

The Critical Digital Literacy Canvas (CDLC)



As new digital technologies are developed and introduced into our lives at an unprecedented pace, it has become increasingly difficult to fully understand and reflect on the consequences of their use (e.g., misinformation, algorithmic bias, and digital inequalities) as well as their impact on social cohesion, democratic practices, and environmental resources.

With this **Canvas**, we provide a resource for supporting the design of learning activities and for advancing Critical Digital Literacy (CDL). The Canvas is primarily designed for educators, while remaining flexible and accessible enough to support anyone interested in advancing its topics. The Canvas covers five areas and offers learning activities for each (see right-hand side). Further details are provided on the following pages.

Critical Digital Literacy is an approach that aims to develop key competences and awareness among citizens, ensuring that they are not merely passive recipients and adopters of emerging technologies, but can also understand and promote fairer and more inclusive technology development and use. We conducted a scoping review to introduce the concept of Critical Digital Literacy and its pedagogical approaches.

Canvas

Technicality

Ethics

History & Society

Self-Reflexivity

Impact & Creativity

Learning activities

- Short exercises
- Proposed activities:

Activity 1

role play: personal values, “attitude”, and collective responsibility

Activity 2

thematic “foxtrail” based on the CDL framework

Activity 3

digital escape room on technology under pressure

Activity 4

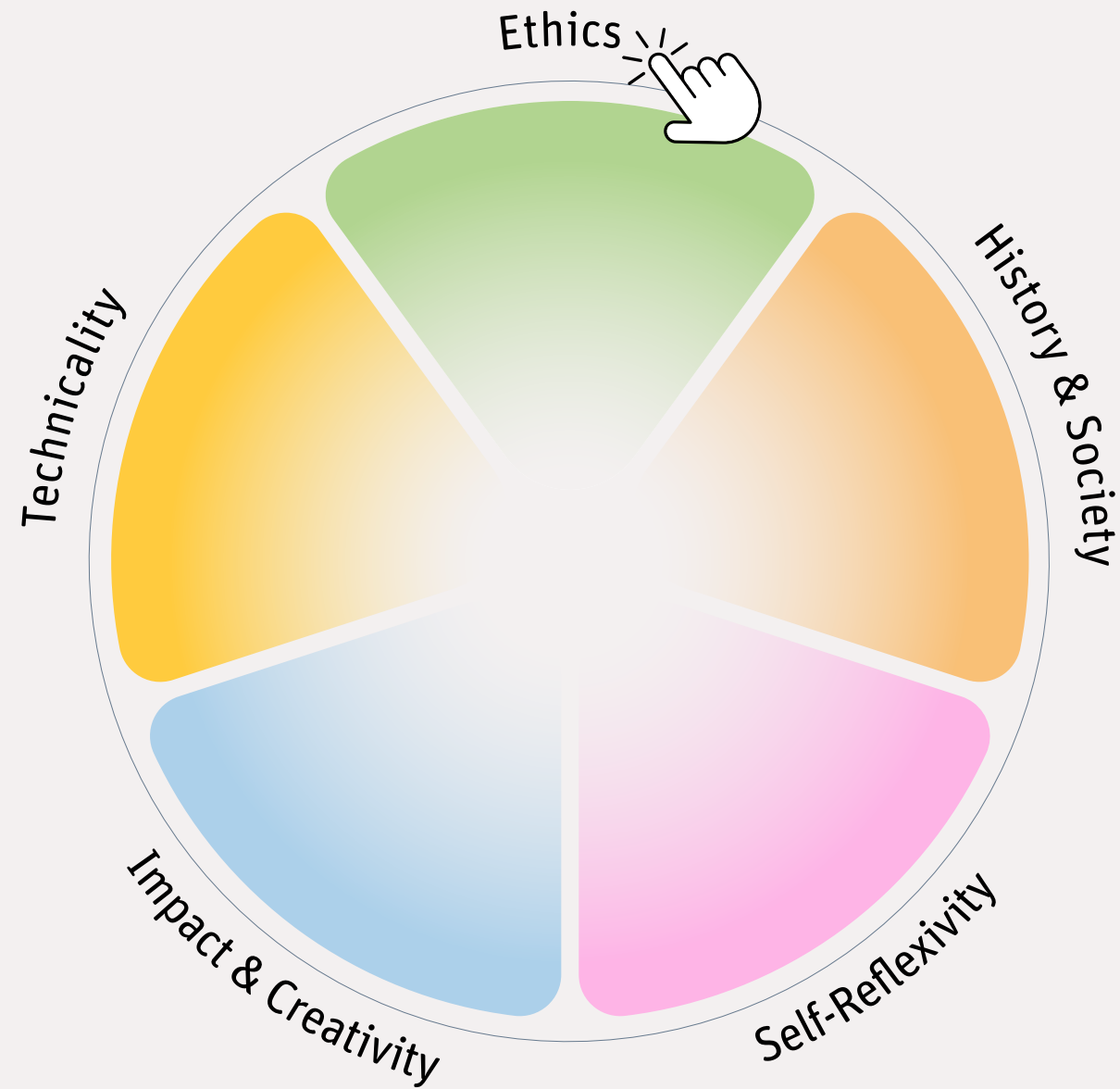
critical quiz & perspective shifter

Activity 5

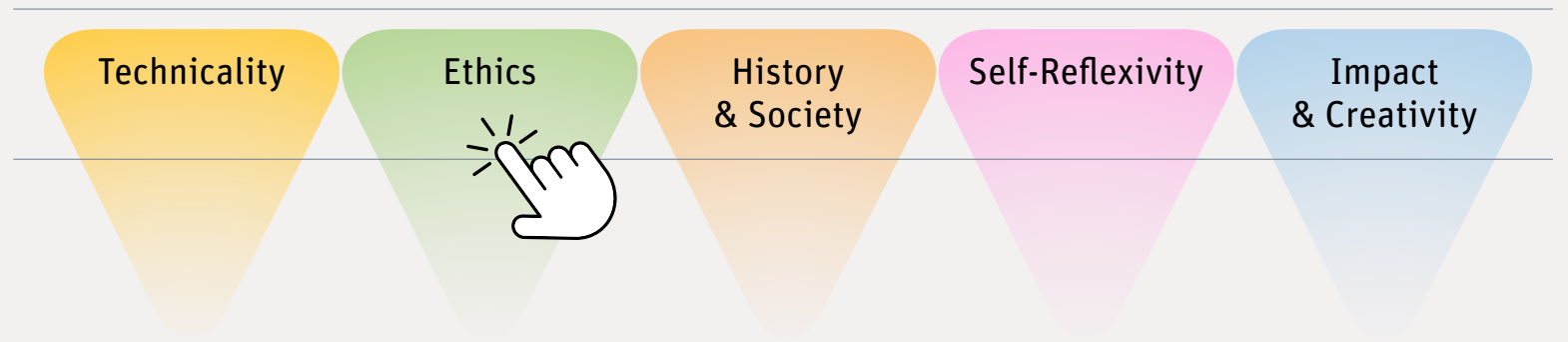
critical debate: contrasting perspectives

How to Use This Document

Complete Canvas

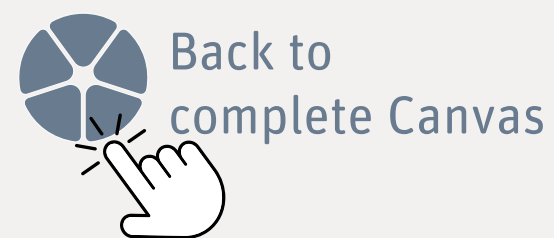


Open Canvas

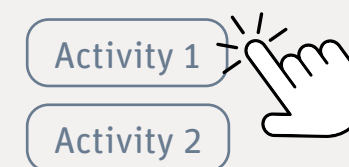


Within each knowledge dimension, the Canvas suggests a range of reading and learning activities that can support the development of specific competences.

