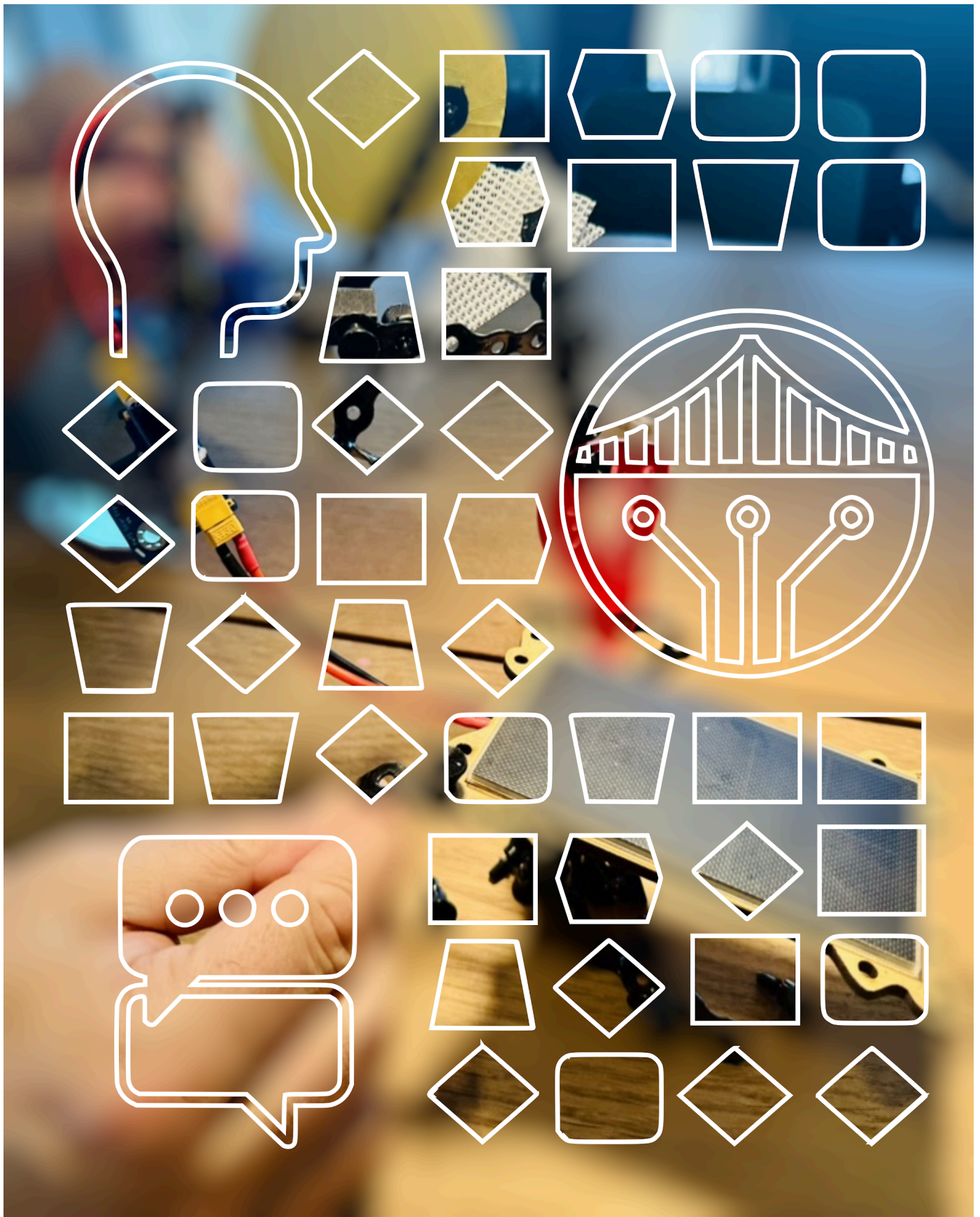
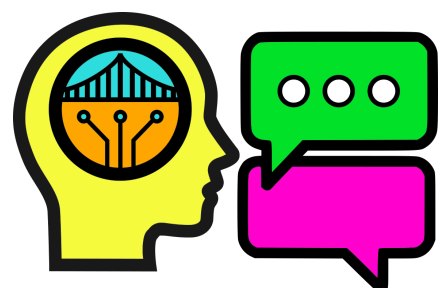




