ENGAGING LEARNING ENVIRONMENTS
The recent efforts to reform Finnish schools

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FINNISH TEACHER TRAINING AT THE UNIVERSITY LEVEL

The training of subject matter teachers has been conducted at the university level since the early 19th century (Master's degree plus pedagogical studies)

The training of class teachers (primary) was transferred over to be carried out by universities in the early 1970s (Master's degree)

The training of kindergarten teachers in universities began in 1995 (BA, also MA)

SOME BACKGROUND

The level of teacher education in Finland is highest in the world – Master's degree is the requirement

Statistically, more difficult to get in to class teacher education programs (elementary school) than to medical or law school

Elementary teachers stay with the same children for several years – they have 13 subjects to master, even they specialise in two

Music, arts, handicraft, domestic skills and sports are all included in the study plans

Autonomous teachers, short school days, long holidays, hardly any standardised tests until the age of 18

School starts at the age of 7 (preschool between 3-6 yrs)

Reform in national curricula in 2016 and also in teacher education

HOW TO CREATE NEW CULTURES FOR STUDY AND ACADEMIC WORK?

VS

Work life calls for collaborative knowledge creation

- We need creative and active citizens, able to solve fuzzy problems in teams
- Physical spaces, social settings and technologies either hinder or scaffold our activities
- School engagement is declining drastically - to be reflected in work engagement
- Are we alienating our youth with our old practices?

The Finnish 21st Century Skills

1) Thinking skills and learning to learn
2) Cultural competencies, communications skills and self-expression
3) Taking care of oneself and everyday skills
4) Multiple literacies
5) ICT competencies
6) Work life skills and entrepreneurship

Basis for National Core Curriculum 2016 to be implemented in school-specific curricula locally.

How to prevent boredom and burn out and support the new generation?

In Japan, there are already 630 000 Hikikomori youth who refuse to come out from their rooms!

What is engagement?

Emotionally - feeling energetic, absorbed, time flies
Cognitively - making meaning, being interested, focused
Acting in a way that shows keen involvement

What is disengagement?

Exhaustion - feeling tired, lack of energy
Cynicism - lack of meaning, alienated
Inadequacy - lack of self-efficacy, experience of failure

Engagement of Finnish 12 yr. olds

These results thus revealed that almost half (46%) of the elementary students felt some degree of cynicism towards school, thereby supporting our gap hypothesis: **these groups of cynical students reported that they would be more engaged at school if socio-digital technologies were used at school.** These results indicate that one way to promote the engagement of cynical students might be to offer them the possibility to make greater use of socio-digital technologies at school (Salmela-Aro et al, 2016, link below)

http://www.tandfonline.com/doi/full/10.1080/17405629.2015.1107542


THE DIGITAL CHALLENGE

Knowledge Practices of ”Digital Natives” (Prensky, 2001; Hakkarainen et al., 2015)

Multi-tasking

Reading from screen

Chatting

Gaming

Socio-digital networking

Constantly online

Dependent on mobile devices

Generation Clash?

Baby Boomers

Generation Y

Generation X

Digital Natives Z -

The socio-digital revolution

Socio-digital technologies:

- **Refer to recently emerged integrated systems of novel technological tools, social media, and the Internet that enable constant and intensive online-interaction with information, people, and artefacts**

Socio-digital participation:

- **Informal, socio-digitally mediated participatory practices as socio-digital participation**

Link to the report for EU Parliament kirstilonka.fi/publications


THE PEDAGOGICAL CHALLENGE

SOME OF OUR RECENT FINDINGS (TO BE PUBLISHED IN 2017)

- According to Finnish 6th graders in Helsinki area, their teachers were the main source of school engagement. The pupils appreciated their great work in any other sense, expect the readiness to promote their *digital engagement* (Halonen et al., 2017)

- Teachers' ideas of learning were related to their ideas of what to promote at school. Those teachers whose main goal was to teach certain facts, did not find critical thinking or creativity relevant at all! Their ideas of assessment were also very traditional. Such teachers were were almost 70% of those Helsinki area subject matter teachers who even participated in our studies (Lonka et al., 2016).

