

Promoting learning
with self-assessment
and
using assessment matrix

Watching a video 5 min (not open without a Helsinki University account)

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- DISA Project (digital self-assessment) Find the publications concerning the project through <https://disa.cs.helsinki.fi/> (in the lower part of the page Background 'a study on self-assessment')



Self-assessment in mathematics (Rämö, Häsä, Nieminen, 2018)

- First-year lecture course
- Students did assignments in Moodle
- Got feedback about the assignments from peers and the teacher
- Assessed their learning in the middle and in the end of the course – gave themselves the grade
- Preliminary results show:
 - Self-assessment was valid – reflected students learning well
 - Students learned more deeply, were more motivated to learn and dropouts decreased



Learning for oneself and not for the exam!

Think by yourself

- Think about the last time when your performance was evaluated or assessed and feelings were involved
- How did you feel before the assessment? How about during the assessment? How about afterwards?
- Do you think that the assessment gave a truthful picture of your real skills?

Discuss with your group

- Share your experiences with your group
- Write down the feelings people in your group have experienced



Evaluative judgement

'The capability to make decisions about the quality of work of self and others' (Tai et al. 2017, 5, in Boud et al. 2018. Developing Evaluative



The ability to engage effectively in lifelong learning is a crucial twenty-first-century capability

Case: Self-assessment in a university course

- students work together with the support of the teacher
- feedback from the teacher and peers
- students practise self-assessment
- award their own grades



Learning objective matrix

- Contains both content and generic skills

- http://www.mv.helsinki.fi/jramo/algebra2/tavoitematriisi_alg2.html
- <https://disa.cs.helsinki.fi/courses/matrix/1>

	Prerequisites	Skills corresponding to grade 1	Skills corresponding to grade 3	Skills corresponding to grade 5
Quotient structures	I can determine the cosets of a subgroup.	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 calculate with cosets fluently.	
	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 can view cosets as equivalence classes, and know which equivalence relation defines them.	I can check whether an equivalence relation is compatible with a binary operation.	I can deduce the definitions of normal subgroup and ideal from the concept of binary operation compatible with an equivalence relation.
	I know how normal subgroups and quotient groups are related.	I can determine elements of a quotient ring and know how ideals and quotient rings are linked.	I know why the equivalence relation needs to be compatible with a binary operation when defining a binary operation for equivalence classes.	
Mathematical discussions	I can check in several different ways whether two cosets coincide.			
	I can formulate precise questions when I do not understand something.	I present my solutions to other people.	When talking to other people, I listen to them and react accordingly.	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 talk about my solutions to other people.	I take part in mathematical discussions with my peers.	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.	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.

What did the students think?

"Now I didn't focus on memorising things. Instead, I focused on **understanding** the topics, so that in the future, if necessary, I can use them / re-learn them quickly."

More information in the blogs

- **Kumpula opettaa:** [blogs.helsinki.fi/kumpula opettaa](https://blogs.helsinki.fi/kumpula-opettaa)
- **Hel of a lesson:** blogs.helsinki.fi/helofalesson

Johanna Rämä and DISA group (Digital Self-Assessment)

Group work: Design an assessment matrix

- In your group, first, choose a situation in which one needs to assess learners' skills
 - a course in university or school or other formal education, workplace, etc.
- What kind of learning objectives are there?
- Design a matrix
- Plan together how self-assessment can be used in to assess the learning outcomes in that situation?

- The figures of group works will be submitted to MyCourses in the area of first contact session