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TRAINING FORMAT

GARDENS

ERASMUS+ KA2 SCHOOL

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TRAINING FORMAT

Context

In recent years, concerns about public health and environmental sustainability have intensified across Europe. Studies indicate that many young people lack essential knowledge about healthy eating habits and the environmental impact of food consumption. Surveys show that only 20% of European adolescents have sufficient knowledge of nutrition, while a significant proportion of 39.9% of students consume and prefer unbalanced diets high in processed foods and low in fresh, natural ingredients. Additionally, 22% of students are overweight, and 30% do not engage in enough physical activity. These issues contribute to long- term health risks, including obesity, diabetes, and cardiovascular diseases. At the same time, food production and consumption play a crucial role in environmental sustainability. The food industry accounts for nearly 30% of global greenhouse gas emissions, and unsustainable dietary habits exacerbate climate change, deforestation, and biodiversity loss. However, food knowledge in schools often lacks an environmental perspective, leaving students unaware of the impact their choices have on the planet.

GARDENS project aims at

- Empowering the education about healthy nutrition habits in schools.
- Enhancing teaching of environmental impact of food practices and habits in schools.
- Validating a hybrid digital educational methodology to support educators and produce high-quality learning outcomes by integrating non-formal education (NFE) and digital game-based learning (DGBL).

AIM OF THE TRAINING FORMAT

Empowering Teachers as Changemakers in Food Education

The **Training Format (TF)** is designed to **empower teachers and educators** to become **changemakers in food education**, equipping them with the knowledge, tools, and confidence to promote **health** and **sustainability** through engaging learning experiences.

Target Audience

- **Teachers, educators, and school staff** working in middle and secondary schools, seeking to expand their methodological and digital competencies.
- **Educational institutions and organizations** aiming to integrate food sustainability and health into their curricula through participatory and digital learning formats.
- **Students and parents**, engaged by the aforementioned target groups, can offer valuable contributions based on **their experiences**. Their involvement helps reinforce **educational consistency** between school and home, while also fostering a stronger **sense of belonging and ownership** towards the solutions that emerge1.

Main Goals

Participants will:

- Learn **how to find and adapt existing** methods, tools, and digital learning applications to their specific school context.
- Reflect on the **shared role that schools** can play in addressing food sustainability and health challenges.
- Develop a common understanding of how to make nutrition education more appealing by promoting healthy eating habits.

[1] Students and parents emerged as relevant target groups to involve during the two format tests conducted in Berlin.

- Gain **hands-on experience** with patterns and strategies drawn from digital games to create interactive and playful learning activities. Increase confidence in **engaging students** on complex and pressing topics such as food, health, and the environment.

Expected Results

By the end of the training, participants will co-create:

- A **systemic map** outlining key blockers and their interconnections, to support a shared understanding of challenges and guide the design of more targeted interventions.
- A set of **actionable solutions** that can be directly implemented to foster healthier choices and sustainable practices among students and within the school context.

METHODOLOGY

The Gardens training format is grounded in **Non-Formal Education (NFE)**, understood as the comprehensive set of educational practices that take place **outside the formal school system**, yet are designed around **learner-centered**, **voluntary**, and **experience-based** processes. NFE allows for flexibility, inclusivity, and strong adaptability to different learning environments and target groups.

Building on this foundation, the methodology integrates approaches from **Design Thinking**, **Systemic Design**, and **Participatory Co-Design**:

- **Design Thinking** supports an iterative learning journey based ondivergence and convergence, where participants are encouraged to explore diverse perspectives and co create solutions by navigating through ambiguity and complexity.

- The training embraces a **Human-Centered Design** mindset, recognizing that educators and learners bring unique lived experiences. Rather than seeking to "solve for all," the process focuses on designing with and for specific communities and needs, as advocated by micro-credit inventor Muhammad Yunus.

- From **Systemic Design**, the methodology incorporates a mindset shift: Participants are invited to see patterns instead of isolated problems, to unlock change rather than impose it, and to work toward the health of systems instead of narrowly defined outcomes.

- The process is rooted in **Participatory Design** principles, engaging participants not as passive recipients but as experts of their own experience, who actively contribute to problem-framing, idea generation, and knowledge development.

HOW WE GOT HERE

The **GARDENS training format** was not developed in isolation: it emerged through a process of iterative design, grounded in testing and feedback from real participants. This handbook captures the refined result of a journey that brought together insights from theory, practice, and lived experience.