- In order to take a digital leap, we first need to take a pedagogical leap?

How to change the culture of schools, universities and workplaces?

Transform

- Physical spaces
- Social practices
- Virtual ways of interacting
- Pedagogical models
- Shared mental models of learning
- Technological solutions and software

From monological culture towards collaborative knowledge creation

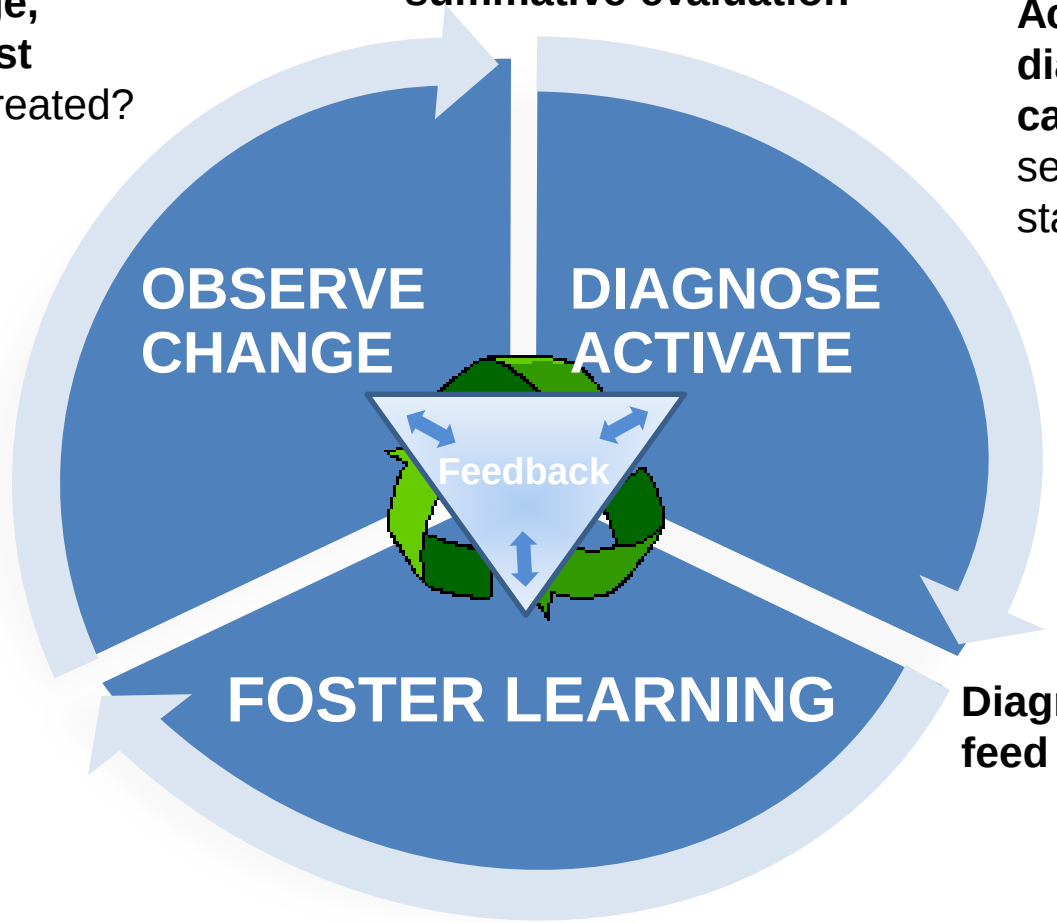
Engaging learning model

(Lonka & Ahola, 1995; Lonka, 2012; Lonka & Ketonen, 2012; Lonka, 2015)

The goal,
summative evaluation

Assessing change,
deepening interest
– what new was created?
– what should be developed?

Activating and diagnosing,
catching interest,
setting context and goals, starting the process.



