

Assessment that considers AI use – Tips for teachers planning teaching

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General

This document highlights the effects of generative AI on teaching and assessment, also offering tips on how to plan your teaching to keep assessment constructively aligned in the era of AI. It is unrealistic to assume that teaching can continue as before – that someone else will tackle the challenges brought about by AI. All teachers should consider these matters and ensure that their teaching remains relevant as circumstances evolve.

Students can use generative AI in many ways when completing learning assignments, some permitted and taught by the teacher and others unauthorised. At times, students may use AI to check spelling, receive advice on text structure or content or generate entire essays or parts thereof at home. Presenting text produced by AI as your own is unequivocally prohibited. AI may be a sensible part of learning assignments when its

use is pedagogically well planned. For example, the AI Assessment Scale¹ (Perkins et al., 2024) describes in more detail the roles AI may play in learning assignments. Within the same course, AI use may be prohibited for some assignments and essential to others.

The University of Helsinki recommends² that only AI services provided by the University³ be used in teaching. This ensures compliance with the GDPR, provides all students with equal access to AI services and offers the support services needed by teachers for their deployment. Teachers always decide how to use (or whether to prohibit) AI in courses and provide instructions for such use in assignments.

Since AI may affect students' learning and academic performance in many ways, it is important to ensure that assessment methods measure actual skills and learning. When considering new assessment methods, courses should be reviewed as a whole in accordance with the constructive alignment of teaching⁴. To begin with, consideration should be given to what has been and has not been effective in the course, taking into account the learning outcomes. After this, the need to redesign content, teaching methods, learning material and assessment methods can be considered. Reflecting on these elements in conjunction with AI-related challenges ensures that students are committed and motivated to learn, and have the opportunity to develop their academic skills. Learning outcomes may include elements specifically aimed at competency in critical and responsible AI use.

In this context, *assessment that considers AI use* refers to assessment practices and assignments that retain their measurability in accordance with the learning outcomes even after the proliferation of AI use. It may either permit the controlled use of AI transparently or minimise the impact of AI-generated outputs on the reliability of assessment.

Please note:

- The learning outcomes of course assignments must be carefully described to enable students to understand what individual assignments are designed to teach. The skills and expertise students themselves expect from their degrees should be discussed with them, as well as the potential and expected role of AI use in skills and expertise.
- Course assignments must indicate the AI use that is permitted and sensible in terms of learning outcomes, and which elements cannot be outsourced to AI.

¹ AI Assessment Scale: <https://aiassessmentscale.com/>

² Artificial intelligence in teaching, guidelines by the Academic Affairs Council: <https://teaching.helsinki.fi/instructions/article/artificial-intelligence-teaching>

³ AI tools at the University of Helsinki: <https://www.thinglink.com/view/scene/1967203288365400932>

⁴ Constructive alignment of teaching: <https://teaching.helsinki.fi/instructions/article/constructive-alignment-teaching-and-10-steps-course-design>

- Particularly in writing assignments, students should be asked to describe their AI use in sufficient detail for assessment purposes (*see guidelines for reporting on generative AI use*).
- A primary goal is to provoke genuine motivation for learning in students. When students are committed to the topic at hand and learning, they are more likely to use AI in support of learning in a sensible manner that promotes learning. Independently completing assignments, including writing, creates a sense of pride and ownership for students. This is undermined by uncritical use of AI tools. Overcoming challenges not only boosts students' self-confidence and self-efficacy, but also is part of the learning process.

One option is to change course learning assignments and their assessment, for example, as follows:

1. Focus on assessing, monitoring and guiding learning instead of outputs.
2. Design assignments that are difficult to outsource to AI.
3. Design courses so that they involve the demonstration of learning, including when AI cannot be used.
4. Assess learning under invigilation and without the possibility of relying on AI.



