

GROUPS

GROUP 1 Olli Seppänen, Jaakko Siltaloppi, Naveed Tabassum, Yu Xiao

GROUP 2 Kirsi Yliniemi, Mia Liljeström, Antti Kuusinen

GROUP 3 Annika Hulten, Eeva-Leena Rautama, Anton Kuzyk, Ruifeng Duan

GROUP 4 Ville Jokinen, Hanna-Riikka Hakala, Kirsikka Riekkinen, Ramzy Abdelazis



Assessment *for and of* Learning

Second Contact Session, 19.11.2018, 12:15 – 15:45
Theme “Peer-Assessment”

Viivi Virtanen, Pedagogical Specialist
Original photograph: Mikko Raskinen

Introduction

LECTURE

The link between student wellbeing and how the students' learning outcomes are assessed

CASES

Peer-assessment and self assessment



ASSESSMENT PRACTICES FOR CURRENT AND FUTURE LEARNING – Assessment Culture is Globally Changing

1 From assessment *of* learning
to assessment *for* learning

2 From control and teacher-led assessment practices
to assessment of processes and student activities

3 From final exams
to

assessment practices with timely feedback (feedback before grading)

1 Birenbaum, 1996; Black, Harrison, Lee, Marshall & William, 2004; Brown, Bull & Pendlebury, 1997

2 Boud, 2000; Black ym., 2004; Bryan & Clegg, 2006; Kearney, 2013; Sluijsmans, Dochy & Moerkerke, 1999)

3 Boud, 2000; Black ym., 2004; Bryan & Clegg, 2006; Sluijsmans, Dochy & Moerkerke, 1999

See Virtanen et al 2015



Assessment Rubric

- a document that articulates the expectations for an assignment by listing *the criteria*, or what counts, and describing *levels of quality (standards)* from excellent to poor.

	PASS	POOR	GOOD	EXCELLENT
Knowledge Skill Professional practice				

Assessment Rubric

C
R
I
T
E
R
I
A

Quo-
tient
struc-
tures

Mathe-
matical
discus-
sions

- a document that articulates the expectations for an assignment by listing *the criteria*, or what counts, and describing *levels of quality (standards)* from excellent to poor.

Levels of Quality

Prerequisites

I can determine the cosets of a subgroup.
I can view a quotient group as a group and handle its elements like in any other group (e.g. determine inverse elements and powers).
I know how normal subgroups and quotient groups are related.
I can check in several different ways whether two cosets coincide.

I can formulate precise questions when I do not understand something.
I can talk about my solutions to other people.

Skills corresponding to grade 1

I can calculate with cosets. I can, for example, determine the elements of the quotient group $\mathbb{S}_4 / \langle (1234) \rangle$. I can also determine the elements of the subgroup generated by $(12) \langle (1234) \rangle$.
I can view cosets as equivalence classes, and know which equivalence relation defines them.
I can determine elements of a quotient ring and know how ideals and quotient rings are linked.

I present my solutions to other people.
I take part in mathematical discussions with my peers.

Skills corresponding to grade 3

I calculate with cosets fluently.
I can check whether an equivalence relation is compatible with a binary operation.
I know why the equivalence relation needs to be compatible with a binary operation when defining a binary operation for equivalence classes.

When talking to other people, I listen to them and react accordingly.
When talking to others about my mathematical thinking, I try to concentrate on the main ideas instead of technicalities.
I give feedback to others when their solutions are discussed.

Skills corresponding to grade 5

I can deduce the definitions of normal subgroup and ideal from the concept of binary operation compatible with an equivalence relation.

I give constructive feedback to others so that they can improve their work. I can find something positive and meaningful to say in other people's work.
I can summarise my solutions clearly, briefly and precisely.
When discussing with other people I can take their position and feelings into consideration. I try to make the conversations meaningful to all parties.

