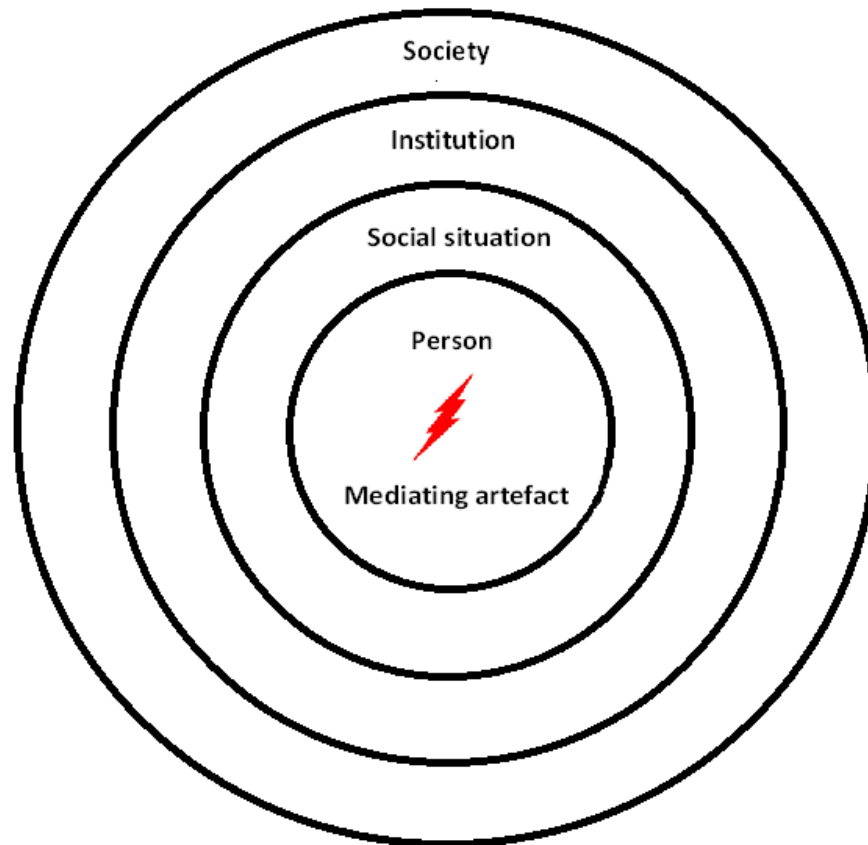
OBJECT – LEONT'EV

› *"The basic, constituent feature of activity is that it has an object. In fact, the very concept of activity (doing, Tätigkeit) implies the concept of the object of activity"* (Leont'ev A. N., 1977, p. 181-182).

MOTIVE – LEONT'EV

› *"According to the terminology I have proposed, the object of an activity is its true motive. It is understood that the motive may be either material or ideal, either present in perception or exclusively in the imagination or in thought. The main thing is that behind activity there should always be a need, that it should always answer one need or another"* *(Leont'ev A. N., 1978, p. 62).*

MOTIVE - HEDEGAARD

› *"Motives develop through common cultural practice..//.. Motives are related to the person's goals that transcend different situations, and can be related to imagined activities" (Hedegaard, 1999, s. 45).*

DIRECTEDNESS (IN DANISH: RETTETHED)

› How can we understand the teacher's choices and orientations in the activity and activity setting?

› Needed an analytical concept – based on Leont'ev and Hedegaards motive/object → *directedness*

› *Directedness* can analytically coin the individual's (or societal or institutional) intentions, motives and orientation toward the individual (or collective) object.

Collective object: to educate the best teacher
Differences in application

DIRECTEDNESS ON SOCIETAL AND INSTITUTIONAL LEVEL
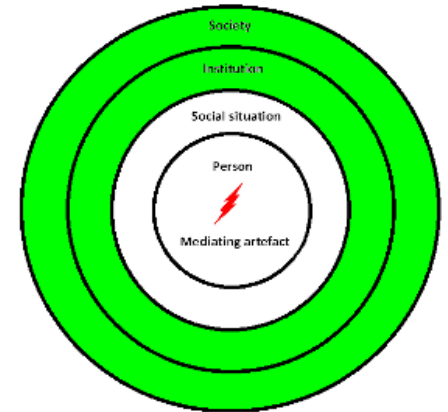
› Societal directedness → digital technology to support subject content and improve learning

› Teacher education (institution) → digital technology as a sign of modernity and competitive object
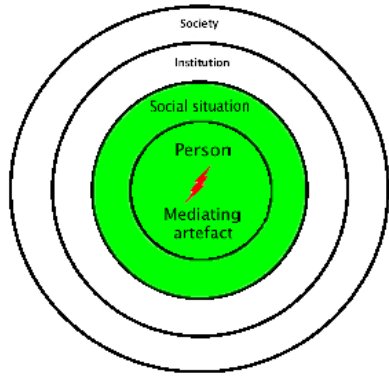
DIRECTEDNESS ON SOCIAL SITUATION AND PERSON LEVEL

DIRECTEDNESS AT OWN TEACHING

Program og mål:

Velkomst og gennemgang af dagens program

Hvor slap vi hinanden sidst? Hvad skrev vi i semesterevalueringen?

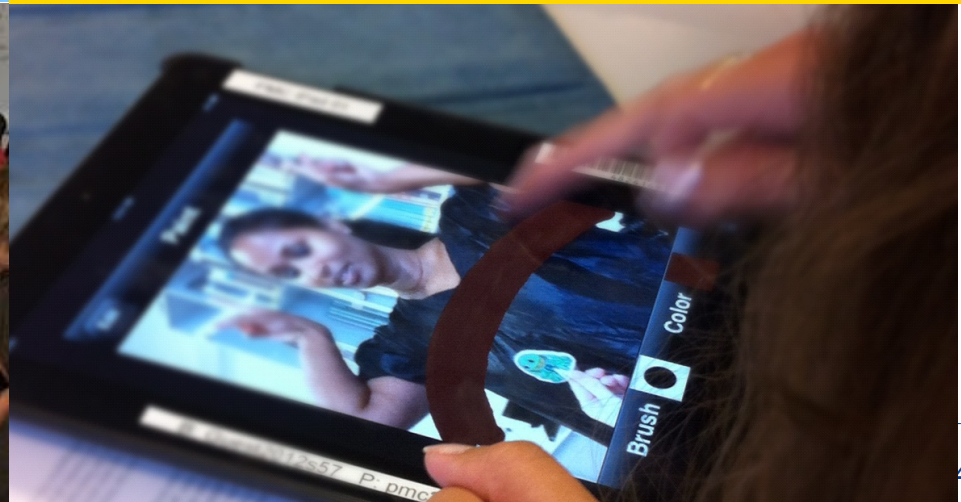**Økologi** - hvad ved vi, og hvad skal vi vide?

(1) Tavlestafet med begreber

(2) Opgave med begrebskort

(3) Udvælgelse af 6 figurer repræsentative fra udleverede materiale - diskuter figuren i gruppen og lad alle komme til orde :-) Lav 2 screencast ud fra modellen som I tidligere har modtaget.

Midtvejsopsamling

Bonus: Se en fed alge - ●●●● servere adlibitum oplevelse

› Program
› Lesson flow
› Time
› Teacher directed
› Reaching learning goals
› Control

Digital technology is used in ways that support this directedness and not used when it can't support it.

TECHNOLOGY AS BOTH TOOL AND SIGN

- mediating the modern professor (sign)
- mediating control and progression (tool & sign)
- only used when supporting the teacher's directedness at e.g. core subject, desire to learn,