VINKKILISTA

tekoälyn huomioivaan arviointiin



TEHTÄVIEN SUUNNITTELU

- ✓ Painotus tehtäviin, jotka kehittävät korkeampia ajattelun tasoja. (esimerkiksi Bloomin taksonomian mukaisesti)
- ✓ Tekoälyn kanssa tehtävät harjoitukset ja simulatiot (tekoäly ohjeistettu oppimistehtävän mukaisesti)
- ✓ Kurssi rakentuu pienistä, monipuolisista osaamistehtävistä, joista saa palautetta oman oppimisen edistymisestä.
- ✓ Pelillisyyttä
- ✓ AI-kritiikki-tehtävät
- ✓ Videona (tai audiona) palautetun työn lisäksi kuvaus siitä, miten esimerkiksi laskuissa vastaukseen on päädytty.
- ✓ Thinglink 3D -skenaariot
- ✓ Osa arvioinnista perustuu lähtilanteessa tai muuten valitussa ympäristössä tehtävän osaamisen osoittamiseen.
- ✓ Osatentit, esitelmät, väittelyt, ryhmäkeskustelut
- ✓ Lähtilanteessa esimerkiksi luokkahuoneessa tai kentällä tehdyt harjoitukset
- ✓ Käänteinen opetus
- ✓ Teach-back sessions: Annetaan aiheet kurssin alussa, ja kerrotaan että kurssin lopussa jokainen on osattava opettaa yksi aiheista
- ✓ Pyydetään valmistautumaan esittämään ja perustelemaan oma työnsä / vastauksensa lähiopetustilanteessa



ARVIOINTI

- ✓ Välipalautuksia ja formatiivista jatkuvaa arviointia
- ✓ Vertaispalautetta
- ✓ Prosessikirjoittamista, johon sisältyy ohjaustapaamisia jokaisen vaiheen jälkeen, esim. suunnittelu- tai luonnosteluvaiheen jälkeen.
- ✓ Kriittinen reflektointiosuus tekoälyn käytöstä
- ✓ Itsearviointia

”Kurssitehtävien osaamistavoitteet tulee avata tarkasti, jotta opiskelijat ymmärtävät, mitä eri tehtävien avulla on tarkoitus oppia. Opiskelijoiden kanssa kannattaa myös yhdessä keskustella, millaisia taitoja ja asiantuntemuksia opiskelijat itse odottavat oppiansa tutkimisessaan, ja mikä tekoälyn käyttämisen rooli osaamisessa ja asiantuntemuksessa voisi ja pitäisi olla.”

”Kurssitehtävissä tulee ilmetä, miten tekoälyä saa ja on mielekästä käyttää osaamistavoitteiden näkökulmasta ja mitä osaa tehtävien teossa ei saa ulkoistaa tekoälylle.”



KURSSI KANNATTAA SUUNNITELLA SITEN, ETTÄ ARVIOINTI PERUSTUU ESIMERKIKSI JOHONKIN SEURAAVISTA:

-  Examinarium-tentit
-  Moodle-tentit salissa
-  Suulliset tentit
-  Lähtilanteessa tehtävät oppimistehtävät
-  Monipuolinen arviointi ja selkeät odotukset tukevat opiskelijoiden oppimista ja motivaatiota.

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Below is a closer look at the above-mentioned suggestions for modifying course assignments and planning assessment.

1. Focus on learning instead of output

Traditionally, assessment may focus on measuring the outcome, which is a summative approach centred on teacher control as well as the measurement and comparison of outputs. In recent decades, assessment has nevertheless moved towards a student-oriented approach that supports learning and where assessment is seen as part of learning. Formative assessment emphasises continuous feedback, students' active role and the supervision of learning, which supports self-regulation and deep learning. This trend is complemented by the sustainable assessment approach, which, according to pedagogical studies, should be at the core of higher education institutions. Key to this approach is students' continued ability to assess their skills, including in the future. This is effectively supported by, for example, self- and peer-assessment skills.

AI can be an appropriate tool for formative and sustainable assessment. It can provide students with immediate and individual feedback, support the monitoring of learning and help students develop their self-assessment skills. AI can be part of overall feedback, supplementing other elements, but it must be kept in mind that students consider feedback provided by teachers as the most useful type (Er et al., 2025).