Assessment in this course

Intended learning outcomes	
to identify the resources of assessment practices <i>in supporting learning process</i> ,	
to analyse and compare various assessment and feedback methods in related to validity and reliability,	
to implement self- or peer-assessment in own teaching,	
(to evaluate the assessment and feedback practices in a programme or major and to participate in developing the practices)	
Other	

Assessment in this course

Intended learning outcomes	(What to do) to pass
to identify the resources of assessment practices <i>in supporting learning process</i> ,	Participation in-class and readings; knowing the purposes of assessment, self assessment, peer assessment, assessment for life long learning, sustainable assessment
to analyse and compare various assessment and feedback methods in related to validity and reliability,	Participation in-class, readings, doing the assignments; The link between intended learning outcomes and 'what the student does' and assessment methods; can give justifications
to 'implement' self- or peer-assessment in own teaching,	Main assignment done (matrix and plan in 3 crs course) (+ 2 credits implementation and reflection)
(to evaluate the assessment and feedback practices in a programme or major and to participate in developing the practices)	Participation in the 3. contact session and the activities there (+ 2 credits sharing)
Other	

Questions Concerning our Course?

Dead line for assessment rubric with plan + reference to at least 2 papers (to read before last session; either any of those I will give or you can find the papers by yourself)

*Assessment & Evaluation in Higher Education,
Studies in Educational Evaluation*

- 19.12.2018 Aalto Learning Gala 9-16
- Interested in to participate in planning the Assessment Workshop?
- Your rubrics ? Could you share them? In MyCourses 'common' course area for Assessment?
- Or later in spring

A!

Aalto-yliopisto



The link between student wellbeing and how the students' learning outcomes are assessed

