



Aalto University  
School of Electrical  
Engineering

# PED-131.9000 Teaching assistant as a learning instructor

*Day 1*

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# Timetable

- 9:00–9:35**    **Welcome**
- 9:35–12:00**    **What makes a good assistant/teacher?**  
**Interaction in learning and teaching**  
**Giving feedback**

# What do you think about working as an assistant?

Pick a **postcard** which somehow describes your thoughts about working as an assistant

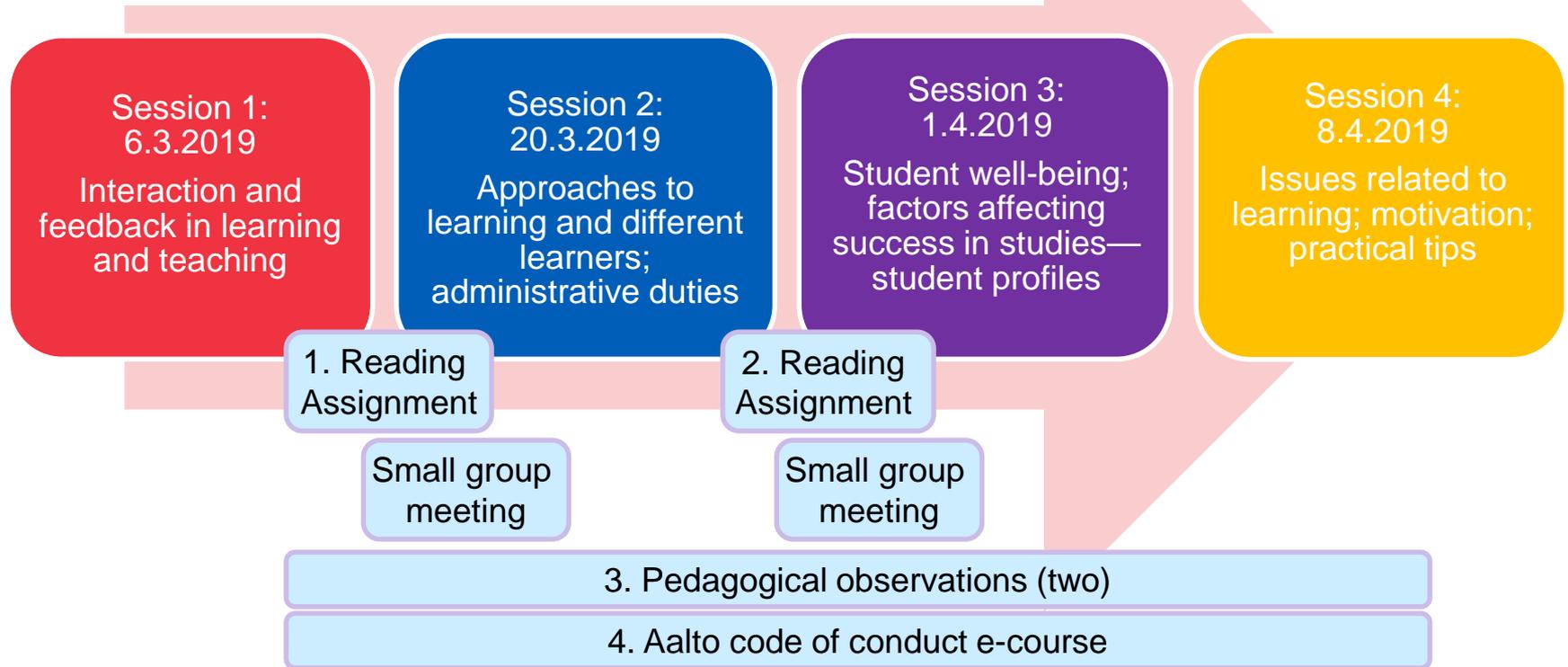


# Learning outcomes for this course

## After the course you will be able to

- observe the classroom environment from the learning perspective
- identify aspects to support students' learning process
- recognise ways to support students' study motivation
- identify your role as a learning instructor