Teachers can also assess learning through interim assignments and meetings, for example, by asking students to report on their work, reflect on the progress of their learning and justify their solutions to assignments. Such multi-stage assignments make monitoring student progress more effective (Estaphan et al., 2025).

2. Design assignments that are difficult for learners to outsource to AI

Advances in AI services are rapid, making it impossible to provide comprehensive tips. AI may soon gain new and more extensive uses that for now are not possible, making it necessary to continually review assignments and assessment methods in relation to AI development. There are nevertheless certain principles to explore when designing assignments that take AI into consideration.

Focus on assignments that develop higher cognitive skills

Research has shown that plagiarism is effectively minimised through assignments that are designed to develop the application of knowledge and other higher thinking skills as outlined in Bloom's taxonomy, not merely the retention of individual facts (Toker and Akgun, 2025). Such assignments can be used to guide students to reason, identify relationships between elements and in relation to the whole, synthesise concepts on their own, come up with ideas, as well as assess ideas, knowledge, practices and solutions (Lonka, 1995).

Assignments should also be tied to perspectives that require real-life problem-solving, in turn requiring complex reasoning from students (Evangelista, 2024). Assignments related to genuine situations in professional life or topical societal questions are often meaningful to students. Linking assignments to learners' personal experiences, the learning context, such as the details discussed on the course, as well as real-life situations or actual and real-time material can reduce the outsourcing of course assignments to AI (Kooli et al., 2026; Ncube et al., 2026).

Assignments completed using AI

Students can be instructed to ask AI for answers to questions and compare them against their own knowhow or answers. Students could also investigate the same topic using reliable research sources and then make comparisons. Practising prompting and comparing the results obtained with different prompts also helps to understand the functioning of AI. The CurreChat service provided by the University of Helsinki also makes it possible to use different language models (including at the time of writing GPT-5.1, GPT-4o-mini, Claude Haiku 4.6 and Mistral Large 3-1), and compare their functioning. This promotes students' AI literacy, which includes the ability to critically analyse AI output and the ability to use tools. It is also useful for teachers to trial their assignments using AI, including how effective different language models are in completing them.

By using the more advanced features of the AI services provided for teaching at the University of Helsinki, interactive AI-powered chat simulations can be created for courses, such as carefully planned conversations with an AI character associated with the field. These include AI patients in medicine (Vilanti et al., 2025), AI criminals in law and AI forest owners in forestry (Hemminki-Reijonen et al., 2025). Teachers hiding their AI prompts from students means that students will be unaware of how AI has been instructed to operate in the course, as well as of the course-specific prompts given to AI and the background material curated by the teacher that the AI relies on. In other words, students only need to conduct a conversation with AI, which is, ironically enough, difficult to outsource to AI. Such assignments can even now be commissioned using the University's CurreChat⁵ service and MOOC.fi⁶ learning environment. At times, skilled students may be able to expose AI prompts that were hidden by teachers. In such cases, teachers can require students to submit, for example, the contents of a conversation with CurreChat and proof that it was conducted by the student.

⁵ CurreChat is available at curre.helsinki.fi/chat.

⁶ The MOOC.fi online learning environment can be used for independent study in open online courses. <https://teaching.helsinki.fi/ohjeet/artikkeli/verkko-oppimisymparistot#paragraph-3925>

The accuracy of responses by AI can be improved by relying on the retrieval-augmented generation (RAG) technique, which enables teachers to add their own material, including studies and learning material, to the CurreChat and MOOC.fi services as background material for AI (Li et al., 2025). In such course assignments, students engage, with the help of AI, in dialogue with the teacher's self-curated learning material, rather than basing their answers on the generic data used to train language models. Similarly, students who do not know the content of the background material provided by the teacher must conduct their own conversation and discover this information with the help of AI. It may also be advisable for students to familiarise themselves with new topics before lectures. They can be asked to converse with AI in a manner, and on the basis of background documents, determined by the teacher. For example, the teacher may have adjusted the AI solution to first ask students certain questions in a specific order and then comment on their answers on the basis of the teaching material provided to it.