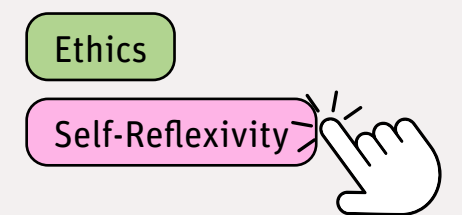
Each page features interactive elements designed to facilitate navigation of the content:



The "Back to complete Canvas" button will take you back to the top of the document.



The "Activity" buttons will take you to the related activities.



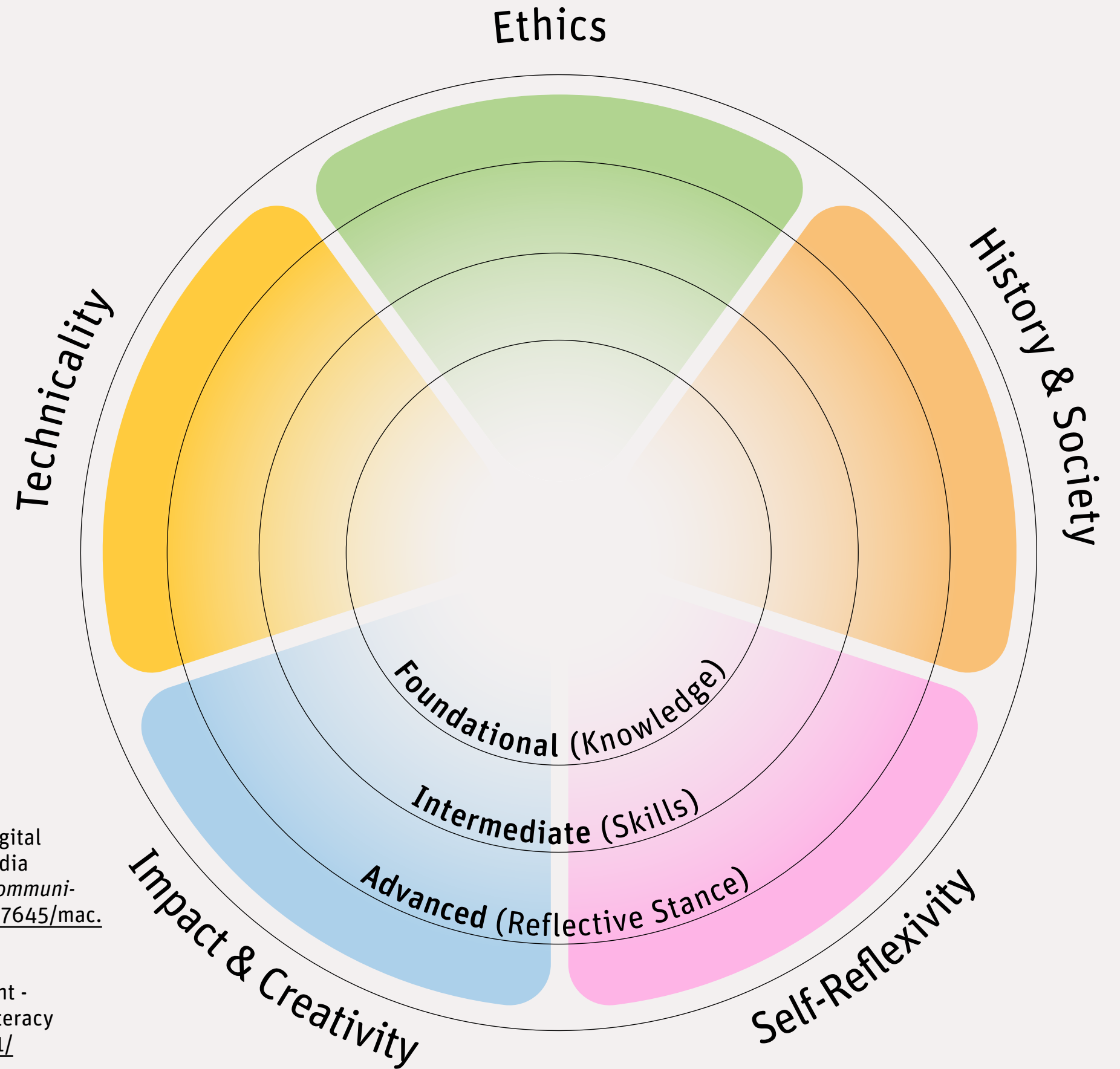
The "Knowledge dimension" buttons will take you from the activity back to the related dimension.

The Canvas is presented as an **interactive PDF** that is accessible and can be navigated through internal links. The complete Canvas gives an **overview** of the five knowledge dimensions.

Complete Canvas

The Critical Digital Literacy Canvas (CDLC) covers **five knowledge dimensions** that are essential for a critical understanding and use of digital technologies. For each knowledge dimension, we have identified **learning objectives** according to different **levels of knowledge**, ranging from “foundational” to “advanced”.

The Canvas advances a “critical” approach to digital literacy that includes additional dimensions beyond “Technicality”. These domains such as “Ethics”, “History & Society”, are critical to position technology in context, while “Self-Reflexivity” and “Impact & Creativity” focus on reflecting, as well as promoting options for alternative use. Educators can pick one or more dimensions and identify the learning objectives more appropriate for each level of knowledge.



Kennedy, K., & Gupta, A. (2025). AI & Data Competencies: Scaffolding holistic AI literacy in *Higher Education*. ArXiv, abs/2510.24783.

Tinmaz, H., Lee, Y.-T., Fanea-Ivanovici, M., & Baber, H. (2022). A systematic review on digital literacy. *Smart Learning Environments*, 9(1), 21. <https://doi.org/10.1186/s40561-022-00204-y>

Leaning, M. (2019). An Approach to Digital Literacy through the Integration of Media and Information Literacy. *Media and Communication*, 7(2), 4–13. <https://doi.org/10.17645/mac.v7i2.1931>

Antonakis, A. (2026). The C is not silent - A Scoping Review of Critical Digital Literacy (CDL). Zenodo. <https://doi.org/10.5281/zenodo.20450951>

Open Canvas

Technicality

Ethics

History & Society

Self-Reflexivity

Impact & Creativity

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Use, apply, and create the appropriate tools with awareness of their implications.

Promote the conscious use of technology that serves human beings and optimises processes without creating dependencies.



Back to
complete Canvas

Open Canvas

Technicality

Levels of knowledge

Ethics

Levels of knowledge

History & Society

Levels of knowledge

Self-Reflexivity

Levels of knowledge

Impact & Creativity

Levels of knowledge

Learnings Objectives

Foundational (Knowledge)

The participants are familiar with a range of digital tools for different tasks.

Intermediate (Skills)

The participants distinguish between tasks and apply the most appropriate tools, positioning themselves as human agents in control rather than in a state of dependency.

Advanced (Reflective stance)

The participants make informed decisions about whether and which digital tools to use for a given task, weighing up the advantages and risks. They can compare options critically and, beyond prevailing hype, choose alternative tools when appropriate—or opt not to use them at all.

Reading Materials

Falloon, G. (2020). From digital literacy to digital competence: The teacher digital competency (TDC) framework. *Educational Technology Research and Development*, 68(5), 2449–2472. <https://doi.org/10.1007/s11423-020-09767-4>

Critical Digital Literacy Education Guide and worksheet (2020). <http://education.historicacanada.ca/en/tools/645> Historica Canada.