*2nd Contact Session
Assessment of and for Learning*

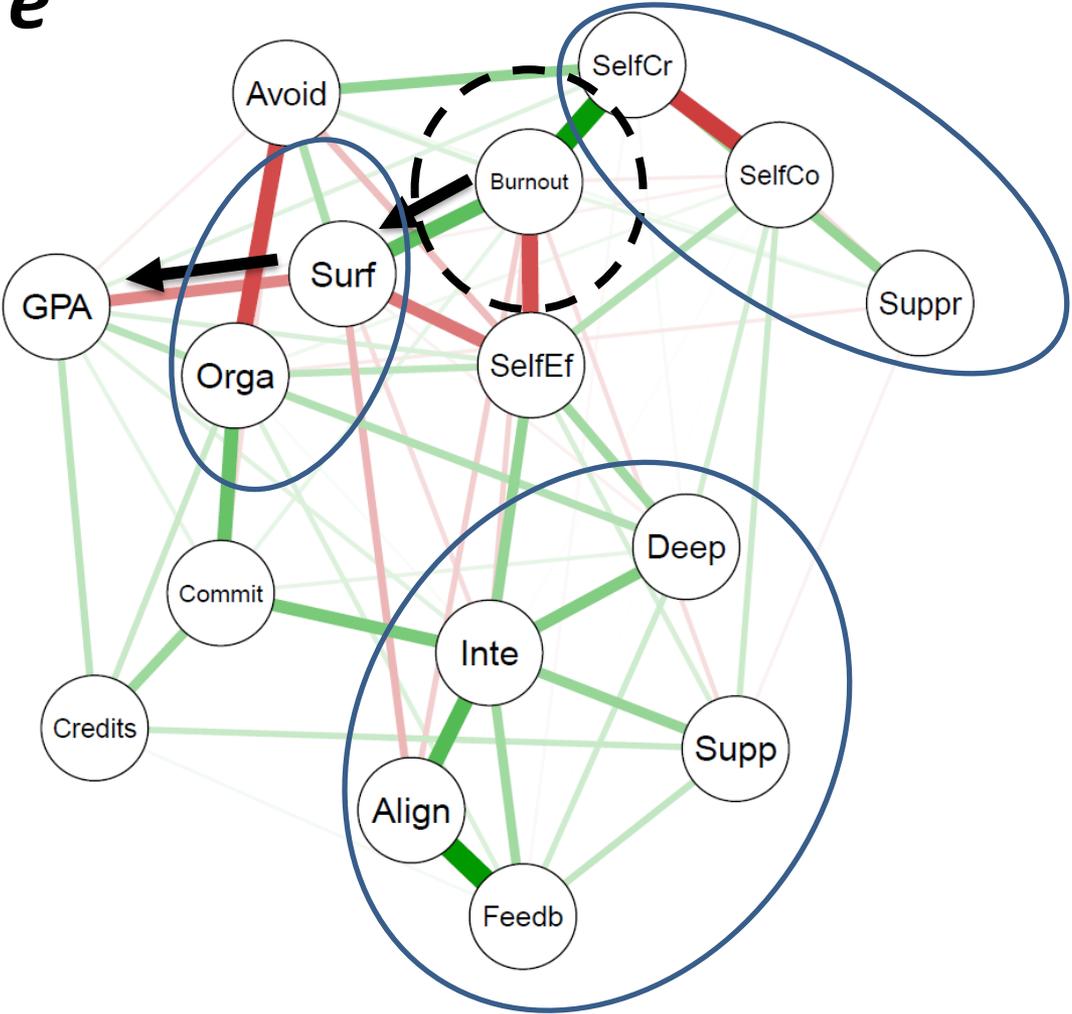


Student wellbeing: *AllWell?* in a nutshell

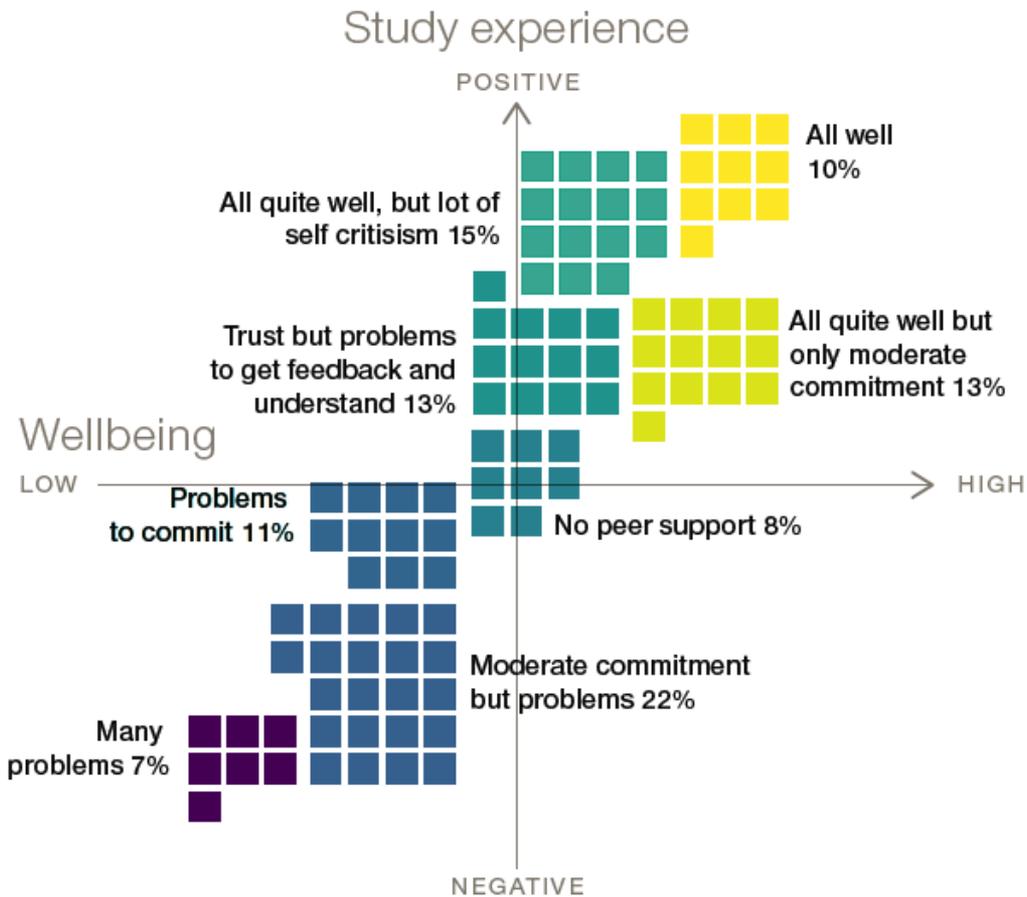
- The *AllWell?* Questionnaire is part of an Aalto strategic development project for 2016–2020. The project seeks to enhance study well-being by developing study advising, teaching, study skills and student services.
- *AllWell?* questionnaire was conducted 2017 and 2018.
- Target group: 1st year master's and 2nd year bachelor's students.
- 75 questions, major part is covered by How-U-Learn instrument developed by the University of Helsinki.
- One main result: ***Aalto students Burn out rate is high!***