Dialogue Formats for Computational Thinking

A Practical Roadmap for Facilitators,
Teachers, Educators and Libraries



Deliverable WP3 following the proposal

Date deliverable	September 15, 2026
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Workpackage	3
Goal of the deliverable	Roadmap with info, ideas and examples to create and facilitate debate events around computational thinking.
Target group	Facilitators, Teachers, educators and Librarians

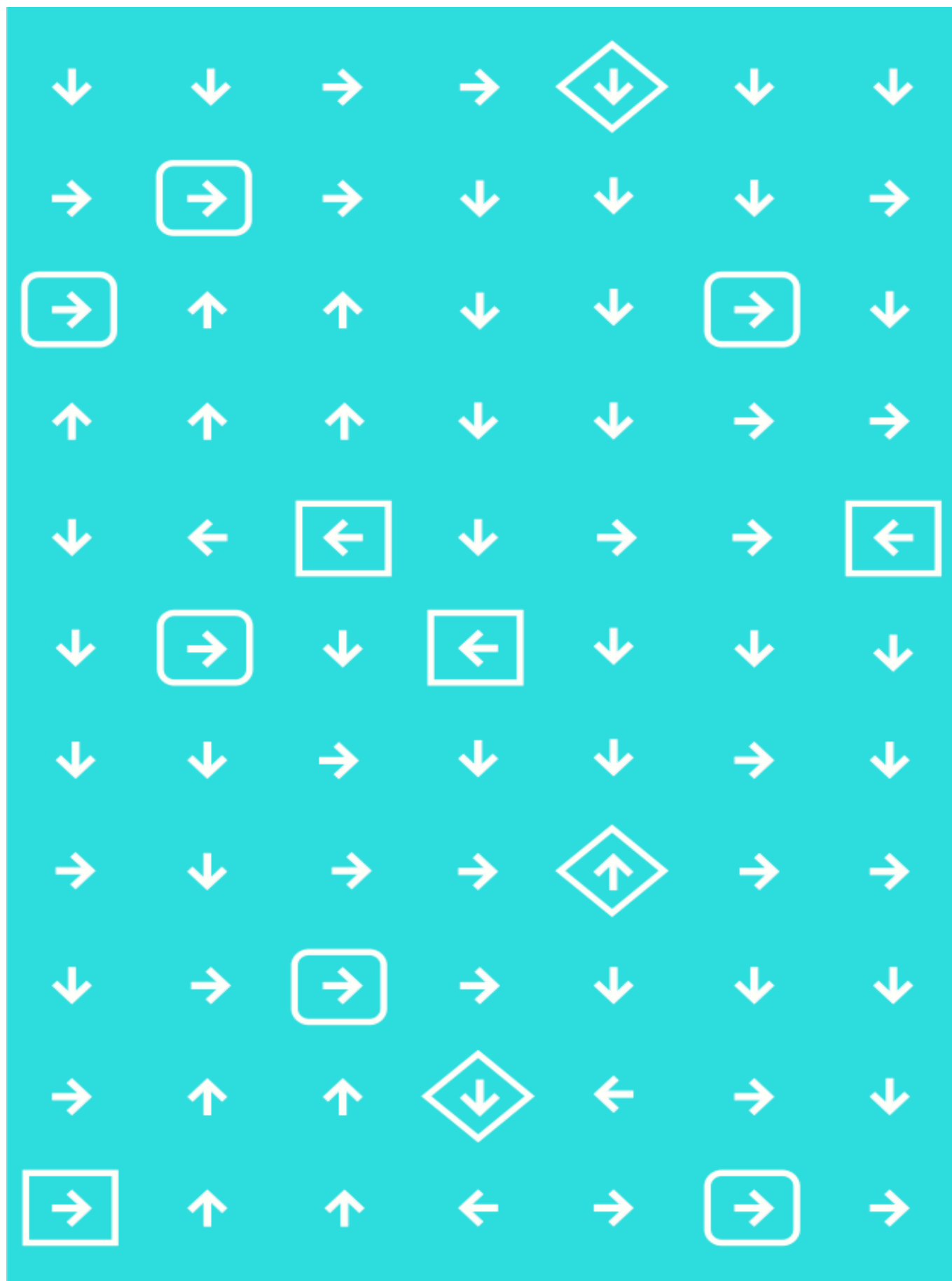


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1.

Introduction

Computational Thinking (CT) is increasingly recognised as an essential competence for understanding and participating in a digital society. However, for many students, parents, educators, and citizens, CT can seem abstract, technical, or disconnected from everyday life.

This roadmap aims to bridge the gap between classroom learning and society by offering practical formats for dialogue-based activities on Computational Thinking. The purpose is not only to build knowledge, but also to create

space for reflection, curiosity, and shared dialogue about how technology shapes everyday life, education, and society.

The Roadmap is designed for facilitators working with young people aged 12–14 and their parents or other adults. It supports inclusive dialogue activities where participants can explore Computational Thinking together, regardless of prior experience.

The guide is based on the belief that learning about Computational Thinking should extend beyond the classroom. Through dialogue,

participants develop curiosity, imagination, and critical reflection, helping them understand the connection between technology and society and their own role within it.

The purpose of these activities is not to reach agreement or provide definitive answers. Instead, they are designed to encourage curiosity, reflection, imagination, and dialogue. By sharing experiences and perspectives, participants can develop a deeper understanding of how technology influences society and how they themselves can engage with these developments.



2.

How to Organise a Dialogue Event

There is no single way to design dialogue activities on Computational Thinking. Different participants, settings, and goals require different approaches, but successful activities often share a few key principles.

Start with a relevant question

Dialogue works best when it begins with questions participants can relate to. Instead of starting with technical concepts, focus on everyday experiences and societal themes.

For example, you can use questions such as:

- How does technology influence our daily choices?