Weber-Wulff, D., Anohina-Naumeca, A., Bjelobaba, S., Foltýnek, T., Guerrero-Dib, J., Popoola, O., Šigut, P., & Waddington, L. (2023). Testing of detection tools for AI-generated text. *International Journal for Educational Integrity*, 19(1), 26. <https://doi.org/10.1007/s40979-023-00146-z>

Hague, C., & Payton, S. (2021). *Digital literacy across the curriculum: a Futurelab handbook*. The National Foundation for Educational Research in England and Wales. https://www.nfer.ac.uk/media/jnhe-ty2n/digital_literacy_across_the_curriculum.pdf

Rafner, J., & Gibat, C.. (2026). *Every Prompt Has a Price: A Toolbox for Tracking the Environmental* <https://doi.org/10.1145/3772363.3799058>

Linked Activities

Short exercises

Activity 2

Activity 3



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Open Canvas

Technicality

Ethics

History & Society

Self-Reflexivity

Impact & Creativity

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Understand technology as a socio-technological system with embedded values and purposes.

Be aware of the consequences of their use for oneself and others (including the environment).

Question and assess the wider implications and impact of the use of digital tools.



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Technicality

Ethics

History & Society

Self-Reflexivity

Impact & Creativity

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Learnings Objectives

Foundational (Knowledge)

The participants understand that the use of digital tools has implications for society and the environment.

Intermediate (Skills)

The participants are able to select digital tools that align with ethical principles (e.g., promoting privacy, addressing bias and discrimination, and advancing justice).

Advanced (Reflective stance)

The participants demonstrate a high level of ethical awareness regarding the potential negative impacts of digital technologies on others and the environment.

Reading Materials

Buolamwini, J., & Gebru, T. (2018). *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification*. *Proceedings of Machine Learning Research*, 81, 1–15.

Roe, J., Furze, L., & Perkins, M. (2025). GenAI as Digital Plastic: Understanding Synthetic Media Through Critical AI Literacy. *arXiv Preprint arXiv:2502.08249*. <https://doi.org/10.48550/arXiv.2502.08249>

Out of Hand. A poster examining the social and environmental impact of producing smartphones from the mining and extracting of raw materials to the disposal of electronics. <https://theglassroom.org/en/what-the-future-wants/exhibits/out-of-hand/>

Data Feminism Lab
<https://dataplustfeminism.mit.edu/>

The Environmental Impact of Generating Images with AI An Ethics Case study
<https://www.scu.edu/ethics/focus-areas/internet-ethics/resources/the-environmental-impact-of-generating-images-with-ai-an-ethics-case-study/>

Linked Activities

Short exercises

Activity 1

Activity 2

Activity 3

Activity 4

Activity 5



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Open Canvas

Technicality	Ethics	History & Society	Self-Reflexivity	Impact & Creativity
Levels of knowledge	Levels of knowledge	Levels of knowledge	Levels of knowledge	Levels of knowledge

Awareness of the historical development of digital tools and data, as well as their socio-economic costs.

Awareness of the underlying assumptions about human nature embedded in technologies.

Commitment to promoting technologies that enhance human potential and democratic engagement.



Open Canvas

Technicality

Ethics

History & Society

Self-Reflexivity

Impact & Creativity

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Learnings Objectives

Foundational (Knowledge)

The participants understand that every digital tool is embedded in a specific economic structure, and they have a basic awareness of the historical development of such tools.

Intermediate (Skills)

The participants evaluate, based on available information, the socio-economic impacts of the digital tools they use, and they are able to reflect critically on their own use within a broader societal context.

Advanced (Reflective stance)

The participants are empowered to use and apply digital technologies to effect social change. They can engage with and critically reflect on alternative, non-commercial tools that serve similar functions as corporate products.

Reading Materials

Crawford, K. (2021). *The Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*. Yale University Press, 2021. <https://doi.org/10.2307/j.ctv1ghv45t>

Pasquinelli, M. (2023). *The eye of the master: a socio-technical history of artificial intelligence*. Verso

Digitalisation feminist and decolonial.

<https://www.youtube.com/playlist?list=PLGwdaKBbIDzCIDQ2nzrrve-eQSepaSO7vN>

Lecture series online, German Federal Agency for Civic Education. (in English and with subtitles)

Google Society

<https://theglassroom.org/en/what-the-future-wants/exhibits/google-society-for-youth/>

How our data encodes systematic racism.

Linked Activities

Short exercises

Activity 1

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Back to complete Canvas

Open Canvas

Technicality	Ethics	History & Society	Self-Reflexivity	Impact & Creativity
Levels of knowledge	Levels of knowledge	Levels of knowledge	Levels of knowledge	Levels of knowledge

Maintain a critical perspective on the use of digital tools, apply them autonomously and purposefully to promote positive outcomes.

Reflect on one's own use and its societal and environmental consequences.

Critically examine how such use is embedded in broader systems and value structures.



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Technicality

Ethics

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Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Learnings Objectives

Foundational (Knowledge)

The participants understand that different digital tools contribute to different outcomes (not all of them positive) and are aware of the importance of verifying results.

Intermediate (Skills)

The participants use digital tools in ways that continuously develop their competences. They can assess which tasks can be delegated to digital technologies, and which core skills they need to practise and develop themselves.

Advanced (Reflective stance)

The participants are capable of reflecting on how their use of digital tools affects their basic needs for autonomy, competence, and relatedness.

Reading Materials

The Real Life of Your Selfie.

<https://theglassroom.org/en/what-the-future-wants/exhibits/the-real-life-of-your-selfie-wtfw/>

If you are interested in using this activity, please contact youth@tacticaltech.org and check out the Host Your Own page, to find out more.

Can Chatbot Friendships Make Us Happy?

<https://www.scu.edu/ethics/internet-ethics-blog/can-chatbot-friendships-make-us-happy/>



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Linked Activities

Short exercises

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Open Canvas

Technicality

Ethics

History & Society

Self-Reflexivity

Impact & Creativity

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Levels of knowledge

Identify new opportunities enabled by digital tools.

Use digital technologies creatively to support meaningful human collaboration while preserving and strengthening human agency.



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Open Canvas

Technicality

Levels of knowledge

Ethics

Levels of knowledge

History & Society

Levels of knowledge

Self-Reflexivity

Levels of knowledge

Impact & Creativity

Levels of knowledge

Learnings Objectives

Foundational (Knowledge)

The participants understand the value of human creativity and the benefits of developing their own ideas, texts, images, and music. They are also aware of digital tools that can support and enhance these creative processes.

Intermediate (Skills)

The participants are familiar with and use alternative, non-commercial tools to support their own creative processes.

Advanced (Reflective stance)

The participants reflect on and intentionally use digital technologies in ways that enhance autonomy, competence, and meaningful collaboration.

Reading Materials

The Hype Literacy Toolkitt

<https://akademie.dw.de/hype-literacy/>

This course introduces the study of hype as an urgent force that shapes technological development, economics, politics, and journalism.

Lee, H.-P. (Hank), Sarkar, A., Tankelevitch, L., Drosos, I., Rintel, S., Banks, R., & Wilson, N. (2025). The Impact of Generative AI on Critical Thinking: Self-Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers. *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*, 1–22. <https://doi.org/10.1145/3706598.3713778>

Digital Detox.

<https://datadetoxkit.org/en/trainings/digital-detox/>

This workshop designed by Tactical Tech gives participants the opportunity to reflect on their values and priorities, and create a digital detox action plan to ensure that their technology use supports their goals.