AllWell questionnaire

Network analysis



Aalto Master students



AllWell? 2018

Collecting qualitative data

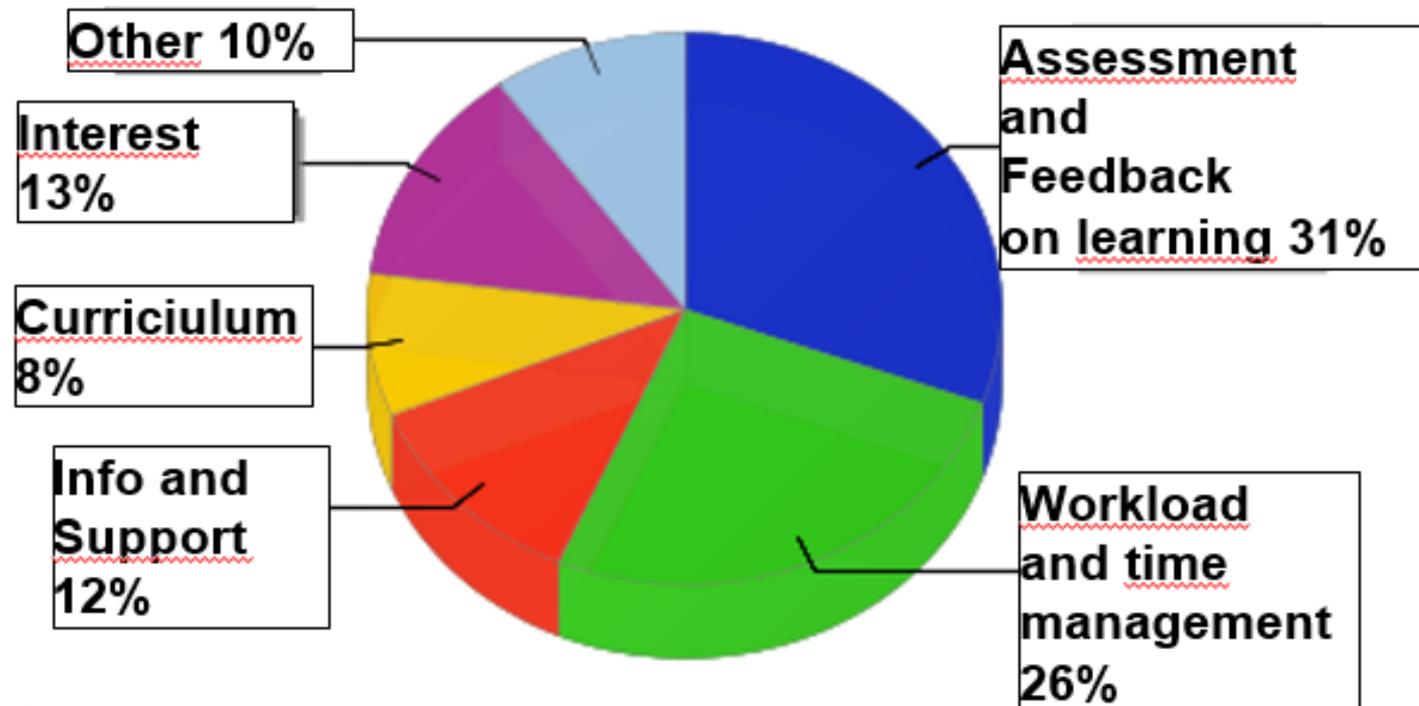
One open question (for the first time in 2018):

“What kind of changes or actions in teaching, supervision or services in your school, programme, or in university would help you to improve your well-being?”