- Can algorithms be fair? How do humans communicate with machines?
- What role should robots play in society?
- What problems can technology solve and what problems can it not solve?

The aim is to encourage curiosity and reflection rather than correct answers.

Connect hands-on experience and dialogue

Dialogue becomes stronger when it is linked to shared, practical experiences. Activities such as robotics, storytelling, or problem-solving can provide a concrete starting point for reflection on Computational Thinking.

Participants explore a topic through doing, and then reflect together on their decisions, challenges, and experiences.



Use participatory formats

The most effective activities are participation-driven rather than lecture-based. Possible formats include:

- Conversation Salons
- Hands-on workshops
- Panel discussions
- Brainstorm sessions
- Ask-an-expert sessions
- Online discussions
- Exhibitions with facilitated dialogue

Formats can also be combined, for example a workshop followed by a Conversation Salon.

Consider your audience

Activities should be adapted to different groups, such as:

School context

- Students
- Students and parents
- Teachers and educators

When working with students, consider their age, prior knowledge, interests, and level of confidence. Activities should give them opportunities to explore,

discuss, create, and form their own opinions rather than simply receive information. With parents, the focus may be more on dialogue and reflection, while teachers and educators may also need inspiration for how the activity or approach can be used in their own practice.

Libraries and community settings

- Teenagers
- Families
- Youth groups
- Community members

In libraries and community settings participants may have very different backgrounds, ages, experiences, and levels of knowledge. Activities should therefore be easy to enter without requiring specific prior knowledge. Offer different ways of taking part – for example, through talking, making, experimenting, moving, or creating. Make room for different perspectives and experiences, and avoid assuming that everyone will engage in the same way.

Other stakeholders

- Museums / cultural institutions
- Policymakers
- Educational leaders

- Companies and organisations

For professional and institutional audiences, it can be useful to connect the activity to their own field, challenges, and responsibilities. Focus not only on what participants experience, but also on what they can take with them and use afterwards. This might be a new perspective, a method, a question, or an example that can inspire further work.