# Course structure



# How to complete the course

- Participating in the teaching sessions
- Doing the coursework
  - reading assignments (two)
  - teaching observations and giving written feedback (two)
  - reflective write-up of half to one page (two, group work)
  - complete the e-course on the code of conduct at <https://mycourses.aalto.fi/course/view.php?id=19437>

# Participant's workload

**A. Teaching sessions** 12 h

**B. Learning assignments (all together)** 15 h

*a) Reading assignment x 2* 4 h

*b) Teaching observation x 2* 6 h

*c) Reflective write-up x 2* 4 h

*d) e-course, code of conduct* 1 h

**C. Working in peer groups (2 meetings)** 10 h

**D. Reflection & working independently** 17 h

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**Total** 54 h  
**(2 credits)**

(one credit is equivalent to a workload of 27 h)

# Your expectations (1/3)

## Context of teaching and learning

- **What should I keep in mind while designing a course?**
- **Tips to prepare a lecture and a connected assignment**

## Developing as a teaching assistant

- **I would wish to learn methods and tools that would facilitate my potential role as a teaching assistant in the future.**
- **Haluaisin kehittää pedagogisia taitojani jotta Aalto juniorin vierailevat kouluryhmät ja assaroimieni kurssien opiskelijat saisivat opetuksestani enemmän irti.**

# Your expectations (2/3)

## Focus on teaching

- Apart from making slides and blackboard teaching, what other tools can be used to make teaching engaging?
- Tools
- Basic guidelines on grabbing student attention in a classroom
- Important skills needed for teaching.
- I expect to get more guidelines or skills of how to teach and help students learn actively.
- How to teach so that the students truly listen and understand?
- Learn tips to keep the audience focus.
- New tools that will help me in my goal of becoming a teacher.

# Your expectations (3/3)

## Focus on students and learning

- How to inspire people to learn?
- Pedagogisia taitoja, kuinka ihminen oppii, opiskelutapoja ja ylipäänsä ihmisten kanssa toimimista.
- Haluaisin oppia, millä keinoin voin parhaiten tukea opiskelijoiden oppimista ja motivoida heitä opiskelussa.

# What makes a good course assistant?

What are the elements and capabilities that make "a good course assistant"?

Step 1 (5 min):

- Write down each element or capability on a separate sticky note.



# Drawing a "prototype" of a good teaching assistant

Step 2 (steps 2 and 3, ~35 min):

- Share your thoughts with your group (~15 min)

Step 3 (~20 min):

- Draw and describe the course assistant that has the attributes and capabilities you have discovered
- You can personalise your prototype: give her/him a name, age, discipline etc.
- Prepare to present your group work (max 5 min/group)



# Conceptions of teaching and learning: why is it important to be aware of them?

The teacher's own conception of learning has an impact on their choices of teaching methods

If you want to develop your teaching, it is vital to know what to develop

- Different conceptions may lead to different teaching methods—and different methods may lead to different learning results

International students may be accustomed to different teaching and learning methods, so they expect different kinds of teaching

# Short break!



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# Interaction: Why and how?



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# Interaction in teaching: why?

- The fundamental rationale is to improve students' learning
- Here interaction refers to the types of exchanges (communication) that are believed to extend thinking and enhance learning
- According to this view, learners develop understanding
  - *in interactive and social situations*
  - *with the help of and in collaboration with others*

Vygotsky 1972; Bruner 1986; Britton 1970; Wells 1986; Norman 1992; Barnes & Todd 1995; Mercer 1995 (in discourse: Gumperz 1982; Chafe 1982; Tannen 1989; Levinson 2006)