Varied assignment types

One option is to design a diverse range of formative assessment methods and assignments, such as drawing up mind maps, infographics and digital portfolios, that guide learning and teaching. Various assignments allow students to accumulate diverse skills. At their best, such assignments will help to better assess students' skills (Estaphan et al., 2025). It may also be worth experimenting with audiovisual answers from students. For example, students could film conversations between themselves and submit the material to the teacher for assessment.

Assignments in 3D ThingLink environments

In virtual 3D environments, students have to advance, explore and investigate things. This is relatively difficult to outsource to AI. The ThingLink⁷ application used at the University of Helsinki is well suited to this purpose, as are many gamified simulations, whether or not they involve information technology. Examples include branching scenarios and drag-and-drop-type tasks.

3. Design courses so that they involve demonstrating learning without AI use

To support assessment, you can add a section at the end of the course where students recall or exploit their learning without relying on AI. If it turns out that students have made prohibited use of AI, teachers may oblige them to demonstrate their learning under invigilation in accordance with the guidelines for cheating⁸.

⁷ ThingLink: <https://teaching.helsinki.fi/instructions/article/other-supporting-tools-teaching-activities>

⁸ Cheating and plagiarism: <https://teaching.helsinki.fi/instructions/article/cheating-and-plagiarism>

Learning assignments completed on site

Examinations are not the only way to demonstrate learning on site. Courses can include groupwork, small-scale writing assignments, discussions and similar elements. In fact, learning should be assessed using a range of methods, since no single assessment method (such as examinations) is suited to all situations. For example, courses can utilise students' self- and peer assessment, sustainable assessment and integrative assessment. Integrative assessment supports continuous learning, utilising various assessment methods, such as formative and summative as well as self- and peer assessment, to gain a comprehensive perspective on the assessment areas so that the learning can be applied in subsequent assignments and professional life. Flipped classroom teaching, where students apply and advance their learning acquired in remote sessions through assignments completed on site, enables teachers to monitor students' learning and steer it in the right direction.

4. Assess learning under invigilation and without the possibility of students relying on AI

Oral presentations

Including oral presentations, examinations and other interactive assignments in teaching whenever possible can support the demonstration of actual learning (Ncube et al., 2026; Estaphan et al., 2025). Students have also found groupwork in the lecture room useful, with results presented orally to the teacher. While inappropriate AI use may be less frequent in the case of oral assignments, students may of course agree in groups, contrary to the teacher's instructions, to complete all group assignments using AI. In such cases, random groups could create more pressure to complete such assignments without relying on AI. This can also serve as a formative assessment tool.

Oral assignments can also be combined with the assessment of remotely completed assignments. In the oral component, students explain and justify in more detail their choice in completing the assignments. Meanwhile, the teacher has the opportunity to ask further questions.

However, it should be noted that written and oral expression are very different things. Students may be able to explain something effectively orally, while being unable to do so in writing, or vice versa.

Invigilated examinations

The University of Helsinki currently conducts two types of examinations completed on computers where network use is restricted by technical means:

- Moodle examinations can be completed using the Safe Exam Browser (SEB).
- Examinarium examinations are completed in separate facilities with dedicated computers. This method is based on flexible examination periods and questions that are usually evaluative. Examinarium examinations are best suited to closed-book and resit examinations, as well as other examinations with a long examination period or a small number of students.

Adding examinations to certain courses (such as open online courses completed through independent study) can also significantly reduce the number of students.

Oral examinations can be held either on site or remotely via a video and audio connection. In the latter case, student privacy must be protected, which means that students must have the opportunity to take the examination on University premises. Oral group examinations are another option, but they require pedagogical skills from teachers, as they involve assessing several students while listening to them speaking.

This assessment method suits some people well, and someone may receive a higher grade for an oral examination than for a written one. For others, oral examinations are much more difficult and anxiety-inducing. At the same time, oral examinations can support the development of professional skills in certain fields, particularly if oral presentation skills are included in the learning outcomes. The labour market and academia need experts who are able to express themselves clearly, which is why this should also be practised during studies.

Some fields have established a practice of always inviting students to oral examinations if the teacher suspects that they have made unauthorised use of AI to complete independent assignments.

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