The goal is to ensure that dialogue feels relevant, accessible, and meaningful for all participants. This means considering: who they are, what they already know, what they are interested in, and what you want them to take away from the activity.

Focus on reflection rather than expertise

Participants do not need prior knowledge of Computational Thinking. The facilitator's role is to support exploration, questions, and dialogue rather than provide answers. The key outcome is not only knowledge, but also new perspectives, awareness, and reflection on technology and society



3.

Example Formats

This guide includes two example formats that can be adapted to different audiences and settings.

Conversation Salon on Computational Thinking

A structured dialogue format where participants explore open-ended questions related to Computational Thinking and society. Download the description from [the website](#)

The Conversation Salon focuses on curiosity, reflection, and democratic dialogue rather than debate. Participants share experiences and perspectives in small groups, creating opportunities for meaningful conversations across generations

and backgrounds. Topics may include:

- What is Computational Thinking?
- Where do we encounter Computational Thinking in everyday life?
- How do technologies shape society?
- How do humans communicate with machines?
- What value does Computational Thinking bring to society?

Story-Based Robotics Workshop

A hands-on workshop where participants explore Computational Thinking through storytelling, robotics, creativity, and

collaborative problem-solving. Download the description from [the website](#)

Participants design, build, and program robotic solutions inspired by challenges in a fictional story world. Reflection questions throughout the workshop encourage discussion about technology, ethics, problem-solving, and society.

This format is particularly suitable for introducing Computational Thinking through practical experiences before engaging participants in dialogue. Both formats can be used independently or combined into a larger event.



4.

Tips for Facilitators

Physical Environment

The physical setting influences participation and dialogue. The environment should support conversation rather than performance. Consider the following:



Arrange seating in small groups of 3–5 participants.



Ensure participants can easily see and hear one another.



Avoid classroom-style layouts when dialogue is the primary goal.



Use visible timers and simple visual aids when needed.



Create an informal and welcoming atmosphere.



Provide opportunities for movement and interaction during longer sessions.



Creating a Safe Space

People are more willing to participate when they feel safe, respected, and listened to. The goal is not to reach consensus but to create understanding and insight. At the beginning of each event:



**Establish clear
ground rules.**



**Emphasise that
different opinions
are welcome.**



**Encourage
participants to
speak from
personal
experiences.**



**Make it clear that
participants do not
need expert
knowledge.**



**Focus on curiosity
rather than
correctness.**



**Allow room for
uncertainty and
exploration.**



The Role of the Facilitator

The facilitator is responsible for guiding the process rather than providing the content of the conversation saloon. Rather than acting as an expert who provides answers, facilitators help participants explore questions and ideas together.

This is especially important when working with young people and adults in the same space. Facilitators should actively create an environment where everyone feels heard, respected, and equally valued.

Key responsibilities include:

- Creating a psychologically safe environment.
 - Introducing the topic in an accessible and engaging way.
 - Encouraging everyone to participate and share their perspectives.
 - Managing time and transitions between activities.
 - Asking open-ended questions.
 - Encouraging curiosity and exploration.
- Helping participants connect different ideas and perspectives.



5.

Tools and Activities for Dialogue-Based Learning

This section brings together a collection of exercises and activities that can support dialogue, reflection, and exploration of Computational Thinking in practice.

The activities are designed to help facilitators create engaging sessions where participants can think, talk, and reflect together.

They can be used as standalone exercises or combined into longer programmes that mix hands-on experiences with dialogue.

Purpose of dialogue activities

Dialogue activities can be used before, during, or after a debate event or a Conversation Salon. They help participants feel comfortable expressing opinions, listening to others, handling disagreement, and reflecting on different perspectives.

The activities are designed to:

- Create a safe and inclusive space for dialogue.
- Lower the threshold for participation.
- Strengthen civic engagement and democratic skills.

- Practice listening, speaking, reflecting, disagreeing respectfully, and finding common ground.
- Help participants experience that their opinions matter.