Ressources for visualising AI from a critical and nuanced perspective

<https://blog.betterimagesofai.org/>

Linked Activities

Short exercices

Activity 2

Activity 3

Activity 5



Back to complete Canvas

Short exercises

This list of short exercises is designed to provide inspiration and new ideas for activities that translate the Canvas into action across the different knowledge domains and learning objectives.

1. [AI Decision Tree](#) a guide to help you decide if and how to incorporate AI into your teaching.
2. Organise an hackathon to bring participants together to solve issues with / about technology.
3. Analyse a real case of digital bias and exclusion (e.g., AI assisted recruitment tools, Smartphone use, and addiction).
4. Use in class the [REAL](#) card deck to inspire and provoke critical thinking about how algorithmic systems shape human lives, societies, and futures.
5. Ethical impact assessment / exercise to develop guidelines for responsible technology.
6. Role-play exercises where participants take on different perspectives and social groups. For example:
 - ↳ Debate current policies for instance on the use of social media in schools (roles: platforms, social scientist, activist, politicians from different countries, etc.).
 - ↳ Discuss facial recognition systems in a near future (roles: politicians, citizens, tech entrepreneurs, police, and security officers, etc.).
7. Fact checking of information (text, images, videos)
 - ↳ Real or AI images quiz: [Quiz 1](#)
 - ↳ [Quiz 2](#) (Newtest / only in German)
8. Invite students to document the evolving attitude towards the technology and their use during the learning process.
9. Learning about AI's impact on creativity: "[Weshalb man das Schreiben nicht immer der KI überlassen sollte](#)" in a short video (in German) and explaining the benefits of writing as a learning process, such as:
 - ↳ developing and reflecting on relationships with the people addressed
 - ↳ development of argumentation, and assessing different positions.
10. "[The questions about AI worth pressing on](#)". An open collection of activities, resources, and pedagogical guidance for higher education instructors bringing AI ethics into their classrooms.
11. Learning about strategies, initiatives and coalitions on "opting out" of technology use, such as:
 - ↳ [Decolonize.digital](#)
 - ↳ or [The library of Babel](#)

Proposed activities developed according to the CDL Canvas principles

This document develops and structures several activity ideas, integrating them within the CDL Canvas framework. Each activity is designed to be concrete, social, and reflective, and is supported by practical and structured examples, clear objectives, and explicit links to the dimensions of the Canvas. Social activities also allow for the exploration of participants' different "attitudes" during activities and discussions.

Shared educational principles

- Predominantly group-based activities
- Comparison between personal values and interests and their collective impacts
- Conscious (and at times intentionally improper) use of technologies to encourage reflection on their consequences; this approach amplifies and explores the concept of individual's attitude
- Inclusion of diverse technologies, such as AI, smartphones, social media, digital platforms, blockchain, and cybersecurity-oriented approaches
- Centrality of reflection and discussion, both during and at the end of each activity

Remarks

Possible bias: a participant may experience social pressure during group activities and therefore may not fully express their true attitude. However, this does not undermine the outcomes of the activities, as group interaction—even when not entirely transparent—still fosters multi-level reflection among all participants.

The proposed activities translate the CDL Canvas into concrete experiences, fostering awareness, dialogue, and the development of deeper reflections. Each activity can be adapted to different educational and organisational contexts, as well as to different levels of knowledge (from foundational to advanced), with only minor adjustments.

Activities proposed

- Activity 1** role play: personal values, "attitude", and collective responsibility
- Activity 2** thematic "foxtrail" based on the CDL framework
- Activity 3** digital escape room on technology under pressure
- Activity 4** critical quiz & perspective shifter
- Activity 5** critical debate: contrasting perspectives

Activity 1

role play: personal values, “attitude”, and collective responsibility

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

General description of the activity

Target group

project teams, interdisciplinary groups, educational teams, research groups, professional communities, and students

Description

Participants are divided into small groups and assigned non-hierarchical functional or social roles (e.g., group coordinator, junior member, technical expert, user representative, external observer, or member of the community).

Each group is presented with a critical scenario related to the use of technology (e.g., digital monitoring of group work, the use of AI to assess individual contributions, sharing personal data within a community, or choosing between efficient but opaque technologies versus more transparent solutions).

The scenarios do not have a single correct solution and are designed to stimulate dialogue and discussion, allowing value and ethical conflicts, collective responsibilities, and social impacts to emerge.

Activity mechanics

Phase 1 – Individual positioning

Each participant makes a decision from the perspective of their assigned role, noting their choice, underlying motivations, and possible consequences for others.

Phase 2 – Group discussion

The group discusses the individual decisions, highlighting differences in values, collective impacts, and tensions between effectiveness, equity, and inclusion.

Phase 3 – Perspective shift

Participants change roles and reassess the initial decision from their new perspective.

Link to the CDL Canvas

- **Ethics** (advanced): assessment of impacts and development of empathy
- **Self-Reflexivity**: awareness of one’s own positioning
- **History & Society** (intermediate): understanding of social and power dynamics

Learning levels

- **Foundational**: recognition of ethical dilemmas
- **Intermediate**: comparison between personal values and collective responsibilities
- **Advanced**: informed and empathetic decision-making

Observable evidence

- Individual and group decision logs
- Arguments articulated during the debriefing
- Ability to reframe one’s own position

Activity Sheet

Summary for Facilitators

Duration: 90 minutes

Target: general teams and interdisciplinary groups

Learning objectives

- Develop ethical awareness in collective decision-making
- Recognise value conflicts
- Foster empathy and perspective-taking

Materials

- Role cards
- Technological scenarios
- Decision log templates

Activity phases

1. Role assignment
2. Individual decision-making
3. Group discussion
4. Role change
5. Collective debriefing

Assessment

- Quality of arguments
- Listening skills
- Depth of the final reflection

Activity 1 – A

blockchain: transparency, trust, and social impact

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

Example A

Initial scenario

An interdisciplinary team evaluates the use of blockchain to manage identities, decisions, or transactions. The technology promises transparency and trust, but also raises concerns related to accessibility, energy impact, and control.

Assigned roles

- Blockchain technical expert
- User with low digital literacy
- External observer (social and environmental impact)

Station 1

Individual positioning

Task

Each participant decides whether or not to adopt blockchain from the perspective of their assigned role. Time may be allocated for web-based research, or participants may consult experts (e.g., moderators or instructors) to ask questions and gather information before the debate.

Examples of guiding questions

- What do I gain personally or in my role?
- Who might be excluded or disadvantaged?
- Is blockchain truly necessary?
- What impact might the use of this technology have?

Station 2

Group discussion

Activity

The group compares individual decisions and identifies:

- conflicts between transparency and the advantages of a decentralised technology;
- tensions between technological trust and social trust (shared distribution of information);
- collective benefits versus environmental costs in specific projects.

Station 3

Perspective shift

Activity

Roles are exchanged (e.g., the technical expert becomes the external observer).

Task

Reassess the initial decision and document what changes and why.

Output and final reflection

- Individual and group decision logs
- Guided discussion on when blockchain represents a responsible choice

Activity 1 – B

artificial intelligence: efficiency, control, and autonomy

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

Example B

Initial scenario

A project team must decide whether to introduce artificial intelligence tools to support evaluation, coordination, or content production. While AI promises efficiency and decision support, it also raises issues related to autonomy, ethics, bias, and responsibility.

Assigned roles

- Project coordinator
- AI / data expert
- End-user representative
- Ethical observer

Station 1 Individual positioning

Task

Each participant decides whether and how to use AI in the project.

