



OER 2

Collective Conflict Mapping

Fostering Reflection on Matters of Transparency
in Educational Technology and AI Usage

Pedagogical guideline for educators

The goal of the OER

This OER leads you through a guided process to **collectively map actor relations and conflicts on transparency matters around technology and AI usage in educational contexts**. At the end of the process, the participants have:

- reflected on the diversity of actors, their interests and power relations around matters of transparency,
- considered the difficulties of identifying solutions that equally benefit everyone,
- imagined different future scenarios and concrete actions which could be taken to address these difficulties and enhance transparency around technology and AI usage.

Optional: **Introduce the concept of “Transparency“**

To provide an ideal preparation, you could precede the application of the OER with a preparatory session, in which the learners familiarise themselves with the EU principle of “Transparency” (based on the EU Commission’s [“Ethical guidelines on the use of artificial intelligence \(AI\) and data in teaching and learning for educators”](#), or the preceding [“Ethics Guidelines for Trustworthy AI”](#)).

As material, you could use:

- the introduction text [from the OER page](#),
- the case study and action points from the [ETH-TECH Framework](#),

- if working with other teachers: the [ETH-TECH self-reflection tool](#),
- and this “friendly definition” developed in the ETH-TECH framework:
AI systems need to clearly explain how they function, what data they collect and for what purposes. Students, teachers and universities should be informed about these aspects so they can give their informed consent when using AI systems.

Usage options

There are **different options to integrate the conflict mapping OER into your classroom and institution**. For instance:

- Develop one collective conflict map together with your students;
- Use the conflict map to collectively visualize learning growth: create one map in the beginning of a course, let students afterwards engage with the topic (e.g., texts, material) and then revisit the map again to integrate students' new knowledge;
- Let different student groups develop conflict maps on the same scenario (or on different scenarios) and compare their results in the end. Here you can also play with providing groups different additional material;
- Develop a scenario together with students (e.g., based on their real university context), on which you implement the mapping afterwards;
- Use the method with colleagues to collectively reflect on perceptions of transparency in teaching contexts;
- Use the method for faculty development meetings, for instance when debating tech/AI strategies.

You should plan a minimum of 90 minutes for conducting the activity together with your students. The method works better the more time participants have to also finegrain, revisit and work creatively with the maps.

Regarding group size, the method works best if you split larger groups into subgroups of 5-6 participants for the mapping exercise. The groups can present their work to the whole class in the end or rotate in-between phases of the activities.

What you need to prepare in advance

Download the materials for the OER from this website. Besides this pedagogical guideline, these include:

- Powerpoint template (you can also use analogue material)
- Example scenario 1: "Authorship and intellectual property rights"
- Example scenario 2: "Learning analytics and identification of students at risk"

PLEASE NOTE:

If you use a **prepared scenario**, you can follow the step-by-step instructions provided in the scenario documents.

If you develop **your own scenario**, you need to prepare two things:

- a) a scenario description which can be introduced to the participants in the beginning;
- b) 'statements' from up to four actor groups involved in the scenario that mirror their specific situations and interests. We recommend keeping each statement short, limiting it to a few sentences.

For application, you can then follow this pedagogical guideline.

Also, it is important to consider in advance **participants' previous experience with the topic**. The OER was designed for Higher Education educators and students as main audience, but feel free to adapt it and try it out in other contexts and with other (age) groups. Also, the method works for beginners and for participants with more background knowledge. Still, for beginners, you might want to further specify the scenario (e.g., use a concrete example from your university) to make it more accessible. Also, you can introduce participants to the topic more generally before doing the activity (e.g., reading 1-2 texts from the reference list which you can find at the end of each scenario document). You can also use conflict mapping to initially explore what your participants already know about the topic.

Using the OER in an online synchronous activity (e.g., online class)

You can also do the conflict mapping in a **synchronous online scenario**. Either you share the map through screensharing (i.e., you draw the map based on the conversations) or you use a shared document or interactive whiteboard where the students can draw the map together.

