



Aalto University

Learning and Teaching in Higher Education (5 cr)

Approach to teaching and expertise

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Contact session 2, 21.3.2018



Photo: Maire Syrjäkari, 2014

Schedule

9.00-11.15	Excerpts from learning logs Learning centred culture
11.15-12.15	Lunch
12.15 – 15.15	Research of your own field Expertise
15.15 - 15.30	For the next session

Timeline: Learning and Teaching in Higher Education (5 cr)

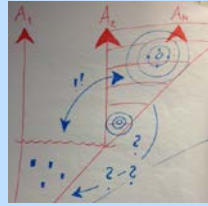


Pre-assignment
DL 1.3.2018



CS1: 7.3.2018
University pedagogy and learning theories

Log 1
DL 12.3.



CS2: 21.3.2018
Approach to teaching and expertise

Log 2
DL 27.3.



CS3: 12.4.2018
Reflection, expertise and development

Log 3
DL 16.4.



CS4: 4.5.2018
Quality of teaching

Log 4
DL 9.5.

Reading tasks (3)
DL 20.3.

Reading tasks (2)
DL 11.4.

Reading tasks (2)
DL 3.5.2018

Essay:
Approach to learning and teaching

Essay:
version 1.0
DL 3.4.

Essay:
Peer feedback
DL 11.4.

Essay:
version 2.0
DL 20.4.

Essay:
Facilitator feedback
DL 3.5.

Essay:
Final version
DL 23.5.2018

Cards - your expectations – how would you like to develop as a teacher in this course

1. Take one card: a card that represents your expectations how would you like to develop as a teacher in this course (5 min)
2. IN GROUPS: Tell about your expectations to your peers (2 min/person).



Photo: Maire Syrjäkari, 2016

Learning logs



Issues which were most mentioned in the logs

- Discussion about learning theories -> started or enhanced individual processes with all participants, in terms of your discipline, teaching experience, prior learning experiences etc.
- Snowball method was considered useful/good
- Research on one's own teaching gave new insights
- Fruitful discussions, sharing experiences with colleagues from all schools
- How to be able to apply new thoughts and ideas?
- Group dynamics and cohesion (individually experienced)
- How same elements + issues came up in spite of different disciplines and backgrounds

Excerpts

”one of the most interesting part of the session was sharing experiences with colleagues from other schools at Aalto..”

”the discussion of the types of approaches to learning and teaching made me more analytically analyze my own teaching and lecturing style”

” In terms of group dynamics, it always takes me some time to feel relaxed with other people..”

” I think using the snow ball effect-method with the topic was really nice because it enabled reflection as well as demonstrated the many factors involved in the learning and teaching process”

”I read the pre-reading material attentively but still I find it difficult to comprehend some of the learning theories”

Group work: What is learning centred culture and how could we promote it?

21.3.2018

Gallery walk: part 1

- Individual thinking about the theme (10 min)
- Working in a group of 5 people (20 min)
 - *Discuss your theme – and try to answer the questions*
 - *Make a poster about the given theme*
 - *Be prepared to present the poster to a new group – everyone in the group will present the theme*



Photo: Maire Syrjäkari 2012

Learning centred culture?

Discuss, consider and illustrate/write your ideas on a poster, especially with concrete actions:

Group 1:

- What is learning centred culture?
- What kind of teaching activities support and promote learning centred culture in your discipline?

Group 2:

- What is learning centred culture?
- How could “Degree programme manager” or “Professor in charge of the major” support and promote learning centred culture?

Learning centred culture?

Group 3:

- What is learning centred culture?
- How a student could affect learning centred culture?

Group 4:

- What is learning centred culture?
- How could a university/department support and promote learning centred culture?

