









Assessment of learning

The webinar programme on ICT IN PEDAGOGY

2022

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Finnish teachers' experiences of assessment during the remote teaching period Interviews of eight elementary school teachers (Luoma, 2021)

Collecting assessment information

Exams and tests: Questions via mobile phone, answering in paper with camera on (younger students), electronic exams (older students), paper exam with answers send as a photo using WhatsApp.

Voice recordings and videos: Voice recordings works well with younger students, good for evaluating reading skills; videos good with older students.

Returning assignments: Mostly by students' sending photos; handy when plenty of assignments from students.

Evaluating the learning process

Visibility of the process: A major challenge, difficult to take into account in assessment; possible somewhat in video sessions with a few students; surprises in students' selfregulation skills compared with class behavior.

Uncertainty: Evaluation of the process difficult or impossible, flexibility needed in exceptional circumstances.

Feedback from parents: Gave additional information especially about poorly performing students; also some surprises compared to teacher's expectations.

Interaction: Moving to technology-mediated interaction drastically changed the possibilities to monitor the process; students' self-evaluation answers gave some information about their working and the process in general.







Continue ... Finnish teachers' experiences of assessment during the remote teaching period

Students' participation in assessment

Self-assessment: Used a lot in different ways (by asking, messages, emojis, surveys); focusing on the ways of working, planning the work, use of time, experiences of remote studying, feelings, participation (e.g. give a grade to yourself, learning diary, reflections on video).

Peer-assessment: Used very little, experienced as laborious to organize; e.g. a group-writing task with peer-assessment and peer-feedback in 5th grade; presentations in the video meeting.

Guiding and supporting students

Giving feedback: Formative assessment difficult because the process is invisible; students do not react to feedback given to completed tasks and it emphasises the end-product instead of process; immediate feedback difficult in video meetings; e.g. emojis, short or longer comments, written feedback to completed tasks, oral feedback possible with a small group.

Targeting the support: Well-performing students can leave the session, focus on those who need help; additional support based on task completions.

Special education teachers and counsellors: Help especially for students with special needs.

Support from parents: Needed more than normally, especially for students with special needs; difficult to know how students were supported at home.









Continue ... Finnish teachers' experiences of assessment during the remote teaching period

Fairness and ethics in evaluation

Versatility: Multifaceted methods more difficult to use because of the invisibility of the process and lack of interaction; easier with older students who have better study and digital skills.

The temporary nature of the exceptional condition: Not much worries about assessment because the distance teaching period was short.

Priorization in assessment: Necessary in exceptional conditions, also permission from the school leaders to prioritize things; decisions made by individual teachers or with colleagues; coping and getting along most important - for both students and teachers.

Assessment emphases and cooperation: Emphasis on end products and summative evaluation; the distance learning period was not taken into account in the final school year evaluation, at least in a lowering way; collaboration among teachers helped making decision. Needs for developing assessment for both distance and face-to-face teaching

- 1. Digital assessment methods
- Students' participation in assessment
- Versatility in assessment in distance/online learning especially the assessment of the learning process







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• Different concepts

Concept	Definition
Assessment	Defining the level and quality of students' learning and performance during and/or at the end of a teaching unit, usually by using pre-defined criteria.
Grading	Defining a grade for students' performance either related to some part of the unit or the whole unit or study year.
Feedback	Evaluation given for students about their learning, performance and outcomes during and/or at the end of the unit; can be given by teacher or peers.
Reflection	Students' evaluation of their own learning, performance and outcomes during and/or at the end of the unit.
Evaluation	More general concept, can mean both teachers' evaluating students, or students evaluating teachers, teaching or their study experiences.







Assessment directs students' study efforts

Online assessment is not so much different than "ordinary" assessment.

Assessment for learning, not only of learning.

The criteria should be clear both for students, parents and teachers, and students should be aware of the assessment criteria from the beginning. Clear assessment practices help students to understand what is needed and in this way, they also support the learning to learn skills.

However, it is important to explain the criteria clearly taking into account the level of students and to help them reflect on their learning outcomes.

Assessment influences the way students study and engage: students put their efforts into issues that are assessed. Assessment is a powerful way to direct studying.