A Cross-Cultural Testing Ground

To test and improve the format, we conducted two testing sessions with a diverse group of educators from across the partner countries involved in the Gardens project. Their different backgrounds, perspectives, and teaching environments provided essential input to ensure the training would be both **adaptable** and **relevant** in varied contexts.

Two Rounds of Prototyping

Day 1 – First Test Iteration (approx. 6 hours):

The first session allowed participants to experience the training flow almost in its entirety. This in-depth test surfaced crucial learnings - on timing, clarity of instructions, and flow between modules - which we used to **refine the structure**, simplify some passages, and better tailor the format to different facilitation styles.

Day 2 – Second Test Iteration (approx. 3 hours):

The second day focused on testing the revised version of the format in a shorter time frame. This gave us the opportunity to validate the adjustments made, and to confirm the format's flexibility across different delivery lengths.

Designed for Flexibility

One of the guiding principles behind the GARDENS training format is **adaptability**. The format can stretch from a **3-hour sprint to a 3-day deep dive**, depending on available time, the number of participants, their familiarity with co-design practices, and the desired depth of engagement. It works as a standalone module or as part of a broader learning process.

Feedback as a Design Tool

Each test session concluded with **structured feedback** activities:



After the **first test**, participants were invited to share what worked well, what they would change, and how urgent those changes felt. This helped us **prioritize the most critical adjustments**.

