Embracing Complexity in Sustainability: Problem Framing

1. Description of the competence

Video link:

Problem framing

Recommended resources:

Presentation of the competence model

Description:

The competence area Embracing complexity in sustainability is about empowering learners with systemic and critical thinking, and encouraging them to reflect on how to better assess information and challenge unsustainability, scanning systems to identifying interconnections and feedback framing challenges as sustainability problems which helps us learn about the scale of a situation while identifying everyone involved. The Problem Framing competence refers to the ability to identify, define, and structure sustainability-related problems in a way that enables effective solutions. It involves understanding complex sustainability issues, recognizing the interconnections between different factors, and framing problems clearly to ensure they are addressed holistically. This competence includes skills such as asking the right questions, considering multiple perspectives, and recognizing the social, economic, and environmental dimensions of sustainability challenges. Problem framing is key to finding solutions that are not only effective but also inclusive, relevant, and actionable.

2. Workshop components

Duration: 120 min

Digital tools suggested:

- Mentimeter: For interactive polls and icebreakers
- Padlet: For collaborative brainstorming and scenario building. Also useful for ice breakers or energizers
- Canva: For creating visual representations

Competencies exercised:

Critical Thinking and Problem Solving, Systems Thinking, Futures Thinking, Ethical and Reflective Thinking, Entrepreneurial Thinking

3. Workshop overview

Annotation:

This workshop focuses on Problem framing in sustainability, helping participants develop skills to define and analyze sustainability challenges. Using digital tools like Canva, Mentimeter, and Padlet, participants engage in collaborative exercises to frame problems effectively, leading to actionable solutions. The workshop enhances critical thinking and problem-solving abilities, equipping participants to apply these skills in real-world sustainability contexts.

Objectives:

- Understand the importance of problem framing in sustainability challenges.
- Develop the skill of identifying and defining sustainability problems.
- Use digital tools to collaboratively frame sustainability problems.
- Apply problem-framing techniques to create solutions that are relevant, inclusive, and actionable.

4. Detailed session structure

Evocation (20 minutes):

Tools:

Mentimeter

Activities:

- Question to ask (5 minutes): Using Mentimeter, poll: *„What do you think is the most pressing sustainability issue today?"*
- Discussion (10 minutes): *Are these issues connected to sustainability challenges? How are they connected?*
- Brief overview (5 minutes): Introduce the concept of problem framing: the process of identifying and defining sustainability problems in a way that makes them solvable. Explain that good problem framing helps to clarify the issue, ensures that solutions are aligned with the real challenge, and helps avoid addressing symptoms instead of root causes.

Resources:

Video **tutorial on how to use Mentimeter**

Understanding (85 minutes):

Tools:

Canva, Padlet, Mentimeter

Activities:

1. Understanding Problem framing (20 minutes)

- Presentation (10 minutes): Explain Problem Framing using real-world examples (e.g., climate change, plastic pollution).
- Use Canva to illustrate frameworks like the "5 Whys" or "Fishbone Diagram" to help participants break down complex issues into manageable components.
- Discuss the importance of asking the right questions to understand a problem fully before jumping to solutions.
- Interactive Exercise (10 minutes): Participants will work in pairs or small groups to apply the "5 Whys" technique to a specific sustainability issue (e.g.,

food waste, deforestation). They will use Canva to create a simple visual breakdown of the problem using this framework. Afterward, each group presents their work briefly to the whole group.

2. Problem framing in action (40 minutes)
   - Scenario Presentation (5 minutes): Present a real-world sustainability challenge (e.g., urban pollution, water scarcity, unsustainable agriculture). Briefly explain the background of the problem and why it's important to frame it correctly.
   - Group Work (25 minutes): Split participants into small groups. Assign each group a specific sustainability problem (e.g., plastic waste, renewable energy adoption, eco-friendly packaging). Using Padlet, groups will work together to:
   - Define the problem.
   - Identify the root causes of the problem.
   - Frame the problem in a way that is clear and actionable.
   - Upload relevant images, resources, or data to support their framing.
   - Encourage them to focus on why the problem matters and to be inclusive of various stakeholders (social, economic, environmental perspectives).
   - Presentations (10 minutes): Each group presents their problem framing on Padlet. The rest of the participants can comment or ask questions. Use Mentimeter to run a quick poll or vote on which problem framing was most effective, based on clarity, root cause identification, and relevance.

3. Applying the Problem Framing Competence to Your Own Work (25 minutes)
   - Individual Reflection (5 minutes): Ask participants to use Canva to create a personal or organizational sustainability problem they are currently working on or passionate about. Have them frame it using the techniques learned in the workshop, such as the "5 Whys" or a root cause analysis. Encourage them to consider various dimensions of sustainability (environmental, social, economic) and think critically about how framing the problem differently might lead to different solutions.

- Group Sharing & Feedback (15 minutes): In small groups, participants will share their personal problem framing and receive feedback from peers. Encourage peers to ask constructive questions that challenge the framing and offer alternative perspectives.
- Final Poll (5 minutes): Use Mentimeter to ask: *"How confident do you feel in framing sustainability problems now?" and "What is the most important takeaway from this session?"*

Resources:

Video explanation of Fishbone diagram

(The 5 Whys is a simple but powerful technique used to explore the cause-and-effect relationships underlying a particular problem. It involves asking the question "Why?" repeatedly (usually five times) to dive deeper into the problem and uncover its root causes. How to implement:

- *Ask the first "Why": Start by asking why the problem occurs. This is usually a straightforward question based on the symptoms you see.*
- *Ask "Why" again: For each answer, ask why it happens. Keep digging deeper to explore each cause.*
- *Repeat: Continue asking "Why?" for each new answer until you identify the root cause of the problem. Often, five iterations are sufficient, but sometimes it may take fewer or more.)*

Reflection (15 minutes):

Tools:

Mentimeter

Activities:

- Recap the key points from the workshop: Why problem framing matters for sustainability, and how it leads to better solutions. Provide additional resources or reading material for those who want to explore more. Thank participants for their engagement and creativity.
- Feedback: Use Mentimeter for a final feedback survey (optional): *"What can we improve in this workshop?" and "What part of the session did you find most useful?"*

Resources:

None.

5. Resources used and additional info

Links: Suggested Reading: **GreenComp Framework**

Toolkit: **Digital Tools Guidebook**