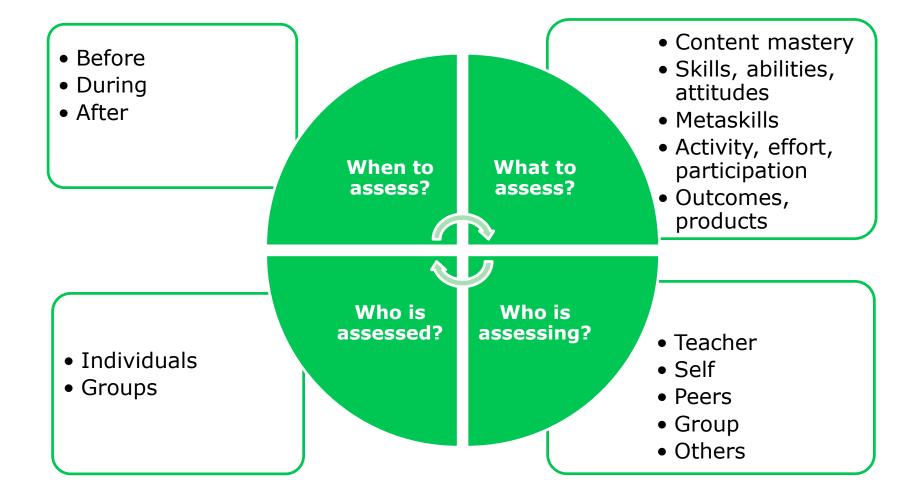








Central questions regarding assessment



In addition. How to assess? Different methods of assessment







Main types of assessment

Diagnostic: Before the teaching unit; gives information of students' prior knowledge and skills; helps students activate their prior knowledge and link it to the course content (e.g. students answer a pre-questionnaire or a quiz). At the primary level, this can be in the form of, e.g. a playful game, a drawing or a short oral presentation

Formative: During the teaching unit; the focus is on giving/receiving feedback during the learning process; feedback both for the student and the teacher; for influencing studying and learning outcomes (e.g. teacher comments drafts of student writings or presentations in the middle of the process).

Summative: At the end of the teaching unit; the aim is to assess how well the students' have learned what they were supposed to learn; the assessment of the learning outcomes (e.g. final text or self-evaluation questionnaire at the end of the course).









Assessment in the Finnish curriculum

The new curriculum (2014) emphasises **diversity in assessment methods** as well as assessment that **guides and promotes learning.** Information on each pupil's study progress must be given to the pupil and guardians on a sufficiently frequent basis. Feedback is also given in ways other than reports or certificates.

At the end of each school year pupils receive a school year report that gives **a numerical grade** for each subject on how well the pupil has achieved the targets set for the school year. To ensure fair assessment, national assessment criteria for the numerical grade eight ("good") have been defined in every subject for grades 6 and 9.

In order to ensure the equality of evaluation, **evaluation criteria for grades 5, 7, 8 and 9** have been prepared for the end of the 9th class (last year of the basic school). The evaluation criteria describe what kind of competence is required to achieve different grades in each subject. Each teacher uses the criteria when forming the student's final grade for the final certificate of basic education.

https://www.oph.fi/en/education-and-qualifications/national-core-curriculum-basic-education

















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Examples of online assessment practices

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• Advantages of peer assessment

Who is assessing: Peers

Activates students and develops generic and reflective skills

Combines the learning process and assessment together

Supports deep approach to learning

Gives feedback to students about their own learning

Reduces the teachers' workload

Requires clear assessment criteria









Giving and receiving feedback between peers



Giving and receiving feedback is an essential learning skill: the one who receives feedback, gets new ideas and help to improve his / her outcome. The one who gives feedback, learns to see how others do the task, raises "above" the task and learns to see also his / her outcome in a new way.

It supports students collaboration and feeling of a student community – important in blended and online learning!

The teacher does not need to control, read, comment or evaluate everything!

Think carefully when teacher/expert feedback is necessary and put the teacher resources to those issues.









Who is assessing: Peers

Peer assessment – how?

Create an open and supportive atmosphere! Then students are more willing and encouraged to give feedback to each others.

Engage students in giving feedback to each other.

Both individuals give feedback to individuals and groups to groups.

Students need training for giving constructive feedback: Provide proper guidance and instructions for peer feedback, or create the guidelines together with the students.

Reserve enough time for giving feedback & for improving the version after feedback.



Start with positive feedback Emphasise strengths Present you own observations but they are not truth! Avoid negative comments about the person Give feedback clearly and kindly



The following six slides are an example of guidance material made for teachers in a project about distance learning

Assessment in an online classroom: How can a teacher keep on eye on student's working?