Examples of guiding questions

- How does AI enhance or limit my role?
- What might I risk losing in terms of autonomy or skills?
- Who benefits and who is disadvantaged?
- What ethical and security issues arise?

Station 2 Group discussion

Activity

Collective discussion on:

- decision-making delegation to AI: what role will humans play?
- awareness of positive and negative consequences (environmental, ethical, autonomy-related, effectiveness);
- potential biases and stereotypes.

Station 3 Perspective shift

Activity

Roles are exchanged (e.g., project coordinator / ethical observer).

Task

Reassess the initial decision and document what changes and why.

Output and final reflection

- Decision log
- Reflection on when AI supports human contribution and when it replaces it
- Reflections on the positive and negative impacts of this technology

Activity 2

thematic “foxtrail” based on the CDL framework

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

General description of the activity

Target group

students, interdisciplinary groups, and educational teams

Description

A stage-based “foxtrail”, either physical or digital, in which each stop represents one dimension of the CDL Canvas. Alternatively, a dedicated “foxtrail” could be developed for each CDL dimension. At each station, questions and activities can be designed for all three levels: foundational, intermediate, and advanced.

Activity mechanics

Participants embark on a physical or digital journey, moving through the different stages and completing the proposed activities. The example below illustrates this process, with each stage linked to one dimension of the Canvas.

- **Technicality:** choosing the most appropriate tool for a specific task.
- **Ethics:** addressing ethical issues related to technology, for example, through the use of thematic cards.
- **History & Society:** encouraging reflection on disruptive technologies and on how they have shaped our society.
- **Self-Reflexivity:** fostering reflection on the role of individuals within a technological process.
- **Impact & Creativity:** promoting collaborative and creative activities, with or without the support of technology.

To make the activity more structured, it could be interesting to implement a stage-based system in which each choice influences the next stage of the experience. To make the experience more immersive and engaging, it would be helpful to create a common thread linking the different “foxtrail” stations, for example, through a story, a shared current topic, or a specific technology.

Learning levels

- **Foundational:** awareness of the different dimensions
- **Intermediate:** strategic choices between stages
- **Advanced:** systemic reflection

Observable evidence:

- Individual and group decision logs
- Tree with the choices at each stage
- Final group reflection

Activity Sheet

Summary for Facilitators

Duration: variable, from one to four hours

Target: general teams and interdisciplinary groups

Learning objectives

- Understand the dimensions of the CDL Canvas
- Connect decisions and consequences

Materials

- Activity materials for each “foxtrail” station
- Decision log templates
- Table with the Canvas dimensions and the related activities, including space for reflections

Assessment

- Consistency of the choices
- Final reflection about the technology using the Canvas dimensions

Below are two examples of thematic “foxtrails” based on the CDL Canvas. Each “foxtrail” is structured into stages, or stations, each linked to one dimension of the Canvas and including concrete activities, decisions to be made, and their related consequences.

Activity 2 – A

“foxtrail” A artificial intelligence

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

Example A

Participants explore how artificial intelligence influences decisions, creativity, responsibility, and society.

Station 1 Technicality

Scenario

The group must choose a tool to create something creative, for example, a drawing based on very precise instructions provided at the station.

Activity

The group tests three different options, possibly by assigning roles and dividing into subgroups.

- Option A involves using only a generative AI chatbot.
- Option B consists of creating a drawing entirely by hand on a sheet of paper.
- Option C involves creating a drawing by hand and then enhancing it with the support of AI.

Task

Discuss which tool is most suitable for similar tasks, linking the discussion to the technical dimension of the activity. The aim is to identify and assess the benefits and challenges of each option. The group can also reflect on other activities in which AI support could be useful, while beginning to consider the possible consequences of its use.

Station 2 Ethics

Scenario

The AI used in the previous station is not without cost. Participants are therefore invited to reflect on the ethical consequences of excessive use of this technology across many creative activities.

Activity

At this station, participants are given several prompts to encourage ethical reflection, such as the creation of false images to manipulate information, the delegation of responsibility for results to technology, the generation of images based on copyrighted material, and the creation of potentially sensitive images.

Task

Discuss how such a technology could be used in a lawful and responsible way, while preserving its technical advantages and adhering to clear ethical guidelines.

Station 3 History & Society

Scenario

Access to disruptive technologies, such as artificial intelligence, has a significant impact on society and its development.

Activity

At this station, participants are presented with images representing different technologies. The group must discuss and decide whether these should be considered disruptive technologies, justifying their choices by reflecting on the impact each has had on society. In a second phase, they may also ask a chatbot for additional ideas and perspectives.

Task

Reflect on how access to certain disruptive technologies can have a profound impact on society.

Activity 2 – A

“foxtrail” A artificial intelligence

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

Station 4 Self-Reflexivity

Scenario

Participants create textual or visual content on an assigned topic in a context where AI may struggle to move beyond stereotypical representations. The different results, ideally generated using different AI tools, are then compared.

Activity

A simple and deliberately broad question is introduced, for example: “How do we imagine a typical man and a typical woman from Switzerland?” In the first phase, the group reflects together on the wording of the question and tries to anticipate the kinds of results AI might generate. In the second phase, different chatbots, such as ChatGPT, Copilot, or Grok, are asked to generate an image representing a typical Swiss man or woman.

Task

Reflect on the results produced by the different chatbots, linking them to the initial discussion and considering how stereotypes may emerge or be reinforced by these tools.

Station 5 Impact & Creativity

Scenario

Creating a creative piece of content, either textual or visual.

Activity

In the first phase, without using AI, each group member imagines the most absurd place where a cat could be found and describes an unusual or improbable colour the cat might have. In the second phase, the group asks a chatbot to generate an image of “a cat with an absurd colour in an absurd place” without providing any further details. In the third phase, the description developed by the group in the first phase is entered, and the chatbot is asked to visualise that specific idea of an absurd cat.

Task

Document the creative process and reflect on what was made easier through the use of AI and what did not work as intended. The final reflection may also focus on who demonstrated greater creativity, the group or the AI.

Station 6 Wrap-Up

Collective reflection on the use of generative artificial intelligence.

Activity 2 – B

“foxtrail” B smartphones

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

Example B

A critical analysis of the smartphone as a pervasive technology that influences attention, relationships, data, and behaviour in our society.

Station 1 Technicality

Scenario

We use our smartphones every day, but do we really know them that well?

Activity

Each participant tries to identify the apps installed on their smartphone. They then count how many of these apps they do not know the purpose of.

Task

Understand whether some unused apps could be uninstalled without causing any problems.

Station 2 Ethics

Scenario

The apps people use, especially free ones, collect personal data.

Activity

Participants are given cards presenting various ethical choices, such as accepting terms of use, limiting permissions, or uninstalling an app.

Task

Decide which compromises are acceptable and explain why.

Station 3 History & Society

Scenario

The smartphone is analysed as a social infrastructure.

Activity

A guided discussion is proposed on what happens in the absence of a smartphone and on who may be excluded from certain dynamics, services, or opportunities when this device is not available.

Task

Collective reflection on the social role of the social role of smartphones.

Station 4 Self-Reflexivity

Scenario

Analysis of one's daily smartphone use.

Activity

Participants review their daily smartphone use and identify the apps they use most frequently.

Task

Discuss as a group how smartphones affect attention, autonomy, and relationships.

Station 5 Impact & Creativity

Scenario

Smartphones can also be used for creative activities.

Activity

Look at your surroundings and try to take a few creative photographs. Then choose the one you like most and share it with the group.

Task

Compare the photographs that were taken and discuss together which image could be considered the most creative. Reflect on how technology may have supported the creative process, while human beings still make the final decisions about what to create and how to evaluate the result.