# Interaction

## When dealing with social information

we observe the situation

we interpret

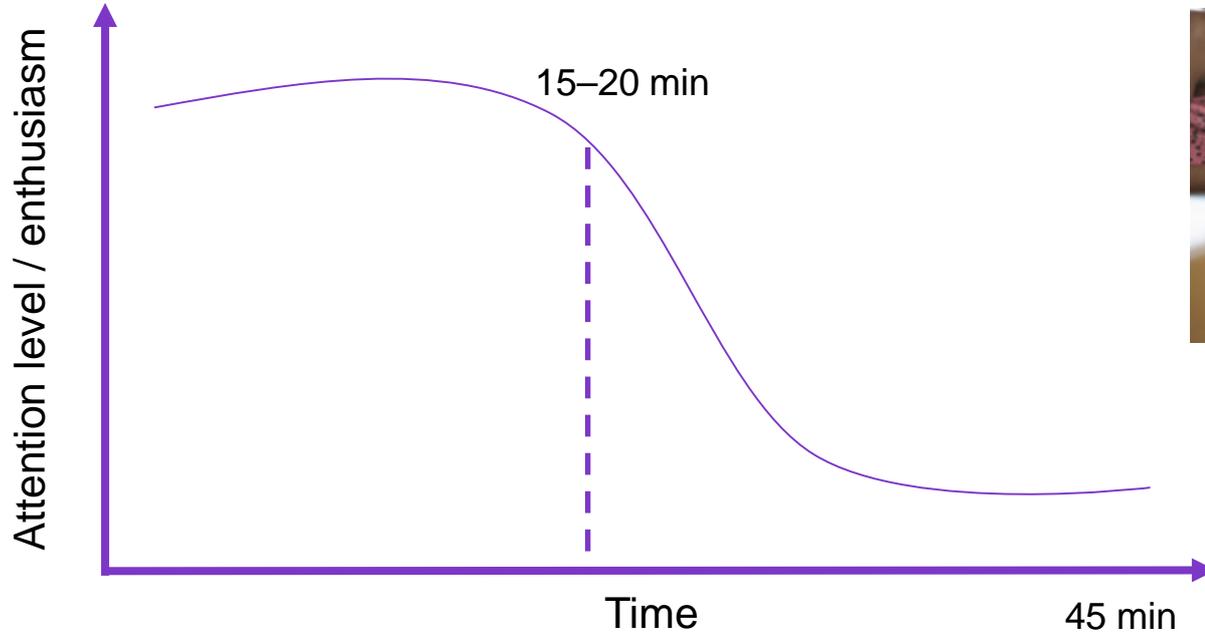
we set a goal



we consider optional  
courses of action

we consider the  
wisest course of  
action

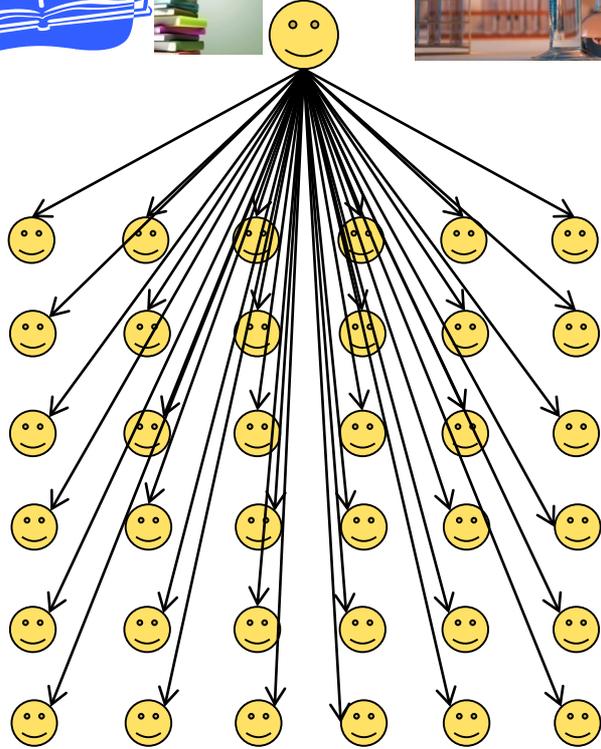
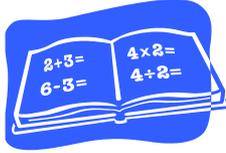
# Attention vs. rhythm of teaching