You can create breakout rooms for enhancing direct interaction, or students use the chat to communicate their input. We recommended a maximum of 30 participants in this online activity to facilitate active engagement.

Implementing the conflict mapping

Open the powerpoint template and read the selected/created scenario to your participants.

→ If you use a **prepared scenario**, you can from now on use the scenario document. It will guide you step-by-step through the process.

→ If you have developed your **own scenario**, follow the next steps:

Phase 1: Mapping out

During a first round of mapping, participants arrange the key actors involved in the scenario one after the other. Start with **two** of the four actor groups and let students read the corresponding statements for these two groups. You can also read the statements yourself, but distributing the statements can further enhance student activation.

Then turn to the powerpoint template (slide 3), let the participants decide on a circle size for both actors and copy them into the conflict map (slide 4). You can also adapt the size, according to perceived influence of that actor group. Let the participants position both actors to each other, together select arrows that best describe the relation between them, and optionally use a textbox to describe the meaning of the arrows in more detail. Whilst participants make their choices, let them explain their reasoning. Discuss with the group whether everybody agrees with the positioning or would change something.

Then, continue with the **third** actor group, let students read the statements of that group and let them position the actor group in relation to the first two actors on the map. It might be necessary to adapt the positions of the first actors. Again, encourage participants to discuss their ideas behind positioning actors in a particular way.

Repeat with the **fourth** and last actor group.

Phase 2: Fine-graining the map

Maybe you already discussed during phase 1 that the actor groups are not homogenous and that it seems necessary to more strongly **differentiate within each group**. Phase 2 invites participants to do so by adjusting the shapes and arrows to highlight such within-group differences.

Go through each actor group once more and discuss which sub-groups should be differentiated within each group. You can duplicate the corresponding actor circles and position the sub-groups in a more nuanced way on the map.

Phase 3: “What would change if...” – using future speculations to develop agency

Whilst the first two phases focus on the disentanglement of actors' relations and an understanding of the involved complexities, phase 3 takes the crucial ETH-TECH step towards 'What's next?'. Think of different questions through which you can engage students to actively imagine different future scenarios (also here, you can find inspiration in the two provided scenario documents). The purpose of the scenarios is to **develop ideas for individual and collective agency in order to enhance more ethical technology and AI usage**, even within given constraints.

We encourage you and your participants to not only discuss realistic scenarios, but to also include hopeful, utopian or absurd scenarios. This can support broadening our scope of creative imagination!

To start this phase, you can create copies of the powerpoint slide with the developed conflict map to contrast different scenarios with your original map.

Rounding up

Have a look at the developed conflict maps and collectively reflect on the activity. The following questions can help you:

- How do participants feel when looking at the maps?
- What was their personal highlight during the process? What did they learn or understand differently?
- How did they feel discussing the future scenarios? Which emotions did the different scenarios trigger?

Based on the scenarios and discussions, brainstorm how this exercise could inform your technology and AI usage strategies in class/in the university with regards to transparency matters. Here are some ideas:

- Checking more intensively/ collectively investigating the terms and conditions of used technologies,
- Boycotting non-transparent technologies,
- Requesting insights to/ transparency regarding collected data (as guaranteed in the GDPR),
- Considering matters of intellectual property more carefully,
- Providing opt-in/opt-out strategies regarding data collection or technology features; requesting those options from university leadership.

Of course, these are only some ideas. You will develop many more! Also, you can use our OER on [Empathetic Contract Creation](#) to collectively define rules for future technology and AI usage in your context.

Maybe you want to **engage your students with the topic further after the mapping** (e.g., providing material, through group work, etc.) and revisit the map after they have acquired additional knowledge. For instance, you can let students engage with the other ETH-TECH material, such as the [Framework of Self-Reflection Tools](#).

Finally, explore options for disseminating the map. For instance, share the map with colleagues, use the material for other events (e.g., exhibitions), let other classes continue with your maps, or compare results across classes. The map can further serve as foundation for essay writing, research assignments, or (artistic ways of) [countermapping](#) activities.



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