Students' perceptions of improving their study wellbeing

E.g., one master programme

DATA: 88 responses



" Adding feedback would help you learn and understand what you did wrong, and then you do n have to think about it yourself. Most of the xxx courses only get a rating, and nothing else "

Master Student id10 2018

..., individual response and suggested improvement.

Master Student id21 2018

Being an international student I didn't have knowledge of Finnish education system and what the teacher expects here in the exam. and I learnt this when I didn't get good grades against my expectations me what does a teacher expects.... A solution should also be provided after exam so that there is a standard with which one can compare himself.

Master Student id59 2018

- *" Alternative ways to conduct courses, not just all one and the same formula, even more than just 100% of the exam emphasis would remove the tutor's stress and bring value to the work done during the course "*
- *'The feedback could also be more accurate and varied; course number without explanations / suggestions for improvement is frustrating because it will not be able to improve for the first time. "* ARTS BSc
- *There is no feedback from all jobs, either at all, or at least during the course. The feedback helps the student to understand if he has learned the right thing and where to develop it. Returning jobs to a "black hole" in order to make the performance mark really foolish !!! BIZ*
- *Encouraging communality with courses rather than competition in grades, clear criteria of criticism, emphasis on cooperation and entrepreneurship and analyticism.*

- *" I would like more personal feedback on my studies and more guidance especially in Master's degree studies. I feel that at the Master's level students are left to their own merit, and for example, the thesis is not adequately instructed "* CHEM MSc
- *" More feedback. If something is left unclear and it is asked, then the student should not be lynched but rather explained "* CHEM MSc 70
- *" ... I have found courses required for the performance of which time does not match the reviews. This means a situation where, for example, 75% of the time spent on the course goes to the exercises but in the evaluation the weight of the assignments is well below 50%. In the worst case, 0% and the grade is determined solely on the basis of the Examination Exam. "* ELEC Student 2018

To be honest, I would really appreciate more feedbacks or even correction sessions concerning labs and projects during the class. Sometimes, I really have the feeling that you produce something, spend a lot of time and efforts in a homework and just get a grade at random, 2 months after. Even sometimes after the exam and after the end of the course period. What for now? Why should we care? I did care a lot for grades, still do a bit to be true. However, I am much more interested in learning. I am curious and really, really love to learn. I hate it when I just receive a grade and not even a comment. I want to know what the teacher think about the performance. Above all, what I did wrong, all my mistakes so that I can learn from it, grow bigger, wiser from this experiences. Right now, I have the feeling that those homeworks, those ongoing assignments are not here to help you learn but to assess your skills and understanding like a final exam would do. They become stressful and useless. Or else, it is the exam in the end that becomes superficial.

Master STUDENT 38 2018

- *Opportunity to substitute exams for example with learning diaries, exercises, etc. " ENG BSc*
- *Courses should be some kind of interim review of the progress of a student at each course. It would probably help to raise your own investment in the course before the exam. ENG BSc*
- *Clearly tell FIRST what the course requires to get the rating x. SCI BA*
- *'The feedback could also be more accurate and varied; the course number without explanations / suggestions for improvement is frustrating because it will not be able to improve for the first time. " ARTS*

Findings based on qualitative data

- **Students are interested and engaged in learning *for future***
- **Students are frustrated if they feel that teaching, *assessment methods*, too tight schedules, curriculum or other practices do not help (or let) them to learn *for future***

ASSESSMENT PRACTICES FOR CURRENT AND FUTURE LEARNING

- Demand of variety to assessment methods: rewarding also for doing, for the process, for creativity (What are the ILOS).
- Also self-assessment for to understand the standards and criteria.
- *(Current evaluation methods don't always support learning; focus is on performance. Students feel they don't get enough feedback to be able to learn and develop)*

In two groups 5 min:

List as many methods as you can.