E.g., Johnson, A. & Proctor, R. W. 2004. Attention, theory and practise

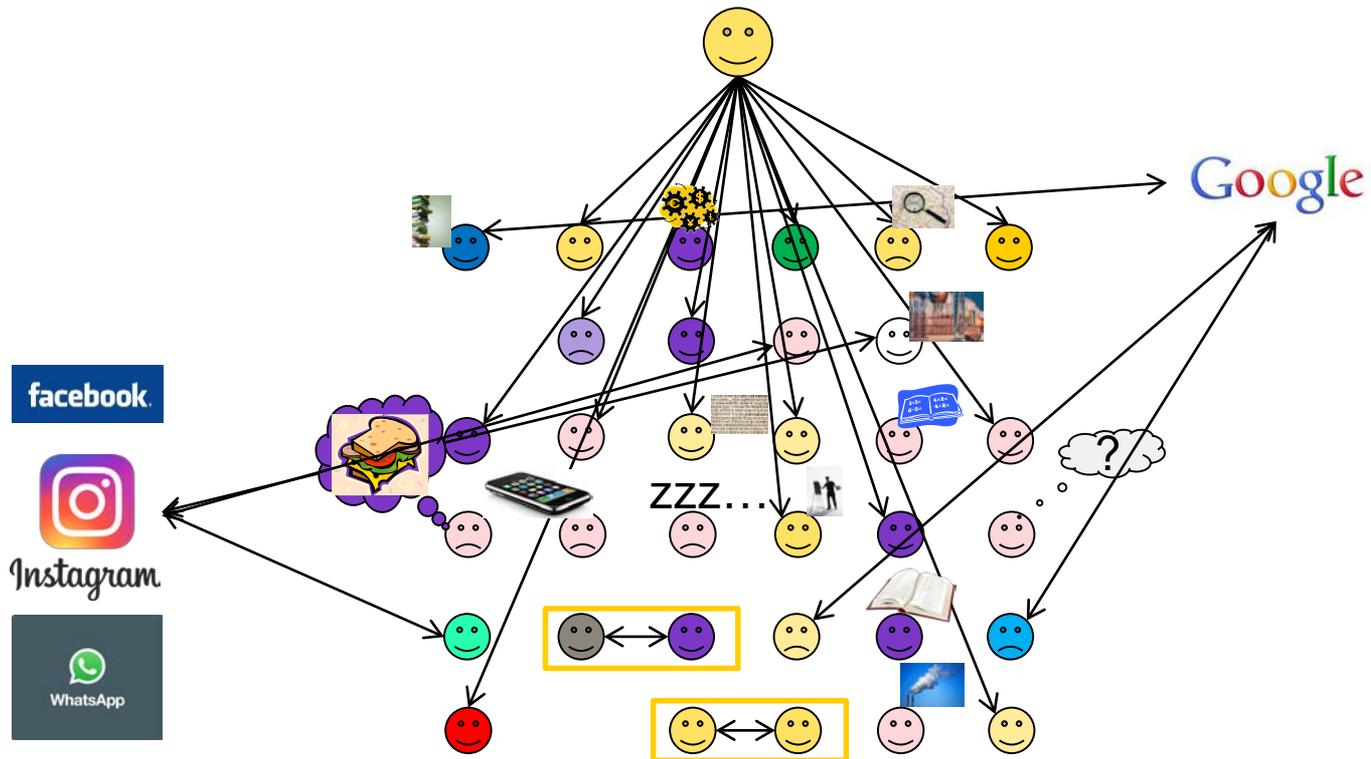


...wenn gewer rauchig auch duntvergie  
tet (als im 2. Buch verzeichnet) ward im 2  
mit als einem Abt / sonder als einem Wist  
äffen. Nostert aber war kein Wisthoff, sond  
Abt ein Wisthoff, welcher zum erlt mal wude  
ist in seinem alter: frieg gefürt vmb zepflic  
er selbigen zeit solches frieg in die hend get  
mosden von Capans in massen widerstue  
nden nit hab insagen hingeleget werden, bifi  
ung des Landes zuletzt verzeht haben. Es  
n nit so vil Leüt als vnfrer Landesfürst, ric