Diagnostic evaluation, feed forward

Diagnostic evaluation, feed forward

Fostering the learning process and reflective thinking, **maintaining interest**, (face to face, P2P, virtually etc.), creating new knowledge or new practices

Phenomenon-based learning?

- Extensive form of problem-, project-, or inquiry-based learning
- Starts from a large phenomenon, such as ’Life and Death’ or ’Peace and War’
- Integrates topics across disciplines
- Humanities, arts, science, technology
- STEAM – science, technology, engineering, arts and mathematics

Engaging Learning Environment - Minerva Plaza (Lonka, 2012)

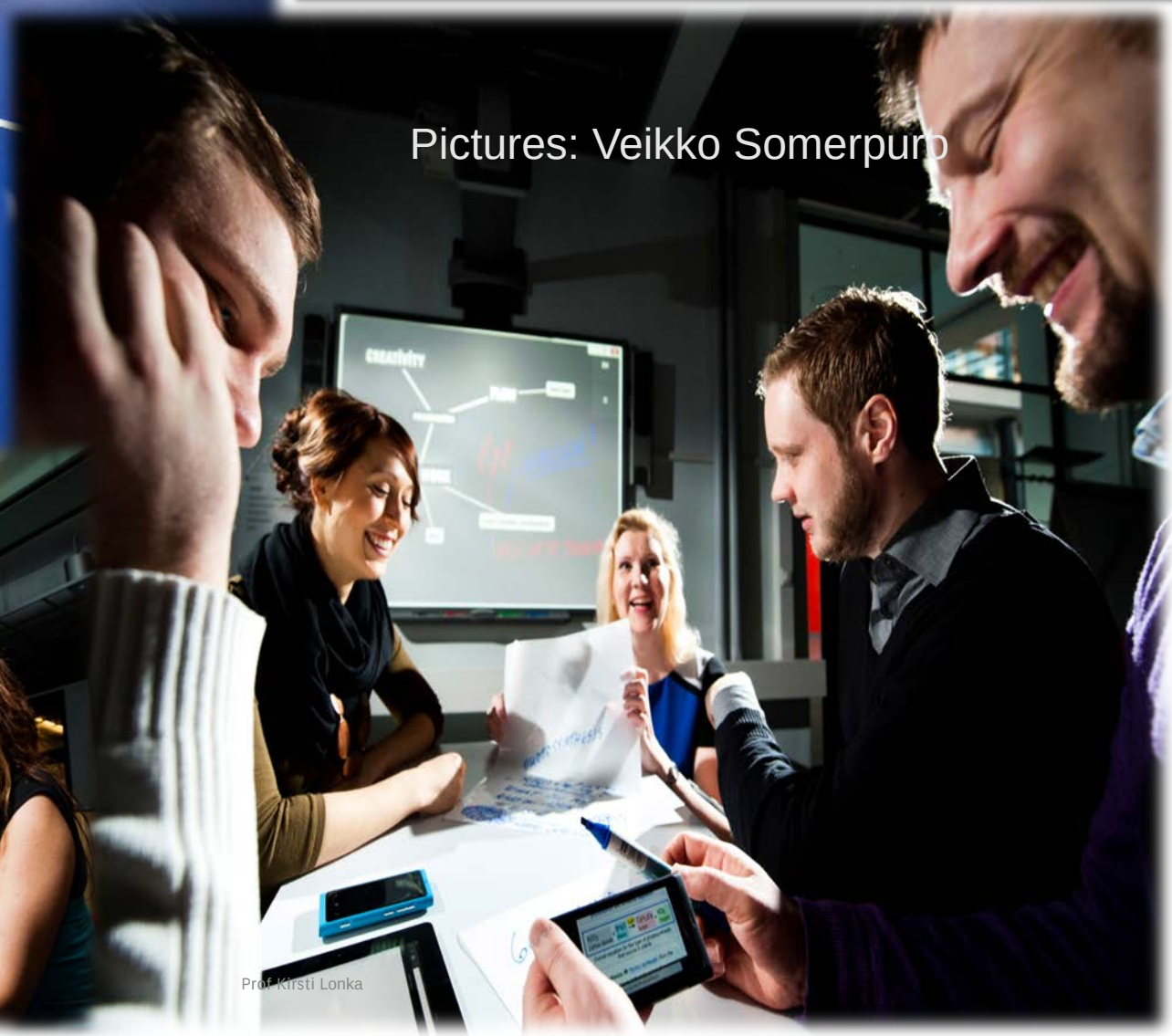
http://vimeo.com/60818003

Video by
Mikko.I.Halonen

ENGAGING LEARNING ENVIRONMENT

FOR FUTURE TEACHERS

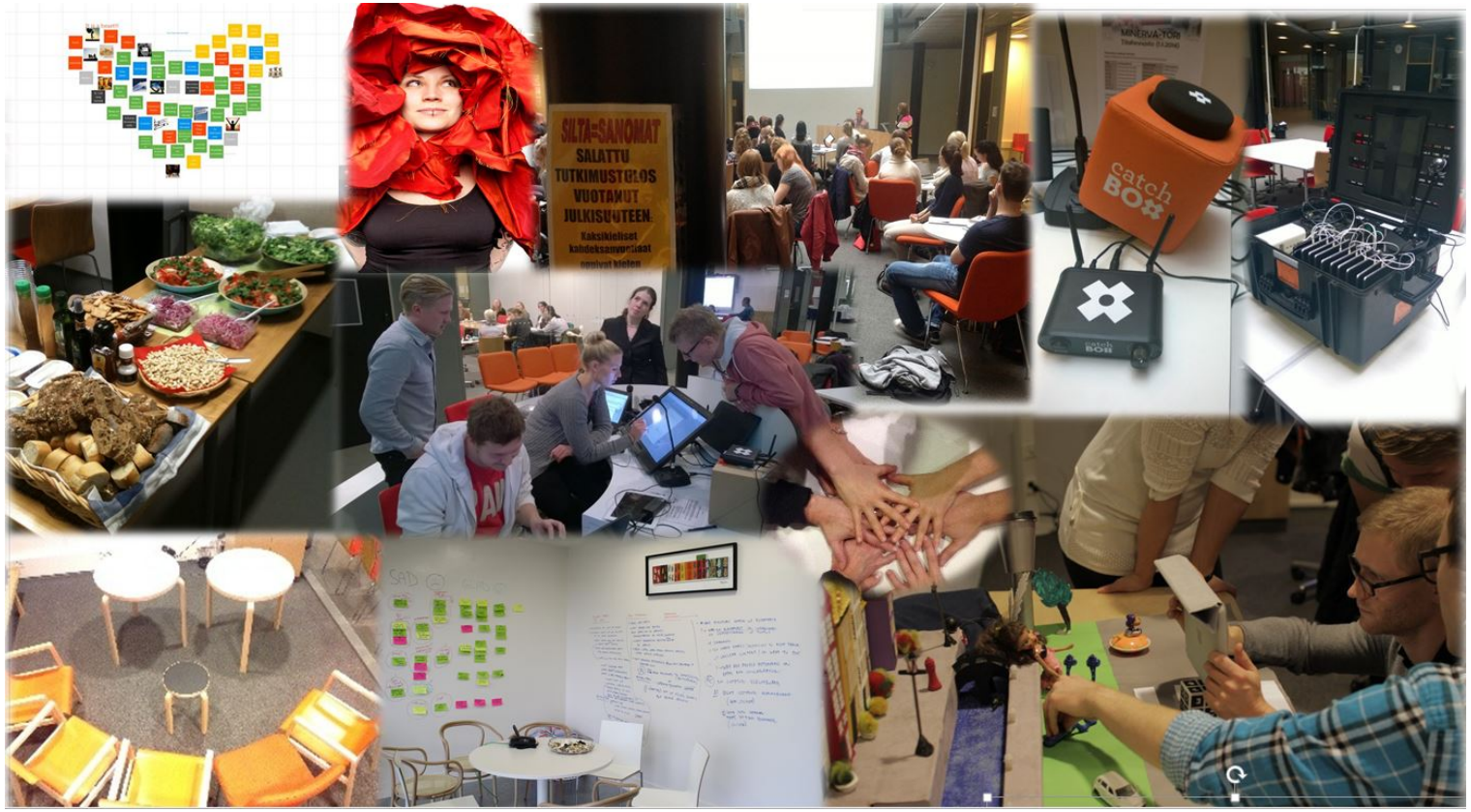
Collaborative knowledge creation by using Flinga.fi
Bring your own device!



