

- AI Ethics Research Areas from code.org:
<https://docs.google.com/document/d/16D3jRO2Q3KxM8FHvC8sdGLa19sxa5DGperetnX9ggcY/edit>
- AI Ethics Research Reflection from code.org:
<https://docs.google.com/document/d/19vF4UVAcJa6UsqkdKynWzSR80Mlnb2G3coBoWNxpIYc/edit>

EU strategy on Artificial Intelligence

- <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1623335154975&uri=CELEX%3A52021PC0206>
- <https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence>
- <https://datainnovation.org/2021/05/the-artificial-intelligence-act-a-quick-explainer/>

Activity 3.2.4 - Creating Ethical Matrices (Advanced level)

The teacher can introduce the idea of the ethical matrix (see MIT AI Ethics Education curriculum) and explain its constitution to students (still using the example of the best science lesson - or equivalent), recalling the concepts of stakeholders, values and goals. The teachers provide a list of AI applications and make students pick their preferred, forming groups around chosen issues. Students should list the interest groups (stakeholders) and fill the matrix based on group discussion. Devise a list of ethical principles relevant to each interest group. The teacher should be available for clarifying doubts regarding technical questions around AI. Furthermore, going through the groups to provide constructive advice and ensure the discussion is around the relevant theme. Students can then be asked to evaluate the impact of each specific principle with a scale from -2 (very negative) to +2 (very positive).

Assessment

DigComp 2.2. area	Definition	Assessment Indicators	Details
5.2 IDENTIFYING NEEDS AND TECHNOLOGICAL RESPONSES	<i>Able to identify some examples of AI systems: product recommenders (e.g. on online</i>	Can you describe one AI project for good?	The student explains project, effects and element of the system

	<i>shopping sites), voice recognition (e.g. by virtual assistants), image recognition (e.g. for detecting tumours in x-rays) and facial recognition (e.g. in surveillance systems).</i>		
1.2 EVALUATING DATA, INFORMATION AND DIGITAL CONTENT	<i>Aware that the data, on which AI depends, may include biases. If so, these biases can become automated and worsened by the use of AI. For example, search result about occupation may include stereotypes about male or female jobs (e.g. male bus drivers, female sales persons)</i>	What is a bias in an AI system? (advanced) Why we have to pay attention to the bias?	Student clearly explain the term “bias” and the connection with AI. (advanced) Student give at least one example of bias in AI.

2.5 (only advanced) NETIQUETTE If use this resource https://thenextweb.com/news/mits-depression-detecting-ai-might-be-its-scariest-creation-yet	<i>Aware that some AI systems can detect user's mood, sentiments and emotions automatically from one's online content and context (e.g. content posted on social media) but this application is not always accurate and can be controversial</i>	Can AI understand the mood of a person really?	Student shows awareness of the interaction between AI and humans.
2.2. (only advanced) SHARING THROUGH DIGITAL TECHNOLOGIES	<i>Willing to collaborate with AI projects for social good in order to create value for others (e.g. by sharing data so long as appropriate and robust controls are in place)</i>	Which AI project for good could receive your activity help to grow?	Student connect one project with one personal action to improve project.

1.2. EVALUATING DATA, INFORMATION AND DIGITAL CONTENT	<i>Able to recognize that some AI algorithms may reinforce existing views in digital environments by creating “eco chamber” or “filter bubbles” (e.g. if a social media stream favours a particular political ideology, additional recommendations can reinforce that ideology without exposing it to opposing arguments)</i>	What is one of the most important roles of the AI’s algorithm? (advanced) How AI system in a social network or app can influence you experience?	Student is able to explain what means algorithm’s use in social or apps. (advanced) Student clearly explain the impact of AI in suggestion of content in social?
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