Author: Sari Hopeakoski

Examples: Sari Hopeakoski and Salli Nurminen

2019



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Problem

Traditional exams are impossible to conduct in an online classroom because the teacher cannot see it the student has, e.g., a open book in front of them. How could the assessment be carried out?



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Solution

There are many options, and the assessment may vary in different courses. At the beginning of each online class course, students should be told how the course is evaluated. Several partial performances can be evaluated, which then together form the entity. In humanities and natural sciences, avoid plagiarism with oral clock. Final exams in languages can be scheduled, so there is no time for snowballing or using Google translation. Vocabulary tests in languages can be given orally to the student so that the teacher can see the student. WhatsApp is also handy for quick testing. Testing oral language skills is well suited to an online classroom. In addition, portfolios can be assigned, and they are evaluated in a self-evaluation discussion between the student and the teacher.



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An example of using digital portfolio assessment

What to assess: Metaskills

Sari Hopeakoski

During a French course, students collected a portfolio which consisted of 4 written outcomes about cultural topics, one oral presentation about culture and "Mon grammaire"- grammar bank (own grammar sentences). In the writings, the students used vocabulary important to them from the course topics, through the cultural presentations they expanded their knowledge of French culture, and the grammar sentences tested their real application ability. In the self-evaluation discussion, the students received personal feedback and motivation for future courses towards the graduation exams.



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Undervisnings

An example of creating a cartoon for assessment

What to assess: Products

Salli Nurminen

During an English course the students made a cartoon in which they practiced and tested their mastery of reflexive verbs. The cartoon was instructed in such a way that the instructions defined precisely what everything must be in the cartoon: at least six frames, some surprising plot twist in the story and six reflexive verbs used in the texts in at least three different person forms. In addition, it was told what the student should invest in if aiming for a higher grade: varied language, the appearance of the cartoon. After returning the work, each of the course participants gave peer feedback on two cartoons according to the instructions. The students had to evaluate things according to the given instructions. They also had to comment on how the cartoon could have been improved in some way. The work was scored based on peer evaluations and the teacher's evaluation.



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Undervisnings-

och kultur-



An example of assessing a guided presentation

What to assess: Skills, abilities

Salli Nurminen

During an English course the students prepared according to the instructions to present their home (if they didn't want to present their home, they could present the floor plan of their dream home). The instructions stated how much (how many sentences) one had to tell about one's own home or room, and that the presentation would evaluate general comprehensibility with an emphasis on the use of prepositions and verbs. The performance was prepared in advance, and the presentation was done in class so that the presenter walked around his home or took pictures of his room while talking about it.



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An example for evaluating one's metacognitive practices, created in a project for upper secondary students

<u>Available</u>

Evaluate	your	own	working	with	this	table

Name:

___ C

Date: _____ Outcome to evaluate:___

Using Students' Assessment Mistakes and Learning Deficits to Enhance Motivation and Learning, James H. McMillan, 2017, Routledge Assessment That Promotes Being Wrong, s. 120. Metacognition means the conscious observation and regulation of one's own information processing

How often I use the metacognitive skill	Seldom or never	Every now and then	Mostly	Often or always
I check the assessment criteria of my task before starting working.				
If I don't understand something I ask help from the peers or the teacher.				
I learn about the mistakes I make.				
I check if I have misunderstood or made mistakes.				
I like to evaluate other students' outcomes.				
I'm eager to wait for feedback about my outcomes or working process.				
I think about what I could change or improve in my studying during the next time.				









Group self-assessment in a teaching unit about online inquiry

Who is assessing: Group Who is assessed: Group

Subject: Mother tongue and literature, Duration: Four 75 minute lessons + homework

Students investigated different viewpoints of a contradictory topic applying web sources and documented their inquiry process progression in a Google document using a working template.

The process was modelled by the phases of online inquiry: 1) searching for relevant sources, 2) evaluating the credibility of sources, 3) preparing a synthesis from multiple sources, and 4) presenting the syntheses to other groups.

The working template included self-assessment questions to be filled by the group after each phase (next slide).

<u>Kiili et al. (2022)</u>









Continue ... Group self-assessment questions after each online inquiry phase

Searching	How did we manage to formulate good search queries? How did we make use of preliminary search results in the development of searches? How did we utilize information about organizations, publishers, and stakeholders in formulating the searches?
Evaluating the sources	How well did we consider different source features when evaluating the quality of online texts? How well did we find the main claim and supporting reasons?
Synthesising	How well did we find differences and commonalities between the different sources? How well were we able to consider the potential explanations for the differences?
Learning and working in the whole project	What did we learn on critical online reading and its importance? How did the project affect our attitudes towards information found on the internet in the future? How was group work planned and coordinated? What was successful? What was challenging and difficult? How did the group members participate in the joint work? How were responsibilities and tasks divided between the group members?









