

Activity 3.2.1 Staging Dilemmas	In class / Online	Intermediate
Activity 3.2.2 The role of stakeholders in AI	In class / Online	Intermediate
Activity 3.2.3 Class Code of Ethics	In class / Online	Intermediate
Activity 3.2.4 Creating Ethical Matrices	In class / Online	Advanced

Activity 3.2.1 - Staging dilemmas

Duration	40 minutes
Requirements	Modules 1 and 2.
Hardware and Software tools used	Remote: Software - Video-conferencing software. Real time online collaboration text editor and presentation software. Hardware - Desktop/laptop computer
Type of assessment	Quality of arguments during group discussion and class presentation.

This activity can be used to engage students in ethical considerations on the potential benefits and risks that could arise from AI and affect the social environment. For that reason the use of ethical dilemmas might be useful. The discussion may concern potential impacts of AI on the labour market, on social inequalities, on environment, natural resources and sustainability, on privacy and surveillance, on human relationships and human rights.

Procedure (steps)

Anticipatory Set

1. The teacher can remind students about the most common ethical theories if not explored previously. The presentation of a well-known ethical dilemma as an example and a brief discussion coupled with some questions to students can be interesting enough to grab their attention. The teacher reminds the students of the case of algorithm bias explored previously (activity 3.1.2) and announces that other crucial ethical issues and related questions will be now addressed.

Direct Instruction

1. The teacher explains ethical issues and questions:

- privacy: when we surf the web many algorithms collect data about us, often without us being aware of it?
 - Power balance: how can we control that the use of AI is not concentrated in certain countries or companies that then become more and more powerful?
 - Responsibility: if many people are working to train algorithms who is responsible for the mistakes they may make (e.g. spreading fake news, see Module 4)?
 - Environment: how can we control the impacts of the use of technologies on the environment?
 - How AI makes us feel: when technologies replace some of the work previously done by humans, how can humans feel and how can they find new ways to contribute?
2. The students should be divided into groups of four to six.
 3. The teacher reads aloud a scenario, or provides to students the scenario's text (virtually or printed) so everyone reads silently.

Guided Practice and Check for Understanding

4. Each group chooses one of the questions listed by the teacher and tries to 'stage' it with reference to a specific technology and a possible case: roles are assigned within the group (supporter, opponent, listener in doubt, etc.) and a short 'script' is written. After the story is read the teacher should ask students how they read the situation and what might be the underlying issues or problems.

Independent Practice

5. When the group arrives at an understanding of the problem, the teacher should ask how they would approach the issue, which steps they would take, and which consequences it would entail. When the groups have completed their work they will take turns staging their scripts.
6. The students in each group will be asked to comment on the scenes performed by the other groups. Inside each group, students should create a list of possible approaches and share them with the class.

Closing

7. Teachers should comment on the proposals and relate the possible solutions to the equivalent ethical frameworks. urges the class to appreciate how many new questions have emerged

Troubleshooting

Possible issue	Possible solution
Dominant personalities in the group shifting the discussion to match their views.	Establishing turns to speak. Creation of a list of approaches instead of demanding for consensus inside the groups.
Irrelevant discussions to the scenario at-hand.	Constant verification by the teacher that the discussions are on track.
Lack of substance on their reasoning around the ethical problems presented.	Provide students with previous knowledge of ethical and moral theories to support their reasoning.

Resources for teachers

- Guide for the activity with examples and description of the facilitator role: https://schoolreforminitiative.org/doc/facilitation_scenarios.pdf
- European Parliament - The ethics of artificial intelligence: Issues and initiatives: [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/634452/EPRS_STU\(2020\)634452_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/634452/EPRS_STU(2020)634452_EN.pdf)
- Automating Society Report 2020: <https://automatingsociety.algorithmwatch.org/>

More in-depth literature:

Eva Brandt, Thomas Binder, Elizabeth B.-N. Sanders. Tools and Techniques: Ways to engage telling, making, enacting. In Routledge International Handbook of Participatory Design. Routledge, New York, NY. 145–181.

Activity 3.2.2 - The role of stakeholders in AI

Estimated duration	40 minutes
Requirements	Modules 1 and 2.
Hardware and Software tools used	In-presence Large sheets of paper, and coloured pens/sticky notes. Remote Software - White canvas software with real time collaboration. Video-conferencing software. Hardware - Desktop/laptop computer with mouse, or tablet.
Type of assessment	Oral presentation of the work group. Students are assessed on the quality of ideas and diversity of issues presented.