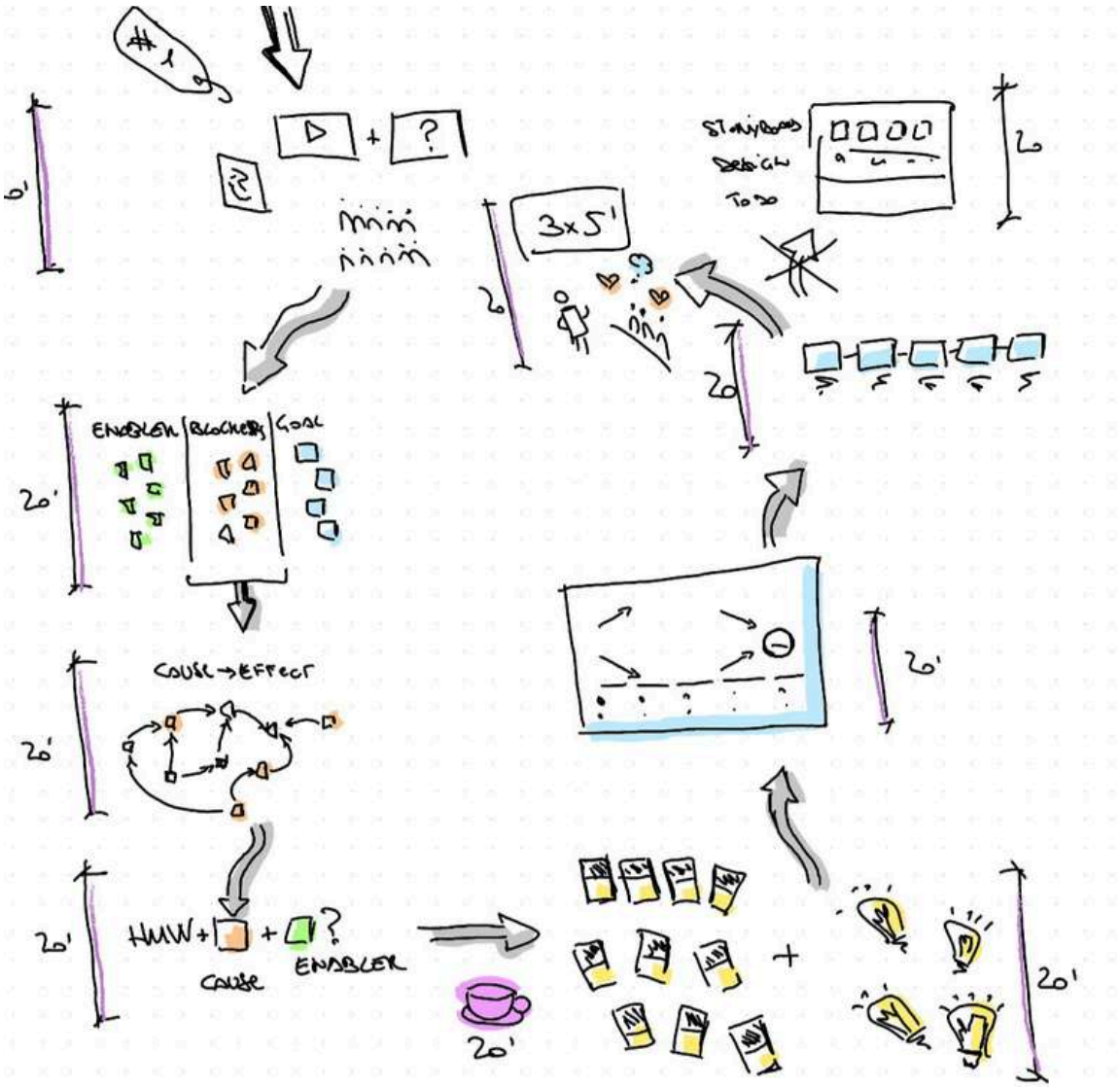


After the **second test**, the feedback focused on what participants appreciated most, new ideas for further development, and open questions. These contributions helped us **finalize the training structure** while leaving space for future evolution.

The feedback maps collected during both days served not only as a source of insight, but as living proof of how **co-design applies not just to the content, but to the process itself**. This handbook is the result of that collective learning journey.

TRAINING FRAMEWORK

The GARDENS training is structured around a modular framework of **9 sequential steps**, combining input, analysis, ideation, and prototyping. Each step is designed to facilitate the **co-creation of solutions** by activating participants' knowledge, lived experiences, and collaborative capacities. The process is rooted in **design thinking**, **systemic mapping**, and **participatory methodologies**, with a dynamic alternation of divergent and convergent phases. It progresses from the exploration of a shared problem space, through sensemaking and ideation, toward the generation of **tangible and testable ideas**.



Summary Table – GARDENS Training Framework

Step	Name	Purpose
1	**Input Session**	Build a shared understanding of the problem and desired change
2	**Rehearsing Inputs**	Explore the challenge from multiple perspectives through team reflections
3	**Prioritizing Obstacles**	Use systemic mapping to visualize blockers and their causal relationships
4	**HMWQ Formulation**	Transform blockers and enablers into actionable "How Might We…" questions
5	**Coffee Break**	Regroup, refresh, and prepare for the ideation phase
6	**Brainstorming**	Generate and adapt idea cards in response to HMWQs
7	**Idea Canvas**	Develop and structure selected ideas using a dedicated framework
8	**Storyboard**	Visualize the idea through the lens of user experience
9	**Pretotyping (Presentations)**	Share, stage, and receive feedback on the idea in a low-fidelity format

Setting of the room

The physical setup of the space is not a passive background, but an active enabler of collaboration, focus, and creativity. In *Gardens*, the room is designed as a **co-facilitator of the learning journey**, supporting both individual reflection and group dynamics through a flexible, modular layout.

Modular, Flexible Layout

The space is organized to support a fluid alternation between plenary moments and team-based collaboration:

- **Plenary Area**

  A central zone, equipped with a screen or projector, allows all participants to **sit and listen comfortably** during input sessions and briefings. This area supports full visibility and collective attention, with no need for special setup beyond basic seating and projection.

- **Team Islands**

  Small clusters of desks or tables (ideally 4–6 people per team) form the **collaborative core** of the training. Each island is equipped with:

  - Post-its and fine-tip markers (no pens)
  - Dot stickers
  - Canvas posters and facilitation materials

  These islands function as creative micro-hubs where teams co-design and prototype throughout the workshop

- **Wall Space**

  A **shared wall** displays **visual notes**, **key highlights from the input sessions**, and the **training agenda**, offering a reference point for all.

- **Tool Corner (optional)**

  A designated area may host **Idea Cards**, **game prototypes**, **inspiration books**, and other facilitation props, providing teams with extra creative inputs during ideation phases.

Aesthetic and Atmosphere

The room should feel more like a **studio than a classroom**: welcoming, informal, and open to experimentation. Whenever possible, include natural light, plants, or cozy details to **soften the institutional feel.**

Safe Space: Co-creating a Culture of Care

Beyond the furniture, the real foundation of the space is how we inhabit it together. The training is grounded in a shared commitment to building a safe and generative environment.