Diagnostic assessment of understanding through a survey in a teaching session

What to assess: Content mastery

Subject: Physics, Topic: Trajectory, Duration: 75 minute lessons

- 1) The teacher explained some basics about trajectory and showed a picture about it with different points (a, b, c, d, e).
- 2) The teacher had created a questionnaire with the *Socrative* application: *At which point is the acceleration of the ball the greatest (options a, b, c, d, e)*. He shared the link and students answered with mobile phones.
- 3) Without showing the result, the teacher told that most answers were wrong. He instructed the students to discuss the answer in groups and think how Newton would answer the question.
- 4) The students answered the question again. Now most answers were correct. The explanation for the correct answer was discussed.
- 5) The lesson continued with similar practice to other issues related to trajectory.









Diagnostic assessment: a pre-questionnaire

A questionnaire (made in Google Forms) including multiple choice questions about copyright issues for teachers.

Answered by the course participants in web before an expert lecture about the topic.

The respondent gets feedback immediately after answering: correct answers and links to websites including more information about the topic.

The feedback is the same regardless of the correctness of answers.

Available in English

What to	assess:
Content	mastery

1. What does this marking/entry below mean in the image or material? *	2 pistettä	
(0)		
The image may not be used without permission.		
The image may be used, but not for commercial purposes.		
The author/maker waives (gives up) all rights to the image or material.		
2. Use and display of YouTube videos in teaching	2 pistettä	
Voutube videos may not be shown in teaching.		
Voutube videos may always be shown in teaching.		
The use of Youtube videos in teaching is controversial. The law is "under construction" e.g. in EU countries (2021).		
A good practice is to ask the learners to watch the Youtube video themselves from a link shared by the teacher.		







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Students' questions as diagnostic assessment

- 1. Explain shortly the relevance and context of the teaching unit topic: why the phenomena are important, what are their relationships with other phenomena studied, how do they relate to real-life challenges, etc.
- Make students write questions that comes to their mind about the phenomena: what do they wonder or want to know about the topic explanation seeking questions, not factual questions, as many questions as come to mind.
- 3. Use a digital tool to list and collect the questions.
- 4. The questions can later be used in various ways: self-assessment (prepost), group work or project work topics, etc.









Summative assessment: alternatives to traditional exams

"Congress" exam

- Students prepare and present a "paper" according to the theme of the teaching unit
- The program is planned based on the papers.
- Students get training in giving oral presentations
- Oral and written feedback (using digital tools) from teacher + agreed students

Problem solving in groups

- Students prepare by reading about the topic.
- In the exam, the students receive a problem (case) to be dealt with in the group -> grading based on the quality of oral or written solution

Open book exam

- Students can use the school book in the exam.
- Application of knowledge, not memorising.

Oral exam

- Students prepare themselves in a similar way as for a written exam
- Begin with easier questions, central content in the middle, end with reflection

Group exam (written or oral)

- The whole group gets the same grade
- 3-6 students / group









Re-use existing materials, share with your colleagues to save your time and effort 1

An example of a nice list of online assessment tools:

9 Ways to Assess Student Learning Online

- Online quizzes
- Essay questions
- Drag-and-drop activities
- Online interviews
- Dialogue simulations
- Online polls
- Game-type activities
- Peer evaluation and review
- Forum posts









Available in English

Re-use existing materials, share with your colleagues to save your time and effort 2

Another example of hints and a list of online assessment tools **Available in English**

Online Assessment Tips

- Keep in mind the age of the students. The younger they are, the more simple the software. Consider multiple choice over free response. Add images or video to both engage the student and add another frame of reference to the words.
- Allow students to take the test offline if they do not have access to technology.
- Give the student a longer time period to take the test in case of issues with technology or Wi-Fi.
- If you truly need to time the test (consider a final exam), ensure that the students have ample notice and perhaps give a sample test so they can test the platform and ask any questions ahead of time.
- If you are allowing free responses that are automatically graded, make sure to input variations of the answer! Incorporate misspellings, add the answer with and without articles, and more.

A list of tools, including GoogleForms and Socrative