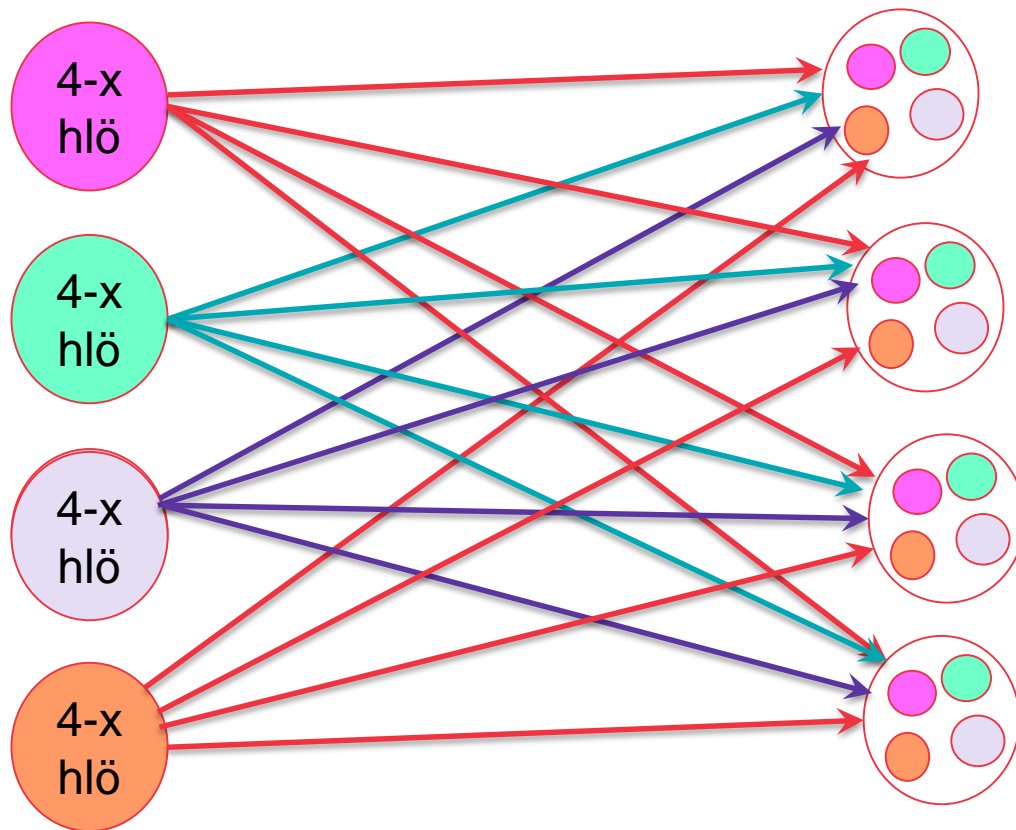
Time: 20-30 min

Gallery walk, part 2

- Attach the posters on the wall.
- We form new groups
- A group will go from poster to poster (10 min/poster). The teachers will signal when time is up
- The poster is presented by a member of the group who has been producing it. Others may comment / add ideas.



Näyttelykävely käytännössä



Lunch break

Education research in your own field of education

- Task: Choose one of the journals and browse papers published in 2014-2017
- Select *one or two* different types of papers, which you find interesting
- Write a short (500-1 000 words) of the papers where you discuss
 - Goals / research questions of the paper
 - Motivation for the work. What is the problem addressed?
 - What data is collected and how it is analysed, if there is an empirical part in the work?
 - Are there any learning theories / models in the background?
 - What are the central results and conclusions?
 - How can the results be applied in teaching practice?

Expertise

Why to explore expertise?

Universities must

- promote free research and scientific and artistic education,
- provide higher education based on research,
- and **educate students to serve their country and humanity.**
- In carrying out this mission, universities must interact with the surrounding society and strengthen the impact of research findings and artistic activities on society.

(Ministry of Education and Culture)

- We need knowledge and skills to support our students to become experts (teaching and guiding).
- Besides our expertise within the field, we need to develop our expertise in teaching and learning (pedagogical expertise)
- We should also develop discipline-based learning and teaching.

Studies leading to the second-cycle university degree (master degree) must provide the student with: *

- good **overall knowledge of the major subject** or a corresponding entity and conversance with the fundamentals of the minor subject or good knowledge of the advanced studies included in the degree programme;
- knowledge and skills needed to **apply scientific knowledge and scientific methods** or knowledge and skills needed for independent and demanding artistic work;
- knowledge and skills needed for **independently operating as an expert and developer** of the field;
- knowledge and **skills needed for scientific or artistic postgraduate education**;
- and good **language and communication skills**.