Station 6 Wrap-Up

Collective reflection on the use of smartphones.

Activity 3

(digital) escape room on technology

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

General description of the activity

Target group

Interdisciplinary groups, students, and educational teams

Description

An escape room in which participants must solve a sequence of challenges related to the critical use of technologies in order to escape or complete the experience. As an additional social element, participants or teams can compete to determine who is able to complete all the challenges first, turning the activity into a contest.

Activity mechanics

Participants will be asked to solve a series of challenges. At the end of each task, they will receive a piece needed to reconstruct the final password required to escape the room.

Here are some examples of challenges:

- distinguishing what is true from what is false through fact-checking activities involving AI-generated content or images and real content or images
- reflecting on the sustainability of a technology by comparing the energy consumption of different tools
- analysing how a specific technology can be used, including intentionally incorrect uses, and then evaluating the consequences

Throughout the escape room, clues will also be placed to help participants solve the challenges, such as newspaper articles, informational videos, and other supporting materials.

Learning levels

- **Foundational:** understanding the problems and solving them through the clues provided in the escape room
- **Intermediate:** applying solutions, which may also be developed with supporting tools such as web searches or the use of AI
- **Advanced:** challenges in which the emphasis is placed more on the critical dimension than on the technical one

Activity Sheet Summary for Facilitators

Duration: 60–90 minutes

Target: interdisciplinary groups, students, and educational teams

Learning objectives

- Apply technical and critical skills
- Work as a team under pressure

Materials

- Escape room challenges
- Adapt the activities and materials depending on whether or not it is a digital escape room.

Assessment

- Documented solutions
- Post-activity discussion: an exchange of experiences on how the solutions were reached and, above all, on what prompted reflection during the activity.

Below are two examples of escape rooms, structured as station-based pathways in which students are asked to solve critical or practical challenges related to specific technologies. Each escape room is aligned with the CDL Canvas and is designed to support, if desired, work under pressure, either in groups or individually, through decisions that generate consequences.

Activity 3 – A

digital escape room A blockchain: trust, energy, and power

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

Example A

Initial scenario

The group is trapped in a digital system based on blockchain technology. To escape, they must demonstrate an understanding of the limitations, impacts, and critical uses of this technology. At the end of each station, participants will receive one part of the password needed to escape the room.

Challenge 1 Technicality

Challenge

Understanding how a blockchain works.

Concrete activity

Participants must reconstruct the correct order of the blocks in a blockchain. To do so, they will need to identify the key elements that make a blockchain reliable, such as its cryptographic component, the role of consensus, and immutability.

Clues in the escape room

Participants will find media in the room containing a simplified representation of a blockchain in the form of blocks, accompanied by basic explanations.

Key to move forward

Participants acquire a basic understanding of blockchain by solving the puzzle.

Challenge 2 Ethics

Challenge

Reflecting on the ethical balance in the use of blockchain.

Concrete activity

Participants are presented with a series of ethical dilemmas related to the use of blockchain, such as:

1. **Economic freedom vs illegal transactions**
Mini-case: a blockchain platform enables free and fast transactions, but some of them are used for illegal activities. Participants must decide how to intervene:
 - a. leave users with maximum freedom
 - b. block all anonymous transactions
 - c. introduce controls only in suspicious cases

2. Product traceability vs sustainability

Mini-case: a company wants to use blockchain to track the entire journey of its products, from production to sale, in order to guarantee greater reliability for consumers. However, recording every single step leads to higher energy costs and a greater environmental impact for the system. Participants must decide how to intervene:

- a. record every stage of the product on the blockchain to ensure maximum traceability
- b. give up traceability in order to avoid additional costs and energy consumption
- c. record only the essential steps, seeking a balance between control and sustainability

Clues in the escape room

There are no clues.

Key to move forward

After working through a series of ethical dilemmas, participants will be able to move forward regardless of the answers they give. The aim is not to determine whether their response is right or wrong, but rather to encourage them to engage with these dilemmas and reflect carefully before taking a position.

digital escape room A blockchain: trust, energy, and power

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

Challenge 3 Impact (Sustainability)

Challenge

Compare the energy impact and sustainability of different technologies.

Concrete activity

A number of sustainability-related questions are proposed, for instance: to rank blockchain, traditional banks, and gold according to their respective energy impact.

Clues in the escape room

Participants will find newspaper articles and charts in the room comparing the energy impact and sustainability of different technologies.

Key to move forward

Solve the proposed questions and reflect on the contexts in which the use of blockchain can be considered justifiable.

Challenge 4 History & Society

Challenge

Reflect on the applications of blockchain in society. Collective reflection on the use of blockchain.

Concrete activity

Participants must identify, by selecting from a list with several options, which are actual applications of blockchain. For example:

1. Shared economy through cryptocurrencies: yes or no
2. Tracking food products for food safety: yes or no
3. Management of easily modifiable data related to society: yes or no

Clues in the escape room

Participants may use the internet or a chatbot as supporting tools.

Key to move forward

Solve the proposed questions and reflect on the contexts in which the use of blockchain can be considered useful.

Challenge 5 Unlock the padlock and escape & Wrap-Up.

Activity 3 – B

escape room B cybersecurity: security, control, and responsibility

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

Example B

Initial scenario

The group is trapped in a compromised digital network. In order to escape, they must identify existing vulnerabilities, make quick decisions, and assess the impact of their actions on the security of others. There will be a person, or a pre-programmed chatbot, responsible for verifying whether the objectives of each challenge have been achieved.

Clues in the escape room

There are no clues. Participants may freely use the internet or chatbots as supporting tools.

Challenge 1 Technicality

Challenge

Recognising a cyber threat and different domains of digital violence.

Concrete activity

Participants are presented with a series of emails, messages, and videos. Their task is to identify the suspicious ones, avoiding the installation of malware, falling for phishing attempts, or sharing sensitive information.

Key to move forward

Identify all suspicious attack attempts.

Challenge 2 Ethics

Challenge

Decide how to respond and what actions to take after a cyberattack.

Concrete activity

Participants must choose one or more options and evaluate them from an ethical perspective as a possible course of action after a cyberattack or experience of digital violence::

- **hide information about the attack that occurred:** this choice could put other users at risk
- **inform the authorities directly:** this choice could expose the user to consequences related to their own digital reliability
- **inform the authorities anonymously:** this choice could create the risk that the authorities may not take the report seriously

Each choice has consequences for both users and institutions.

Key to move forward

Participants must justify their choice from an ethical and responsible perspective. The person managing the game may decide whether the ethical reflections are sufficient to allow the participants to move forward.

Challenge 3 History & Society

Challenge

Understand what the most common causes of cyberattacks are.

Concrete activity

Participants begin by researching the most well-known cyberattacks on the internet, trying to understand where the vulnerability in the affected systems was located. In a second phase, they will need to assess whether these attacks were mainly caused by technical factors, such as the lack of system updates or the power of certain AI-based attacks, or by human factors, such as distraction, insufficient training of those affected, the skill of the attacker or the personal relationships.

Key to move forward

The reflections based on the research carried out will be evaluated. In order to move forward, it will still be necessary to contextualise the two main components of cyberattacks: the human factor and the technical dimension. The person managing the game will decide whether these key elements have been addressed adequately.

escape room B cybersecurity: security, control, and responsibility

Link with CDL Canvas

Technicality

History & Society

Ethics

Impact & Creativity

Self-Reflexivity

Challenge 4 Technicality

Challenge

Classify a series of sensitive and non-sensitive files.