Pictures: Veikko Somerpuro

Minerva Learning Spaces in 2016

The importance of play, handicraft, sports, music and art – fostering well-being, cognitive development and socio-emotional skills




WE ALREADY DESIGNED
ENGAGING LEARNING
ENVIRONMENTS

BUT THE SOLUTIONS NEED NOT TO BE EXPENSIVE...

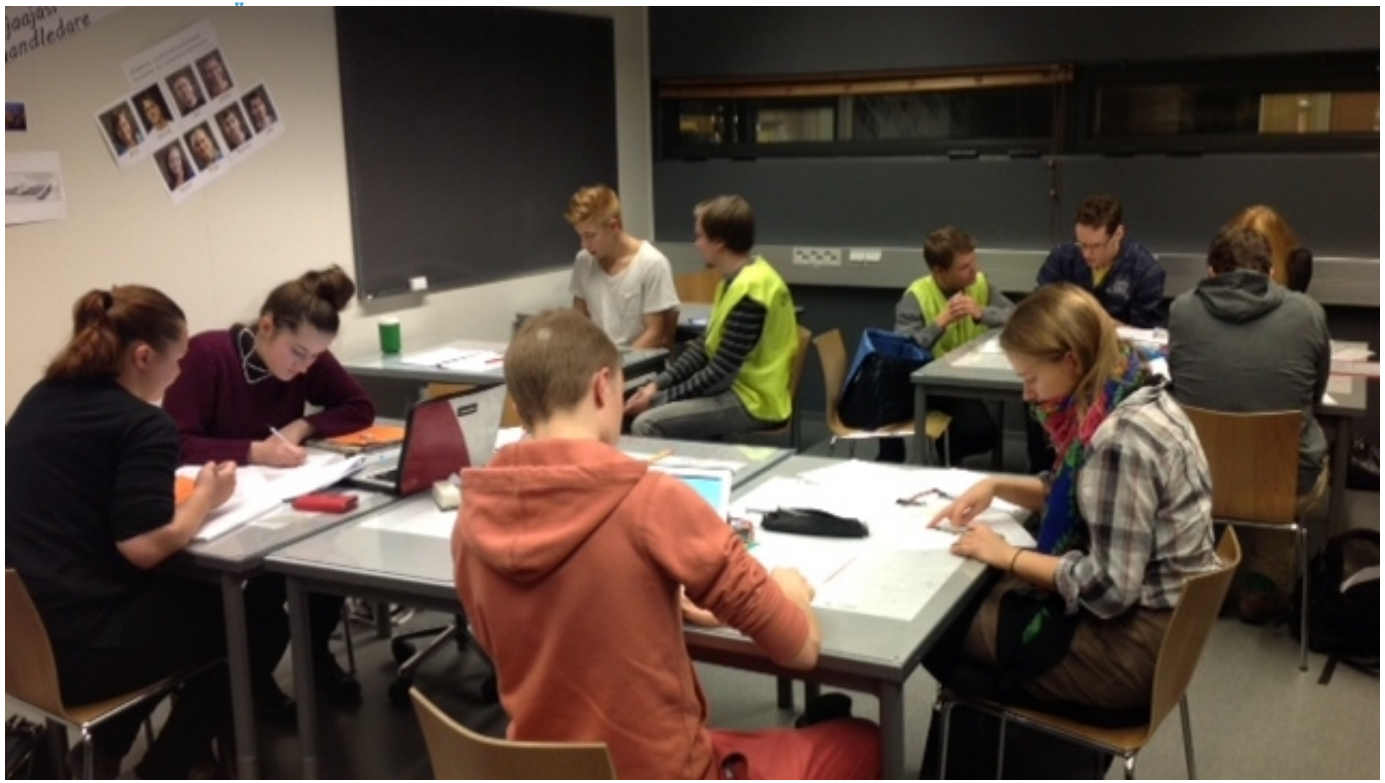
Flexible places for learning project (2015-2016) IN ESPOO, FINLAND