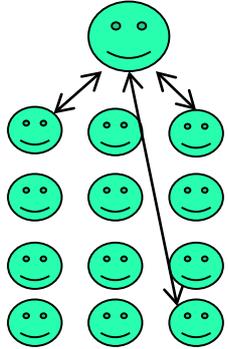


...wenn diese Auswertung zum Ausdruck  
nicht nur in "blau gezeichneten" Zahlen, sondern  
in mit den Zahlen verbundenen Texten, die  
sich mit den Zahlen verbinden lassen, ist  
es möglich, Zusammenhänge zwischen  
den Zahlen zu erkennen. Diese Zusammenhänge  
sind es, die die Zahlen zu einer Sprache  
machen. Die Zahlen sind die Buchstaben  
des Alphabets, die die Wörter bilden.  
Die Wörter sind die Sätze, die die  
Sinnhaftigkeit der Zahlen ausmachen.  
Die Zahlen sind die Bausteine, die die  
Welt der Zahlen bilden. Die Zahlen sind  
die Bausteine, die die Welt der Zahlen  
bilden. Die Zahlen sind die Bausteine,  
die die Welt der Zahlen bilden.

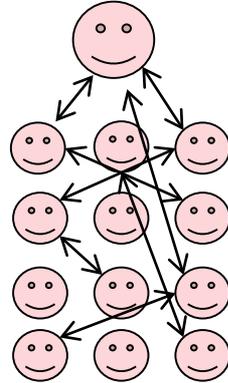


# Examples of how to arrange interaction

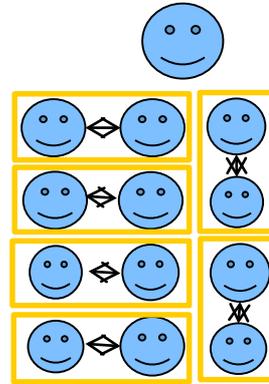
Between teacher and student



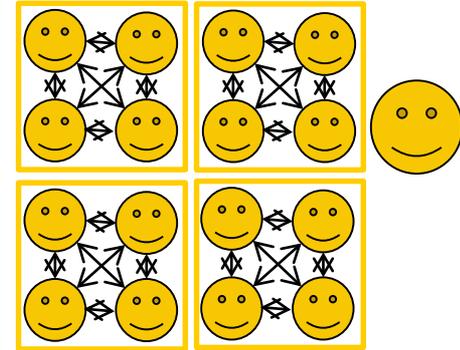
Teacher led group discussion



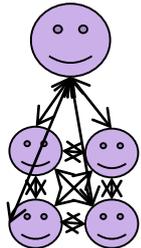
Discussion in pairs



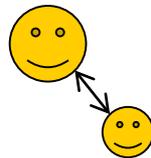
Group discussion; teacher coordinates



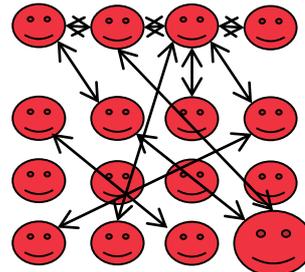
Group instruction



Personal instruction



Group discussion, led by the students



# Interaction: to promote learning



Constructive discussion of  
difficult issues

Deep processing of  
the learned subjects

Fair/equal participation

Positive and safe atmosphere

Remember  
the code of  
conduct

# Open questions to stimulate thinking (Aarnio & Enqvist 2002)

Can you explain what you have done so far?

What are you aiming for? (intermediate results in the problem)

How do you consider...?

What is it based on...?

What does it mean...? / What is the meaning of...?

How do you understand...?

What is it all about...?

How do you explain...?

How is it in your point of view...?

What are the consequences of...?

What if...?

What is this... connected to?

How do you feel about...?

What do you think you are going to do...?