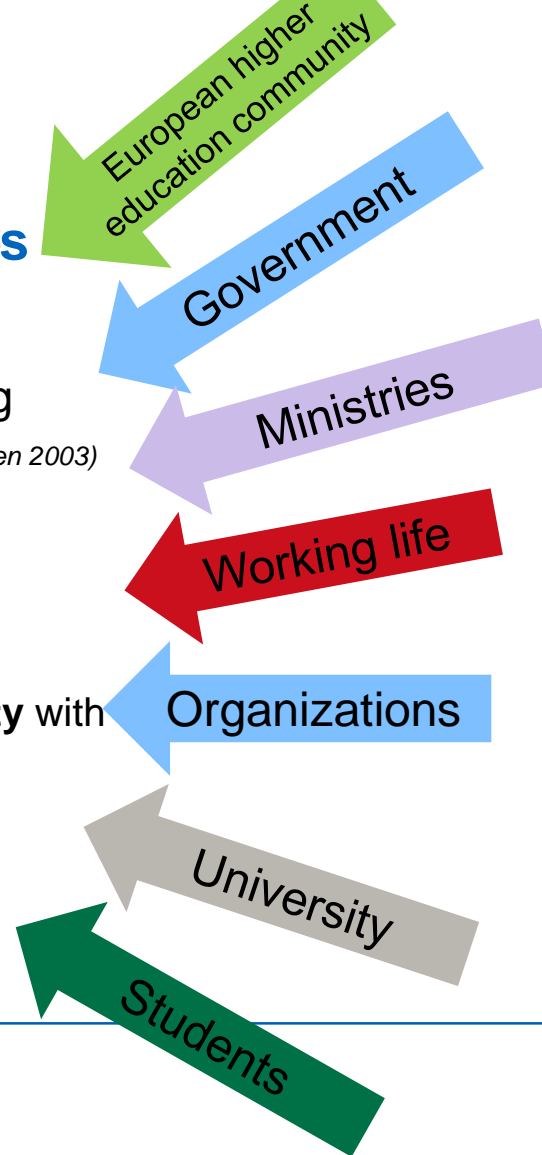
The education is **based on research or artistic activity and professional practices** in the field.

What to teach to our future experts? -We are facing many challenges

University has the most challenging duty in the education sector. *(Karjalainen 2003)*

“The universities must arrange their activities so as to assure a high international standard in research, education and teaching in conformity with ethical principles and good scientific practices.”