BEFORE

AFTER

Prof Kirsti Lonka

Flipped learning in Dept of Mathematics, University of Helsinki



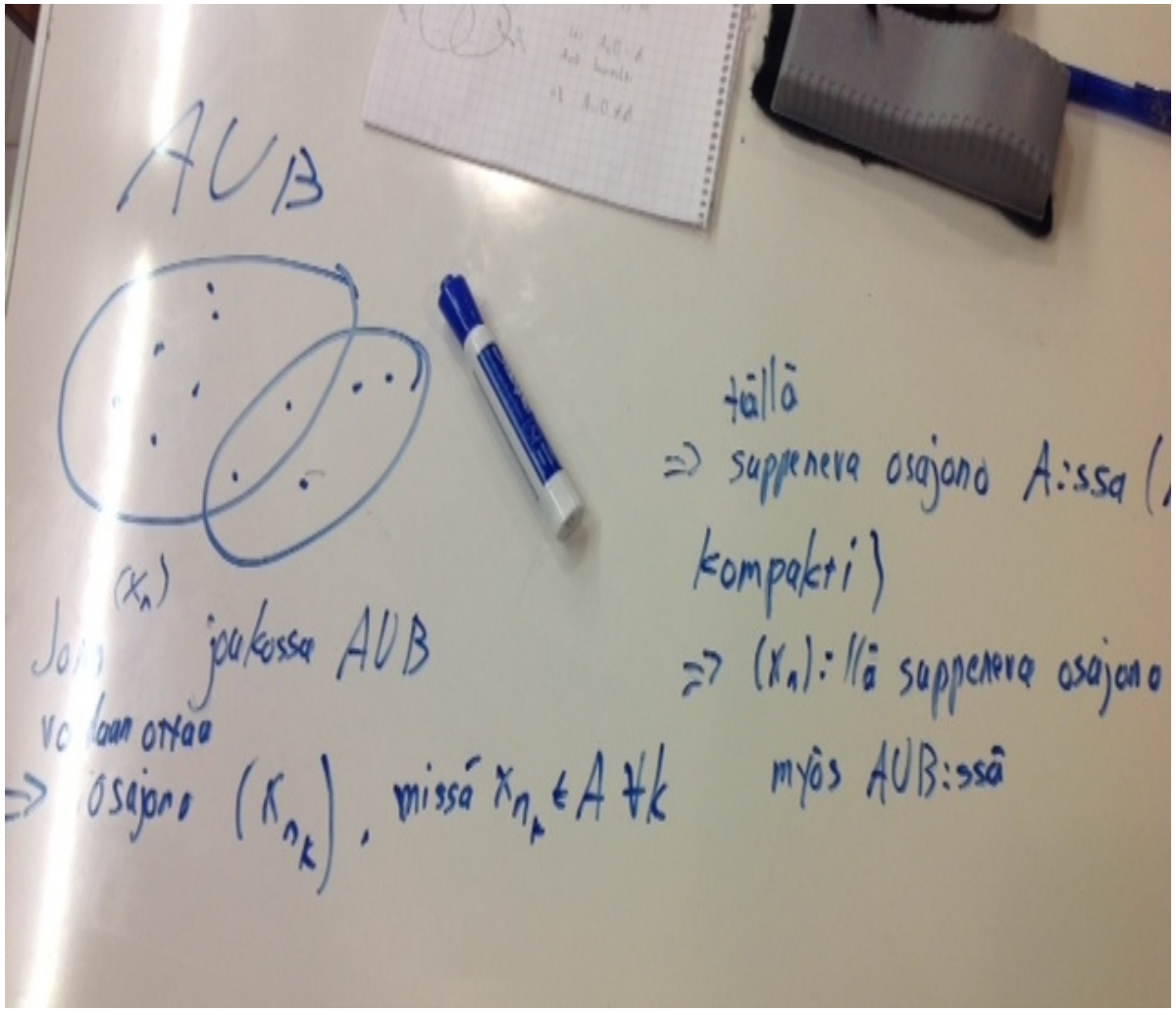
Theory is learned from the net, but students come to solve problems together. Freshmen tutored by advanced students