Concrete activity

Participants receive a list of possible files, some sensitive and some non-sensitive. They must classify them correctly into the following categories:

- public, for example, photos of a landscape taken during a holiday
- for internal use, for example, the schedule for a family weekend
- restricted, for example, documents containing personal data
- confidential, for example, passwords and access codes

Key to move forward

Participants will have to classify the files correctly.

Challenge 5 Unlock the padlock and escape & Wrap-Up.

Challenge

Collective reflection on the importance of cybersecurity.

Activity 4

critical quiz & perspective breaker

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

General description of the activity

Target group

Students, interdisciplinary groups,
and educational teams

Description

An interactive quiz with deliberately thought-provoking questions, designed to stimulate critical reflection and challenge mainstream perspectives on artificial intelligence, blockchain, social media, and other technologies.

Activity mechanics

Ideally, the activity is organised into several phases:

- participants first answer the quiz questions individually. This phase is meant to encourage personal reflection based on their own knowledge and values
- this is followed by a comparison phase: working in groups of two or three, participants discuss and compare their individual answers to the quiz questions. The aim is to stimulate group discussion, with each participant explaining their answers and sharing their own point of view
- in this phase, all participants are encouraged to deepen their knowledge. The positions that emerged during the first two phases are either strengthened or questioned through targeted and in-depth research. Participants are therefore invited to re-examine their answers critically, confirming or reconsidering their position on the basis of sources
- afterwards, a collective discussion takes place to review what emerged from the research. Ideally, within the groups or in the plenary discussion, participants are able to arrive at shared views
- finally, the activity concludes with a final reflection

Examples of questions:

- Energy consumption: gold or Bitcoin?
- Artificial intelligence and the ethics of its use: How ethical is this technology, really?
- Connected digital society or digital loneliness?

Learning level

- **Foundational:** recognising bias and becoming aware of the existence of different, non-univocal perspectives
- **Intermediate:** comparing perspectives while re-evaluating one's own knowledge in light of new information and research
- **Advanced:** developing a strong critical and ethical sense towards information by examining and carefully verifying highly debated topics

Observable evidence:

- Individual and group decision logs
- Arguments articulated during the debriefing
- Ability to reframe one's own position

Activity Sheet Summary for Facilitators

Duration: 90 minutes

Target: students, interdisciplinary groups, and educational teams organised in groups

Learning objectives

- surprise participants, challenge dominant perspectives, and dismantle stereotypes
- stimulate discussion and promote well-argued discussion
- encourage a synthesis of different points of view
- develop ethical awareness in collective decision-making

Materials

- a series of questions designed to stimulate discussion
- a worksheet on which to record the answers to the questions, both before and after the research
- materials to support research and further exploration, such as books, newspaper articles, and digital resources

Activity phases

1. Quick individual quiz (five to ten questions): an initial individual engagement with the proposed topics
2. Formation of small groups and comparison of answers within the groups
3. Guided plenary discussion or research using relevant sources to explore the topic further
4. Collective re-evaluation of the answers given in the quiz
5. Wrap-up and reflection on and reformulation of the initial individual positions

Assessment

- Quality of arguments and ability to reformulate
- Participation and listening skills
- Depth of the final reflection

Activity 4

critical quiz & perspective breaker

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

Exemple of questions

Here are some possible questions for a quiz designed to stimulate critical discussion. The quiz is intended to surprise participants, challenge perspectives that are often taken for granted, and encourage collective reflection on a wide range of technologies.

The questions are organised according to the levels of the CDL Canvas (foundational, intermediate, advanced) and cover different technologies, including artificial intelligence, blockchain, smartphones, social media, cybersecurity, and digital infrastructures.

Foundational level: recognising bias and assumptions

- When a technology is described as “intelligent”, what do you automatically imagine?
 - Do you think an algorithm is more objective than a person? Why?
 - Would you associate blockchain more with speculation or with social innovation?
 - Is the smartphone, for you, a tool of freedom or a source of dependence?
 - Who do you think has stronger digital skills, young people or adults? What is this idea based on?
 - When you think about cybersecurity, do you associate it more with protection or with control?
 - What does digital violence signify for you (can you think of examples)?
 - Does an automated system always seem more efficient to you than a human one?
 - Do social media connect more than they divide?
 - When you accept terms of service, do you really feel free to choose?
 - Do you think artificial intelligence can be creative?
 - Who decides what is “safe” online?
 - Is a switched-off smartphone a loss or a relief?
 - Blockchain equals transparency: Do you agree?
 - Would you trust a decision made by an algorithm?
 - Is digital security an individual or a collective responsibility?
- Does using advanced technologies always mean progress?
 - Do you feel represented in the digital systems you use every day?
 - Can technology be considered as “neutral”?
 - Who is excluded when a technology becomes a standard?

Activity 4

critical quiz & perspective breaker

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

Intermediate level: comparing perspectives and information

- In which contexts does artificial intelligence genuinely improve decision-making, and in which does it risk making it worse?
- Does blockchain solve the problem of trust, or does it simply shift it elsewhere?
- Which data on your smartphone would you never share, and why?
- Can cybersecurity justify limitations on individual freedom?
- Who benefits economically from the technologies we use every day?
- Can an automated system be considered responsible for the decisions it makes?
- Is it better to have a technology that is efficient but opaque, or transparent but less effective?
- Does your smartphone use increase or reduce the quality of relationships?
- How much is convenience worth compared to privacy?
- How do digital technologies expand or reduce social inequalities?

- Who has the power to shut down or modify a digital infrastructure?
- Is total online security really desirable?
- In what ways do cultural biases enter AI systems?
- Is blockchain really decentralised in practice?
- What happens when a technology fails?
- Who pays the environmental cost of digital technologies?
- Is it ethical to use digital tools that we do not fully understand?
- Which non-technological alternatives are often overlooked?
- How do behaviours change when we know we are being monitored?
- Which compromises do you accept every day when using digital technologies?

Advanced level: critical verification, reformulation, and individual ethical positioning

- When is choosing not to use a technology a responsible decision?
- How would a technology change if designed for the most vulnerable groups?
- Which personal values would you sacrifice for efficiency or security?
- What responsibility do you have when helping build digital systems that affect others?
- How would you redesign this technology to support human autonomy and competence?
- Which collective rules would be necessary for a fairer use of technology?
- To what extent is your point of view on a technology influenced by others?
- Which forms of power are hidden behind digital infrastructures that appear neutral?
- How can we make the invisible impacts of technologies visible?
- Which technologies should we slow down or limit, and for what reasons?
- What role should education and critical literacy play?
- How can security, freedom, and trust be balanced in digital systems?
- What does “progress” mean from a social, rather than only technical, perspective?
- How could an extractive technology be transformed into a regenerative one?
- Which questions are almost never asked when we talk about innovation?

- What collective responsibility do we have as users, and not only as designers?
- How would your behaviour change if the consequences of your choices were immediate and visible?
- Which everyday technological decisions have a political impact?
- What role does conscious refusal play in digital citizenship?
- How would you define a “fair” use of this technology?