UNIVERSITIES ACT 558/2009

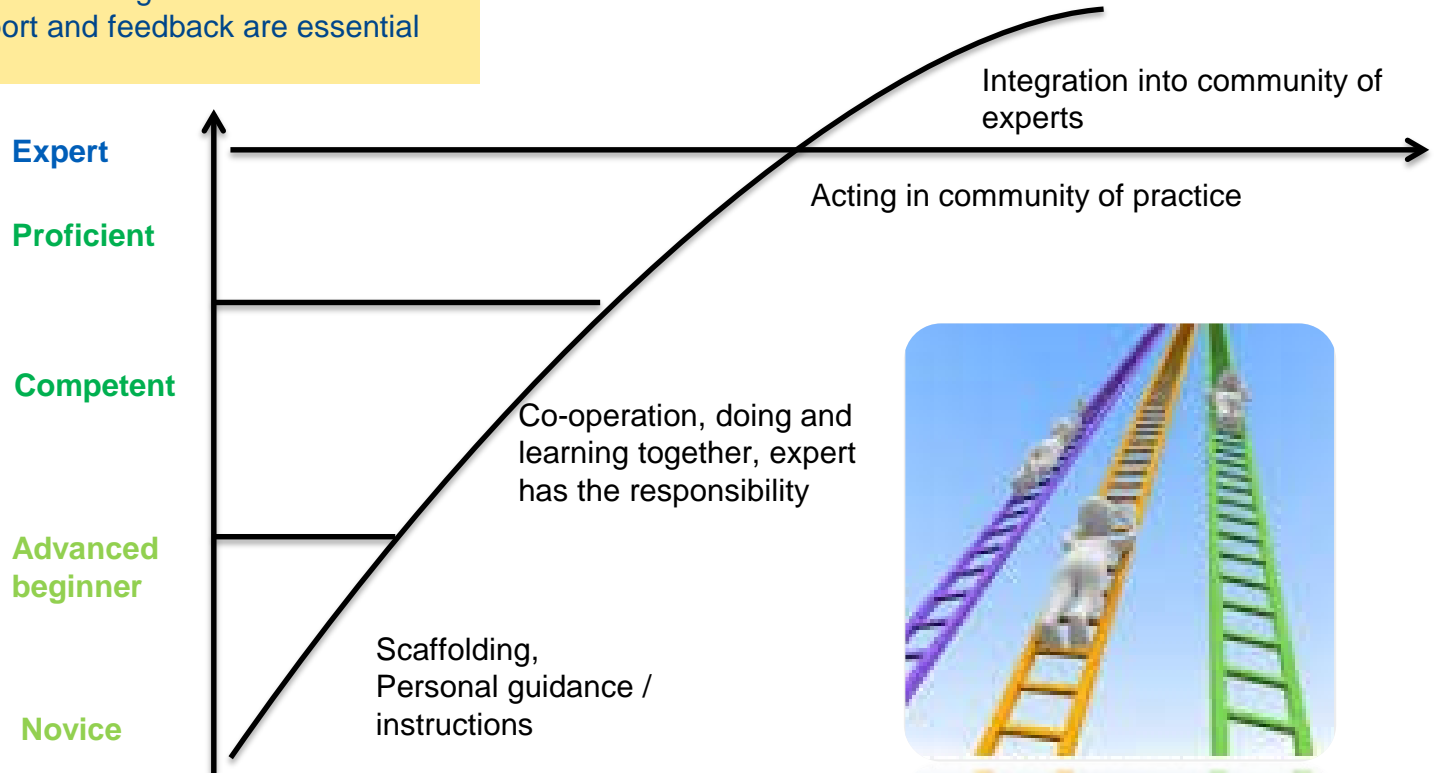


Wishes, expectations and requirements

Learning to become an expert in a process

Deliberate practice

- Long term practicing
- focusing on improving performance in aspects that are the weakest
- Using the latest scientific knowledge of the field
- Mentoring & social support and feedback are essential parts of the process