One method/one post it -note

Assessment methods

Assessment methods



Aalto-yliopisto

GROUP 1 Olli Seppänen, Jaakko Siltaloppi, Naveed Tabassum, Yu Xiao

GROUP 2 Kirsi Yliniemi, Mia Liljeström, Antti Kuusinen

GROUP 3 Annika Hulten, Eeva-Leena Rautama, Anton Kuzyk, Ruifeng Duan

GROUP 4 Ville Jokinen, Hanna-Riikka Hakala, Kirsikka Riekkinen, Ramzy Abdelazis

Peer-Assessment

Why to use peer-assessment?

How to use peer-assessment/peer feedback in the course?

1. Discuss what the student should learn. Name some targets.
2. Discuss about how to grade, so, how to assess that the students have achieved the intended learning outcomes.
3. (Rubric is available, you can modify.)
- 4. *How the students are engaged with the rubrics? WHAT KIND OF TASK? WHEN? SHOW IT in timetable***
- 5. *How to organize peer-assessment?***

Give one or more solutions.

In the end, make a poster. Discuss together what are the main points you want to present to the others in 5-7 minutes



CASES

- 1) **Project Design Course – Working in groups.**
- 2) **A course with the final product 'Written report' .**
- 3) **Lecture course. The final product 'Learning Diary' (small group) or 'Exam' (large group)**
- 4) **Master course.**
 - **Individual student' s Expertise/Competences will be assessed by POSTER PRESENTATION**
 - **Peer group's Expertise/Competences will be assessed by POSTER PRESENTATION**

In groups: Peer-Assessment

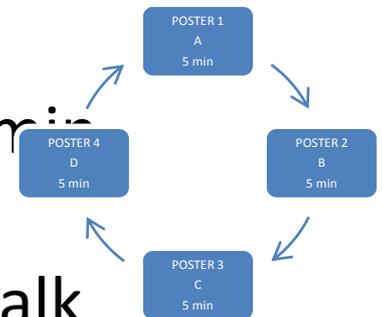
In each GROUP 1-4 label the members A,B,C,D,(E)

15.00 poster presentation

New groups. All A persons start from poster 1, B poster 2, C poster 3, D poster 4

TIMETABLE: Working 30 min, Presenting 30 min

- Design and plan the contents together
- "Gallery walk" in new groups. In poster walk presentation each member will present own poster



GROUP 1 Design Course – working in groups

TASK: *How to use peer-assessment/peer feedback in the course?*

1. Discuss what the student should learn. Name some targets.
2. Discuss about how to grade, so, how to assess that the students have achieved the intended learning outcomes.
3. (Rubric is available, you can modify.)
- 4. *How the students are engaged with the rubrics? WHAT KIND OF TASK? WHEN? SHOW IT in timetable***
- 5. *How to organize peer-assessment?***

Give one or more solutions.

In the end, make a poster. Discuss together what are the main points you want to present to the others in 5-7 minutes



GRUP 2 A course with the final product 'Written report'

TASK: *How to use peer-assessment/peer feedback in the course?*

1. Discuss what the student should learn. Name some targets.
2. Discuss about how to grade, so, how to assess that the students have achieved the intended learning outcomes.
3. (Rubric is available, you can modify.)
- 4. *How the students are engaged with the rubrics? WHAT KIND OF TASK? WHEN? SHOW IT in timetable***
- 5. *How to organize peer-assessment?***

Give one or more solutions.