Our Posture

- We **suspend judgment**
- We **listen actively**
- We release the need to prove ourselves
- We treat others' experiences as valid
- We practice **non-violent communication**

Our Habits

- We speak honestly, even about doubts
- We build on others' ideas with care and curiosity
- We leave space for quieter voices
- We ask questions to deepen understanding and open reflection
- We use post-its clearly, purposefully, and respectfully

Our Wellbeing

- We **take breaks** when needed, without asking permission
- We **stay hydrated**, move, stretch, and tune into our body's needs
- We let facilitators know if anything needs adjusting to feel fully present

In short, the room is not just a setup: it is a **shared commitment to learning with generosity, playfulness, and respect**.

1 / Input Session: Framing the Intention of Change

This first module lays the foundation for the training by creating a shared understanding of the challenge and encouraging each participant to articulate a personal and actionable **intention of change**. The goal is to transition from general awareness to specific and self-defined goals that will guide the rest of the co-design journey. This module blends **expert insight**, **individual reflection**, and **group-based decision-making**, fostering early ownership and engagement.

Instructions for Participants

1.1 / Listening and Note-taking

The session begins with a short talk by a **knowledge holder**, who introduces the topic by:

- outlining the **problem situation**;
- sharing **supporting content** such as data, personal stories, videos, orreal-world examples.

While listening, participants take personal notes to help formulate their own **"intention of change"**, defined as:

"A specific problem we aim to solve, described through the change we want to see."

Simultaneously, the **facilitator takes visual notes** on a shared board or canvas, to, create a **common visual framework** that captures key ideas, tensions, and drivers of change.

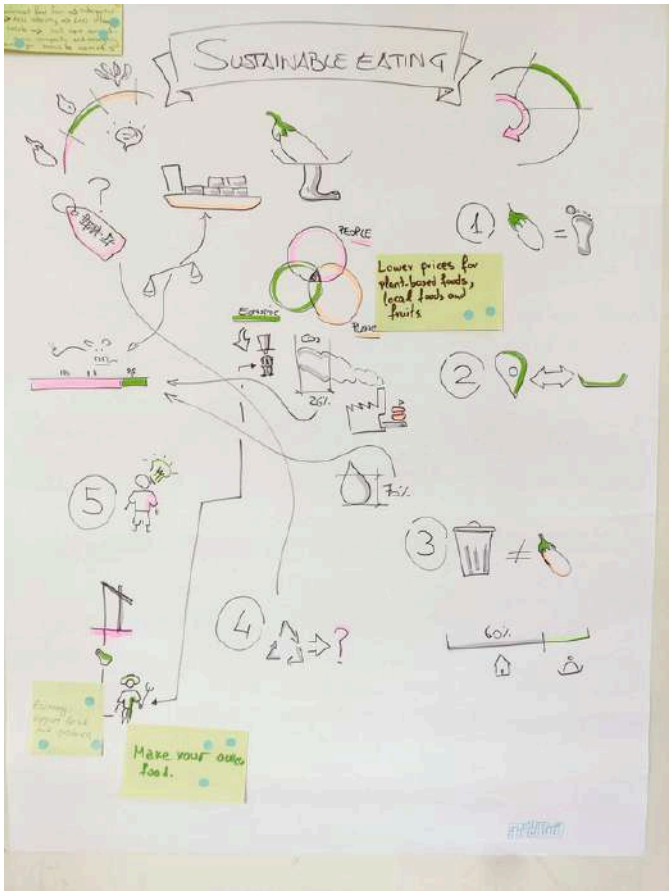
1.2 / Writing and Sharing Intentions

After the talk, each participant formulates their own intention of change, writing it down and posting it on or near the shared visual notes. This step externalizes individual motivations and makes them visible for collective reflection.

1.3 / Voting and Team Formation

Participants receive three voting dots to express their preferences among the posted intentions. The most voted ones are selected, and working teams are formed accordingly. Each team will adopt one of these intentions and carry it forward as a design focus throughout the workshop.

Example from a Workshop Test – Sustainable Eating



In one of the training pilots focused on **sustainable eating**, the knowledge holder illustrated various challenges: environmental impact, pricing disparities between processed and fresh foods, food waste, and cultural barriers to plant-based diets.

Participants then crafted a range of intentions of change, including:

- *"Make plant-based food more affordable and accessible."*
- *"Support and promote local food producers."*
- *"Empower people to prepare their own meals."*

After voting, teams were formedaround the top-voted intentions. Each group used its chosen intention as the entry point into deeper exploration and ideation.