What kind of actions...?

# Short break!



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# Feedback



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# What type of feedback have you received?

Recall a feedback session and analyse it:

- How was the situation?
- Who gave/received the feedback?
- How did you feel about it?
- What was good/not so good in the situation?
- Did you learn something from it?

Discuss and share them in groups of two or three (10 min)

# Feedback

## What is feedback about?

- **Task**
- **Process**

Hattie and Timperley (2007)

## What does feedback mean?

- **Motivational:** influences beliefs and willingness to participate
- **Reinforcement:** rewards specific behaviour
- **Informational:** aims to change performance to a particular direction

Nelson and Schunn (2009)

# Constructive feedback<sup>†</sup>

- **Relevant, tailored**
  - addresses the performance/process that it is meant to address
  - designed to meet the individual actor's specific needs and circumstances
- **Factual**
  - based on actual achievement/performance
- **Confidential**
- **Encouraging**
  - motivates to continue and increase efforts
- **Immediate** (some studies<sup>‡</sup> show that delayed feedback has its benefits too)
  - provided as soon as information is available
- **Helpful**
  - provides suggestions for improvement of teaching and learning
- **Respectful**
  - respects actors' integrity and needs

# Offering feedback

Your message should be in the tone: *I appreciate you and what you have done and whatever else I say should be taken in this context.*

- Be realistic
- Be sensitive to the goals of the recipient: LISTEN
- Be timely!!
- Be descriptive
- Don't be judgemental
- Be positive

# Examples (1/2)

Constructive	Unconstructive/destructive
<p>Is about an <b>issue/action</b></p> <ul style="list-style-type: none"><li>▪ <i>E.g. Up to here everything is fine... now let me see... ah, there's an error here.</i></li></ul>	<p>Is about the <b>person</b></p> <ul style="list-style-type: none"><li>▪ <i>E.g. Can't you understand when I tell you...?</i></li></ul>
<p>Justifies the <b>views</b></p> <ul style="list-style-type: none"><li>▪ <i>E.g. Consider this from the point of view of...</i></li></ul>	<p>Contains <b>judgements</b> (good/bad)</p> <ul style="list-style-type: none"><li>▪ <i>E.g. You don't know what you're talking about.</i></li></ul>
<p>Is useful for <b>development</b></p> <ul style="list-style-type: none"><li>▪ <i>E.g. You did this part correctly, and practice this part some more...</i></li></ul>	<p><b>Does not</b> necessarily <b>benefit</b> anyone</p> <ul style="list-style-type: none"><li>▪ <i>E.g. How stupid can you be...</i></li></ul>
<p><b>Takes into account</b> the recipient's state of development, situation, ability to receive feedback, etc.</p> <ul style="list-style-type: none"><li>▪ <b>Confirm the situation:</b> <i>Can you explain what you have done...? What do you think about this...?</i></li></ul>	<p><b>Does not take</b> the recipient into account, is given only from the evaluator's perspective</p> <ul style="list-style-type: none"><li>▪ <b>Assume you know the situation:</b> <i>This is how it is, nothing you say will change my mind...</i></li></ul>

# Examples (2/2)

Constructive	Unconstructive/destructive
<p>States <b>observations</b></p> <ul style="list-style-type: none"><li>▪ <i>E.g. This is what <b>I observed</b>... This looks like... I think this is...</i></li></ul>	<p>Makes <b>subjective conclusions / interpretations</b></p> <ul style="list-style-type: none"><li>▪ <i>E.g. This is what <b>you did</b>. This went like this because...</i></li></ul>
<p><b>Two-way process</b>, the recipient has an opportunity to respond</p> <ul style="list-style-type: none"><li>▪ <i>E.g. Do you think that <b>you understood</b> what I meant... I hope <b>I understood</b> your question correctly...? Could you elaborate...?</i></li></ul>	<p><b>One-way process</b>, no chance to answer or reflect</p> <ul style="list-style-type: none"><li>▪ <i>E.g. This is how it was, and <b>that's it</b>.</i></li></ul>