Tutoring is available.

NO HIGH-TECH SOLUTION ☺

All walls and tables of the corridors are painted so that you may draw on them.

Advanced students study on corridoors.



OUR CHALLENGES ARE NOT LOCAL, BUT GLOBAL!

- The same issues are discussed world wide
- There is a gap between schools and outside world and it is widening
- Technologies, digitalisation and automatisation are changing societies and setting new demands for learning
- Intercultural issues are not very well handled – we should learn from Canada
- The main problems have to do with reforming teacher education and continuing professional development to promote change

Kirsti Lonka became Board Member of NTUST (National Taiwan University of Science and Technology)

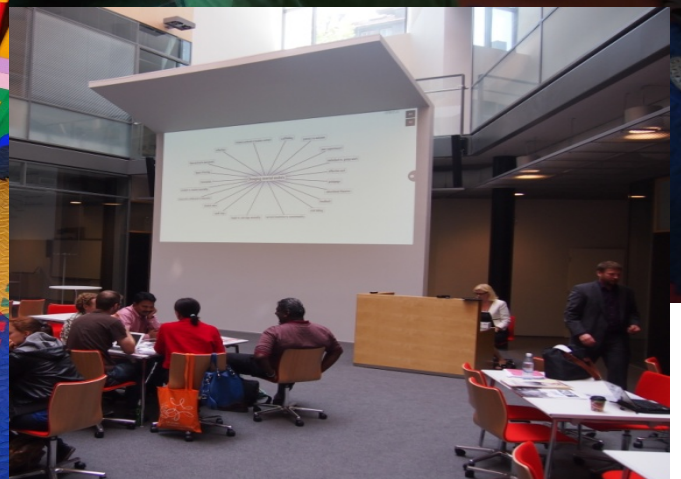
Graduate Institute of Digital Learning and Education in 2015

台科大數位學習與教育研究所國際諮詢委員

Prof Kirsti Lonka


公 佈 欄
NTUST

MOOV – How unemployed youth learn to design web sites in Orange Farm, South Africa




"Be the change you
wish to see in the
world"
Mahatma Gandi

Sustainable Education Design

Pedagogy

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Koulutus ja työnohjaus
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Elementit-E Oy

UNIVERSITY OF HELSINKI
FACULTY OF BEHAVIOURAL SCIENCES

MIND THE GAP
Between digital natives and educational practices

Wired Minds

blogs.helsinki.fi/mindthegap

facebook.com/mindthegaptutkimus

http://vimeo.com/hufbs/timelapse

Kirstilonka.fi/publications

www.wiredminds.fi/projects/

facebook.com/wiredminds hub

twitter.com/wiredmindshub @kirstilonka #mindga

www.rym.fi

European Parliament (Ed.). 2015. *Innovative Schools: Teaching & Learning in the Digital Era – Workshop Documentation*. Brussels: European Parliament. Pages 5-46.

Slides on page 73.

Link on kirstilonka.fi/publications:

http://www.europarl.europa.eu/RegData/etudes/STUD/2015/563389/IPOL_STU%282015%29563389_EN.pd

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Some latest 2016 publications

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