Activity 5

critical debate: contrasting perspectives

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

Impact & Creativity

Activity Sheet Summary for Facilitators

Duration: 60–90 minutes

Target: interdisciplinary groups, students, and educational teams with different learning levels

Learning objectives:

- develop critical argumentation skills
- understand the plurality of perspectives
- practise listening and moderation

Materials:

- thematic worksheets and materials useful for exploring the topic in greater depth
- a timer to ensure that each side has the same amount of time available
- a board or visual support

Assessment:

- quality of the arguments: well-structured and well-developed pro and con arguments
- critical interventions by the moderators, if the moderators are participants in the activity
- listening and debating skills
- quality of the synthesis and moderation
- documented collective meta-reflection

General description of the activity

Target group

Students, interdisciplinary groups, and educational teams

Description

This activity draws on the dynamics of a debate between two factions with opposing views. Two groups are asked to prepare to defend a predefined position and perspective. The activity unfolds as an exchange of contrasting arguments and viewpoints, with the aim of legitimising or questioning the use of certain technologies in society. Its structure resembles that of a political debate, with Pro and Con sides and an explicit moderator role, assigned either to participants with advanced-level competences or to someone outside the groups, such as the organiser of the activity.

The debate is not intended to determine who is right, but rather to bring out values, arguments, trade-offs, and ethical as well as social implications.

Activity mechanics

At the beginning, participants are divided into three groups:

- PRO side: this group defends the adoption of technology as a source of progress, efficiency, and opportunity. It supports the spread of technology in a strongly positive way and highlights its benefits.
- CON side: this group emphasises risks, exclusion, and social as well as environmental impacts. It represents a critical or sceptical position towards the technology in question.
- Moderators ensure balance in the debate, ask for clarification and further explanation, highlight ethical and social implications, and guide the final meta-reflection.

Alternatively, the moderator role may be taken on directly by the organiser of the activity. Once the roles have been defined, the activity can begin.

Phase 1 – Preparation (30 min)

- Each side prepares its arguments and counterarguments
- The moderators, ideally with advanced-level competences, also prepare themselves on the topic that will be debated. In a neutral and well-informed way, they identify both the strengths and the critical aspects of the technology under discussion.

Phase 2 – Structured debate (30 min)

- Alternating interventions by the PRO/CON sides
- Cross-questions
- Interventions by the moderator, who may also stimulate the debate by raising further issues.

Phase 3 – Guided meta-reflection (20 min)

- What emerged beyond the simple pro/con opposition?
- Which conflicting values are illustrated in the debate and how do they clash?
- Which compromises may be possible
- What narratives can be considered dominant, what arguments do we usually not hear so much?

Phase 4 – Wrap-up (10 min)

If more time is available, a role reversal could also be introduced: those who initially belonged to the PRO group move to the CON group, and vice versa. This can encourage greater flexibility of thought and a deeper understanding of different perspectives.

Examples of debate topics:

- artificial intelligence in work and assessment
- automation and human creativity
- privacy vs security
- smartphones and attention
- cybersecurity and control
- blockchain and decentralisation

Learning levels

- Foundational: understanding opposing positions and building arguments
- Intermediate: developing more in-depth arguments and being able to respond to criticism from the opposing group, making the debate lively and engaging
- Advanced: moderation skills and an advanced understanding of both the pros and cons. Ability to synthesise perspectives and to take a critical position on the technology

Activity 5

critical debate: contrasting perspectives

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

Here are some exemplary topics suitable for collective discussion and debate in this type of activity. To increase the chances of success and encourage debates with a high level of critical intensity, focused on contemporary technologies that are controversial from an ethical, social, and sustainability perspective, it may also be useful to develop a worksheet containing a series of critical questions that the groups can use during their debate preparation. The activity is designed to foster deep dialogue, a plurality of voices, and shared meta-reflection.

Proposed debate topics

Topic 1 – Artificial Intelligence: efficiency vs human dignity

Introduction

Nowadays, artificial intelligence systems are increasingly used to assess whether human beings are suitable for certain roles. One example is the automated screening of job applications in large companies, where only the candidates selected by AI are invited to an interview. Another example concerns the analysis of personal data to decide whether a person is eligible for financial credit. Is this simply an optimisation of resources, or does it risk becoming an affront to human dignity?

Focus

- artificial intelligence in the evaluation of people, for example, in employment, education, and access to credit
- automation of decision-making processes

Points of tension

- efficiency and scalability vs reduction of human complexity
- bias, stereotypes, and responsibility
- delegation of judgement to opaque systems

Topic 2 – Digital Surveillance: security vs freedom

Introduction

Surveillance systems promise greater security to some, but they also risk undermining our social privacy and amplify discrimination and inequalities. Are these systems designed to help us and contribute to building a safer society for everybody, or do they risk invading our private sphere and creating new forms of social control?

Focus

- intelligent video surveillance
- behaviour tracking

Points of tension

- risk prevention vs social control
- normalisation of surveillance
- who watches the watchers

Topic 3 – Smartphones and Attention: connection vs dependence

Introduction

Smartphones, although highly useful and used by all of us on a daily basis, can also generate dependence, distract us from what matters most, and create a range of problems. This issue is particularly significant among young people, who may experience greater difficulties in social

interaction, struggle with attention, and be exposed to cyberbullying. On the other hand, these devices open up many possibilities for connection and provide access to a vast range of useful information and tools. Does it therefore make sense to restrict smartphone use in certain specific contexts?

Focus

- persuasive design and total immersion in a digital world
- the attention economy and the balance of social interactions

Points of tension:

- continuous access vs cognitive fragmentation
- individual responsibility vs platform responsibility
- impact on relationships and learning

Activity 5

critical debate: contrasting perspectives

Link with CDL Canvas

Ethics

Self-Reflexivity

History & Society

Topic 4 – Blockchain and Sustainability: autonomy vs environmental cost

Introduction

One of the possible applications of blockchain is the creation of a decentralised and transparent economy, in which a growing number of people may gain access to forms of economic autonomy and to more traceable systems of exchange. However, this scenario also raises several issues in relation to centralised economic systems. In addition, the adoption of these technologies brings significant environmental sustainability challenges. Ethical and practical questions therefore run throughout the entire debate.

Focus

- transparency and economic decentralisation
- sustainability and energy impact

Points of tension

- transparency and autonomy vs resource consumption
- inclusion vs technological exclusion

- the ideology of decentralisation

General structure of the debate activity

Once the topic has been chosen, the activity unfolds by involving the different groups, each with a specific role within the discussion process.

Groups and roles

- PRO group: defends the adoption of the technology, emphasising its benefits, opportunities, and potential for progress.
- CON group: highlights risks, negative impacts, ethical dilemmas, and social consequences.
- MODERATORS group (advanced): manages timing and speaking turns, encourages deeper exploration of the issues, and guides the final meta-reflection.

Phase 1 – Preparation (30 min)

Phase 2 – Structured debate (30 min)

Phase 3 – Guided meta-reflection (20 min)

Phase 4 – Wrap-up (10 min)

Phase 1 – Guiding questions for debate preparation

During the debate preparation phase, the groups will receive the following questions, designed to encourage them to address some of the more complex and sensitive issues that may arise during the discussion.

- Which historical or social problem does this technology claim to solve, and why is that problem still relevant today?
- Who truly benefits from its adoption, and who, on the other hand, risks losing resources, rights, opportunities, or power?
- What impacts does this technology produce, including those that are less visible or less immediate, on society, the environment, the economy, and human relationships?
- Which values or ethical principles does it support, and in which cases might not using this technology be a more responsible choice?
- Which technological or non-technological alternatives exist to address the same problem, and why might they be fairer, more sustainable, or more effective?
- What responsibility do we have, both as individuals and as a collective, in supporting, regulating, limiting, or rejecting this technology?

We aim to make this Canvas a live resource, and we will continue to improve and update its content. Please do let us know if you have any questions, suggestions, or would simply like to know more about this project.

If you plan to use the Canvas or any of its activities, we would be glad to hear from you and provide support if needed.

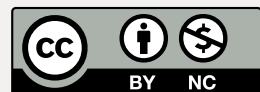
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