In the end, make a poster. Discuss together what are the main points you want to present to the others in 5-7 minutes



Lecture course. The final product is 'Learning Diary' (small group) or 'Exam' (large group)

TASK: *How to use peer-assessment/peer feedback in the course?*

1. Discuss what the student should learn. Name some targets.
2. Discuss about how to grade, so, how to assess that the students have achieved the intended learning outcomes.
3. (Rubric is available, you can modify.)
- 4. *How the students are engaged with the rubrics? WHAT KIND OF TASK? WHEN? SHOW IT in timetable***
- 5. *How to organize peer-assessment?***

Give at least 2 solutions (exam/learning diary)

In the end, make a poster. Discuss together what are the main points you want to present to the others in 5-7 minutes



GROUP 3 Master course. Case 1) Individual student' s Expertise/Competences will be assessed by POSTER PRESENTATION

Case 2 Peer group's Expertise/Competences will be assessed by POSTER PRESENTATION

TASK: *How to use peer-assessment/peer feedback in the course?*

1. Discuss what the student should learn. Name some targets.
2. Discuss about how to grade, so, how to assess that the students have achieved the intended learning outcomes.
3. (Rubric is available, you can modify.)
- 4. *How the students are engaged with the rubrics? WHAT KIND OF TASK? WHEN? SHOW IT in timetable***
- 5. *How to organize peer-assessment?***

Give one or more solutions.

In the end, make a poster. Discuss together what are the main points you want to present to the others in 5-7 minutes



GROUPS

GROUP 1 Olli Seppänen, Jaakko Siltaloppi, Naveed Tabassum, Yu Xiao
Design Course – working in groups. MATRIX ON

GROUP 2 Kirsi, Mia, Antti,
The final product is 'Written report' You have the matrix.

GROUP 3 Annika Hulten (general diagnostic assessment). Eeva-Leena, Anton, Ruifeng
Lecture course. Learning Diary ONE OPTION or EXAM. MATRIX ON

GROUP 4 Expertise/Competences will be assessed by POSTER PRESENTATION.
Ville Jokinen (poster); Hanna-Riikka, Kirsikka, Ramzy,

GROUPS

GROUP 1 Olli Seppänen, Jaakko Siltaloppi, Naveed Tabassum, Yu Xiao
Design Course – working in groups. MATRIX ON

GROUP 2 Kirsi, Mia, Antti,
The final product is 'Written report' You have the matrix.

GROUP 3 Annika Hulten (general diagnostic assessment). Eeva-Leena, Anton,
Ruifeng
Lecture course. Learning Diary ONE OPTION or EXAM. MATRIX ON

GROUP 4 Expertise/Competences will be assessed by POSTER PRESENTATION.
Ville Jokinen (poster); Hanna-Riikka, Kirsikka, Ramzy,

GROUPS

GROUP 1 Olli Seppänen, Jaakko Siltaloppi, Naveed Tabassum, Yu Xiao
Design Course – working in groups. MATRIX ON

GROUP 2 Kirsi, Mia, Antti,
The final product is 'Written report' You have the matrix.

GROUP 3 Annika Hulten (general diagnostic assessment). Eeva-Leena, Anton, Ruifeng
Lecture course. Learning Diary ONE OPTION or EXAM. MATRIX ON

GROUP 4 Expertise/Competences will be assessed by POSTER PRESENTATION.
Ville Jokinen (poster); Hanna-Riikka, Kirsikka, Ramzy,

GROUPS

GROUP 1 Olli Seppänen, Jaakko Siltaloppi, Naveed Tabassum, Yu Xiao
Design Course – working in groups. MATRIX ON

GROUP 2 Kirsi, Mia, Antti,
The final product is 'Written report' You have the matrix.