This guide contains the following exercises:

- Exercise 1: Opinion Spectrum
- Exercise 2: From Concern to Action
- Exercise 3: Active Listening Pairs
- Exercise 4: Perspective Cards
- Exercise 5: Common Ground Challenge

EXERCISE 1: OPINION SPECTRUM



Purpose To help participants practice taking a position, expressing opinions, and experiencing disagreement in a respectful environment. This exercise can be done with both smaller and larger groups of people.	Time 10–15 minutes Learning Outcomes Forming opinions, expressing viewpoints, listening to different perspectives, handling disagreement respectfully	Tips Start with light-hearted statements before moving to more complex topics. Encourage curiosity rather than debate. Remind participants that disagreement is valuable and does not have to lead to conflict.
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Instructions

1. Mark two ends of the room: “Agree” and “Disagree”.
2. Read a statement related to the topic of the event.
3. Ask participants to reflect individually before choosing a position.
 - a. To encourage independent thinking, participants can close their eyes while deciding and only move once everyone is ready.
4. Participants position themselves on one of the sides.
5. Invite volunteers from different positions to explain their reasoning.
6. Important: Emphasize that opinions can change and that the exercise represents a snapshot of what participants think at that moment.

Inspired by Democracy Fitness: <https://democracyfitness.org/>

EXERCISE 2: FROM CONCERN TO ACTION



Purpose	Time	Tips
To help participants experience that they can influence their surroundings and identify actions they can take on issues they care about..	15–20 minutes	Focus on concrete actions rather than perfect solutions.
	Learning Outcomes	Encourage participants to think about actions they can influence themselves.
	Identifying challenges, developing ideas for change, collaborative problem-solving, civic engagement	Celebrate different approaches and ideas.

Instructions

1. Present a question related to the event theme.
2. Participants first reflect individually.
3. In small groups, participants discuss:
 - a. What is the problem?
 - b. Why does it matter?
 - c. What could be done about it?
4. Ask groups to identify one realistic action that could make a difference.
5. Share ideas in plenary.

Inspired by Democracy Fitness: <https://democracyfitness.org/>

EXERCISE 3: ACTIVE LISTENING PAIRS



Purpose	Time	Learning Outcome
To strengthen participants' listening skills and encourage understanding before responding	10–15 minutes	Active listening, understanding different perspectives, respectful communication, reflection and empathy

Instructions

1. Divide participants into pairs.
2. Present a question related to the topic of the event.
3. Participant A speaks for one minute without interruption.
4. Participant B listens carefully and may not ask questions or respond.
5. Participant B summarizes the main points they heard.
6. Participant A confirms whether they felt understood.
7. Participants switch roles.

Inspired by Democracy Fitness: <https://democracyfitness.org/>



EXERCISE 4: PERSPECTIVE CARDS

Purpose	Time	Learning Outcome
To help participants explore different viewpoints and develop empathy by discussing issues from another person's perspective.	15–20 minutes	Perspective-taking, empathy, critical thinking, understanding complexity in social issues

Instructions:

1. Prepare short character descriptions or scenarios.
2. Divide participants into small groups.
3. Give each group a character card.
4. Present a question or dilemma related to the event topic.
5. Ask participants to discuss the issue from the perspective of their assigned character.
6. Invite groups to share their thoughts.



EXERCISE 5: COMMON GROUND CHALLENGE

Purpose	Time	Learning Outcome
To help participants explore different viewpoints and develop empathy by discussing issues from another person's perspective.	15–20 minutes	Finding compromise, collaborative problem-solving, respectful dialogue, building mutual understanding

Instructions

1. Divide participants into small groups.
2. Present a topic that may generate different opinions.
3. Ask participants to discuss the topic.
4. Their task is to identify three points that everyone in the group can agree on.
5. Groups share their common ground statements.

Inspired by Democracy Fitness: <https://democracyfitness.org/>





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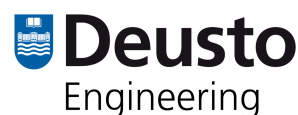
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