# Additional material: Principles of effective feedback (1/3)

- 1. Feedback is ongoing and integral part of assessment/course**
  - relevant, timely, fit for purpose, informs the process of learning
  - constructively aligned with intended learning outcomes
- 2. Feedback guidance is explicit**
  - clarifies assessment criteria, is explicit about the criteria of quality
- 3. Feed-forward is emphasized more than feedback activities**
  - feedback is on work in progress

- 4. Students are engaged in the process**
  - feedback enables development of self-assessment skills: not too detailed and specific.
- 5. Content and level of feedback**
  - focuses on what, how, and why
  - suggestions on how to improve
  - takes students' level of understanding into account
- 6. Training in feedback/forward is an integral part of a course**
  - feedback facilitates relationship building between lectures and students
  - peer feedback
  - training in how to peer- and self-assess

# Additional material: Concrete actions to ensure students receive useful feedback (2/3)

1. Ensure an appropriate range and choice of assessment opportunities throughout a program of study;
2. Ensure that guidance about assessment is integrated into all teaching sessions
3. Ensure all resources are available to students via virtual learning environments and other sources from the start of a program to enable students to take responsibility for organizing their own learning
4. Clarify with students how all elements of assessment fit together and why they are relevant and valuable
5. Provide explicit guidance to students on the requirements of assessment
6. Clarify with students the different forms and sources of feedback available including e-learning opportunities

# Additional material: Concrete actions to ensure students receive useful feedback (3/3)

7. Ensure early opportunities for students to undertake assessment and obtain feedback
8. Clarify the role of the student in the feedback process as an active participant and not as purely receiver of feedback and with sufficient knowledge to engage in feedback
9. Provide opportunities for students to work with assessment criteria and to work with examples of good work
10. Give clear and focused feedback on how students can improve their work including signposting the most important areas to address
11. Ensure support is in place to help students develop self-assessment skills including training in peer feedback possibilities including peer support groups;
12. Ensure training opportunities for staff to enhance shared understanding of assessment requirements

# Goals of the learning assignments

## 1. Reading assignments (two)

- Read the text so that you can discuss it with your peers in your small group

## 2. Teaching observations (two)

- Observe a class, focusing on a given theme
- Make notes and reflect on the observation
- Give feedback to the teacher observed

## 3. Group meetings (two)

- Reflect on the previous course session
- Discuss and reflect on the reading assignment
- Plan your teaching observation

## 4. Code of conduct e-course

- General guidelines of acceptable behaviour



# Learning assignments for the next session (1/3)

## 1. Reading assignment: DL 20.3.2019

Go to MyCourses→Day 1, and find the link for the book:

**Biggs, J., Tang, C. 2011: *Teaching for Quality Learning at the University*.**

Read **chapter 2, "Teaching according to how students learn"**, p. 16–33.

Read the text so that you can discuss it with your peers in your small group

# Learning assignments for the next session (2/3)

## 2. Teaching observation: DL 20.3.2019 (8.4.2019)

- Visit an exercise class, if possible a class of one of your group members.
- Focus on **interaction** in the classroom and note down at least the following: How was it created? What approaches were used? Which aspects you found supported students' learning process? You can add reflections and insights of your own.
- Be specific, positive and give constructive feedback. **Use the feedback form from MyCourses for this.**
- Give your feedback to your peer/the teacher, and submit it in MyCourses (Day 1) with the name of the observed peer/teacher removed.

# Learning assignments for the next session (3/3)

## 3. Group work for the course: DL 20.3.2019

- *Start your group work now:* Arrange two meetings with your small group, one before the next class and the other after (do it now).
- Plan your teaching observation and discuss the article.
- Submit your notes and reflections in MyCourses (Day 1): What did you discuss? What did you observe? What did you think about the article?

## Hand in

- Your notes, reflection and feedback given on the observation
- Notes on the group work; one for the entire group (put the names of the group members on the document submitted)



**Feedback time:  
What was good?  
What would you change?**