GROUP 3 Annika Hulten (general diagnostic assessment). Eeva-Leena, Anton,
Ruifeng
Lecture course. Learning Diary ONE OPTION or EXAM. MATRIX ON

GROUP 4 Expertise/Competences will be assessed by POSTER PRESENTATION.
Ville Jokinen (poster); Hanna-Riikka, Kirsikka, Ramzy,

Literature

- Asikainen, Virtanen, Postareff, Heino (2014). The validity and students' experiences of peer assessment in a large introductory class of gene technology. *Studies in Educational Evaluation*, (43) 197-205.
- Boud, et al. 2018. *Developing Evaluative Judgement in Higher Education*. Routledge.
- Biggs, J. & Tang, C. 2010 *Teaching for quality learning at university*. Textbook.
- Birenbaum, M. (1996). Assessment 2000: Towards a pluralistic approach to assessment. In: M. Birenbaum & F. J. R. C. Dochy (toim.), *Alternatives in assessment of achievement, learning processes and prior knowledge* (s. 3–30). Boston: Kluwer.
- Black, P., Harrison, C., Lee, C., Marshall, B. & William, D. (2004). Working inside the Black Box: Assessment for learning in the classroom. *Phi Delta Kappan*, 86 (1), 9–21.
- Boud, D. (2000). Sustainable assessment. Rethinking assessment for the learning society. *Studies in Continuing Education*, 22 (2), 151–167.
- Brown, G., Bull, J. & Pendlebury, M. (1997). *Assessing student learning in higher education*. London: Routledge.
- Bryan, C. & Clegg, K. (2006). *Innovative assessment in higher education*. New York and London: Routledge.
- Sluismans, D., Dochy, F. & Moerkerke, G. (1999). Creating a learning environment by using self-, peer-, and co-assessment. *Learning Environments Research*, 1 (3), 293–319.

More references for modern assessment, see the literature in: Virtanen, V., Postareff, L. & Hailikari, T. 2015 Millainen arviointi tukee elinikäistä oppimista? Yliopistopedagogiikka. 22, 1, 1-11. (Abstract in English How to reform assessment practices for lifelong learning?)



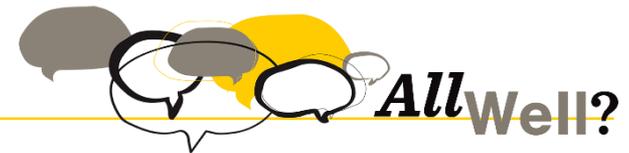
Aalto-yliopisto

Extra materials



Assessment tasks to give feedback

1. **Assessments tasks designed for to facilitate, by giving timely feedback**
 - e.g., diagnostic tasks so that both students and teachers know the level of students' prior knowledge
 - e.g., peer feedback before grading the project, transparency in criteria
2. **Assessment tasks designed to enhance future learning**
 - e.g., self-assessment based on criteria, also skills such as creativity, risk-taking, competence and willingness to ask questions included
3. **Tasks for testing current learning (almost all methods at present)**





Why to involve peer assessment or self-assessment?

These are assessment practices that enhance student involvement in assessment by

- Engaging students with criteria and standards, while students apply them to make judgements
- The understanding of criteria and standards
 - Enhances understanding of the content
 - Enhances evaluation skills
 - Enhances group working skills
 - Enhances ability to identify own competences and targets
 - Enhances ability to lifelong learning





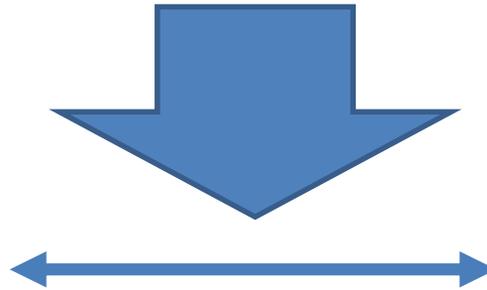
What is assessment?

All forms of assessment provide estimates of the person's *current status*

results can be used for

Judgemental purposes

Certification purposes



Developmental purposes

Giving timely feedback
Supporting student learning
Enhance current and future learning



Assessment guides student learning

Teacher perspective

Intended Learning Outcomes

Assessment

Student perspective

Assessment

Teaching methods

What the student does

Learning strategies

Learning Outcomes