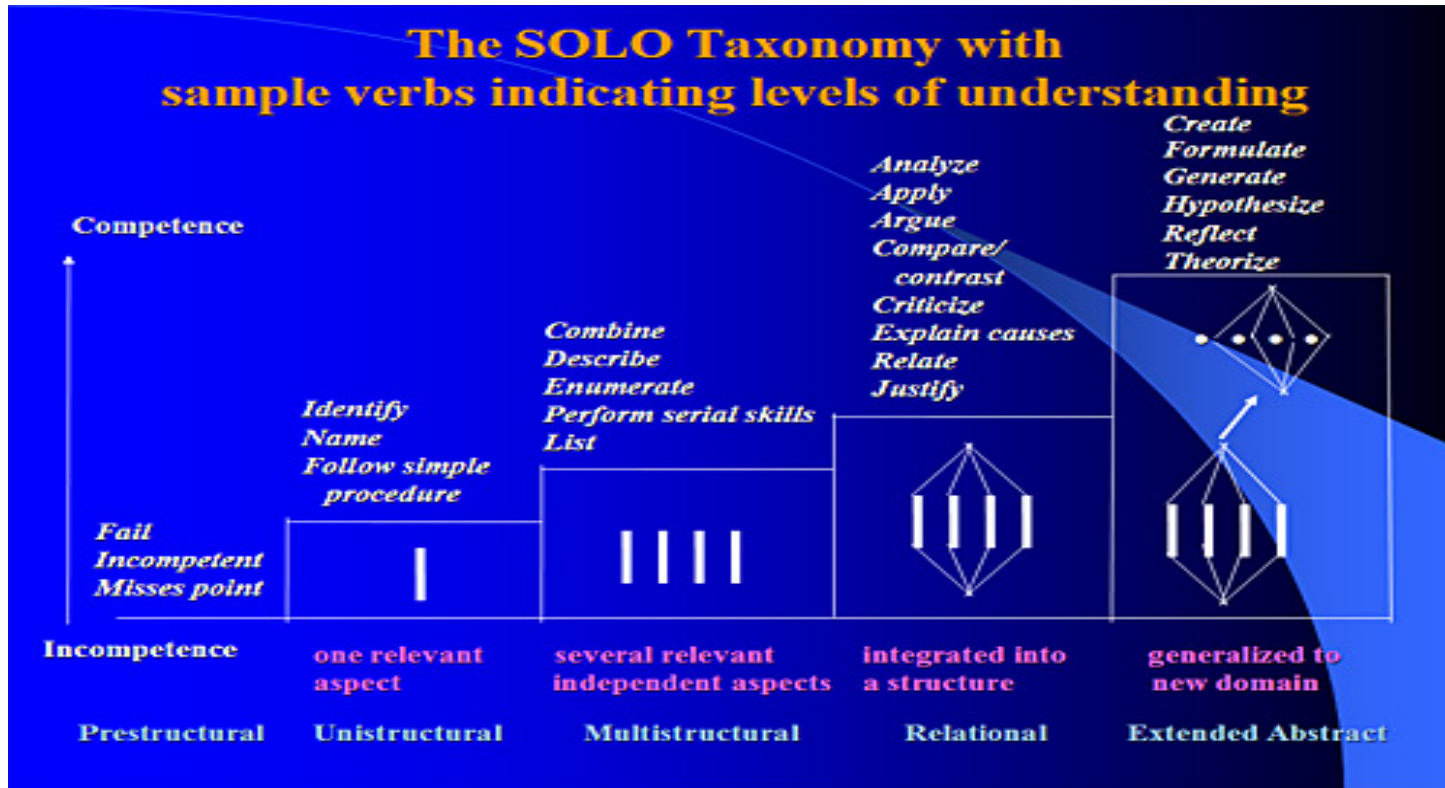


Five stages of skill acquisition (Dreyfus and Dreyfus, 1986)

<i>Skill level</i>	<i>Components</i>	<i>Perspective</i>	<i>Decision</i>	<i>Commitment</i>
1. Novice	Context-free	None	Analytical	Detached
2. Advanced beginner	Context-free and situational	None	Analytical	Detached
3. Competent	Context-free and situational	Chosen	Analytical	Detached understanding and deciding. Involved in outcome
4. Proficient	Context-free	Experienced	Analytical	Involved understanding. Detached deciding
5. Expert	Context-free and situational	Experienced	Intuitive	Involved

Dreyfus, H L and Dreyfus, S E (1986) *Mind over Machine: the power of human intuition and expertise in the age of the computer*, Oxford, Basil Blackwell

SOLO taxonomy (The Structure of the Observed Learning Outcome)



Biggs & Collis: Evaluating the Quality of Learning: The SOLO Taxonomy (New York: Academic Press, 1982)



Group work

It is year 2030 and you are a member of steering group in a company X. You are a fast growing company in your field (or university) and you desire to have the best experts. You have a good competitive position but there is still an intense competition.

Your task:

1. Give a name for your company.
2. You are hiring new experts. Write a list of desired knowledge, skills, or competence for your candidates. Remember they are the future experts in your field. Utilize the pre-reading material but consider also requirements in your field.
3. What kind of studies or experience you value?
4. Write your lists (2 and 3) on MyCourses discussion area, word document or slides and bring them to MyCourses.
5. Time: 30 min – prepare 5 min presentation.



Assignments for the next session 12.4.2018

1.
Learning log 2, **DL 27.3.2018**
2.
Essay, first version, **DL 3.4.2018**
3.
Prepare to give written and oral feedback on your peer's essay **DL 11.4.2018**. Familiarize yourself with constructive feedback. Document will be updated into MC (the area will be updated).

Groups for giving feedback (essays)

Group 1	
Imran Ashgar	SCI
Cross Sam	ENG
Galan Juanjo	ARTS
Gloukhovtsev Alexei	BIZ

Group 2	
Fink Gerhard	ENG
Kaario Ossi	ENG
Karakoc Alp	CHEM

Group 3	
Kim Mariia	ELEC
Korvala Jenni	Lang. centre
Lehtonen Miikka J.	BIZ
Nieto Fernando	ARTS

Group 4	
Paverd Andrew	SCI
Rubio Ana Diaz	ELEC
Saarela Saara	ARTS
Shahzad Summer	ENG

Group 4	
Sjöberg Mats	SCI
Tähkämö Leena	ELEC
Verma Ira	ARTS
Yawaar Sadaat Ali	BIZ

Example of the cycle of peer feedback

Group 2	
Fink Gerhard - gives feedback on Ossi's essay	ENG
Kaario Ossi – gives feedback on Alp's	ENG
Karakoc Alp – gives feedback on Gerhard's	CHEM

Assignments for the next session 12.4.2018

4. Reading assignment(s): Read one or more.

Biggs and Tang. 2011. Teaching for Quality Learning at University. Chapter 2: Teaching according to how students learn. (e-book, link in MyCourses)

Moon Jenny : Reflection in Higher Education Learning (document in MyCourses)

Moon Jenny: Guide for Busy Academics No. 4 Learning through reflection (link in MyCourses)

Tynjälä, P. 2005. Konstruktivistinen oppimiskäsitys ja asiantuntijuuden edellytysten rakentaminen koulutuksessa (pdf in MyCourses)

Learning centred culture



How to promote learning centred culture?

- Teaching design takes into account students' prior knowledge and needs.
- The aim is to promote students' learning by utilizing activating teaching methods.
- The teacher guides students for independent thinking and knowledge construction.
- Assessment on learning highlights understanding and deep learning (aligned with intended learning outcomes)