Participant Feedback Highlights

Participants appreciated this process, noting that it helped clarify their personal stance and align with others:

- *"Voicing one's intention helps clarify what you really want to achieve."*
- *"Many ideas emerged; great points for discussion."*

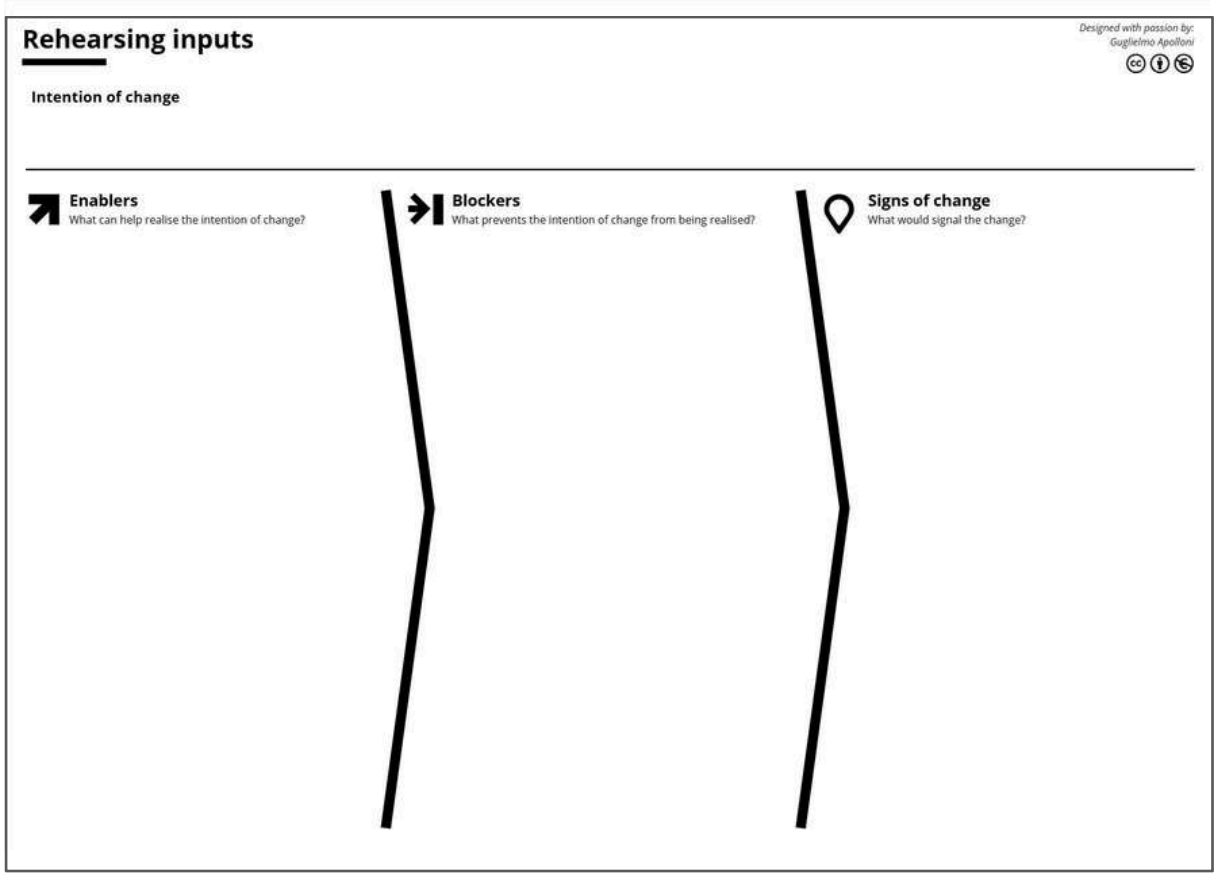
2 / Rehearsing Inputs: Mapping the Intention of Change

This module introduces the **Rehearsing Inputs Canvas**, a visual tool designed to support teams in analyzing their chosen **intention of change** from different perspectives. The aim is to make visible what may **signal** the change, what might **enable** it, and what could **block** it. This early diagnostic exercise is essential to **open up the system**, surfacing both known elements and hidden dynamics that will be explored more deeply in the following steps.

By making assumptions, perceptions, and insights visible on the canvas, teams begin a process of **collective sensemaking** and alignment, moving from abstract intentions toward tangible design opportunities.

Instructions for Participants

Each team works on their assigned intention of change using the **Rehearsing Inputs Canvas**, structured into three columns: *Enablers*, *Blockers*, and *Signs of Change*.



2.1 / Frame the Intention

At the top of the canvas, write the **intention of change** your team is working on (as defined and voted in Module 1).

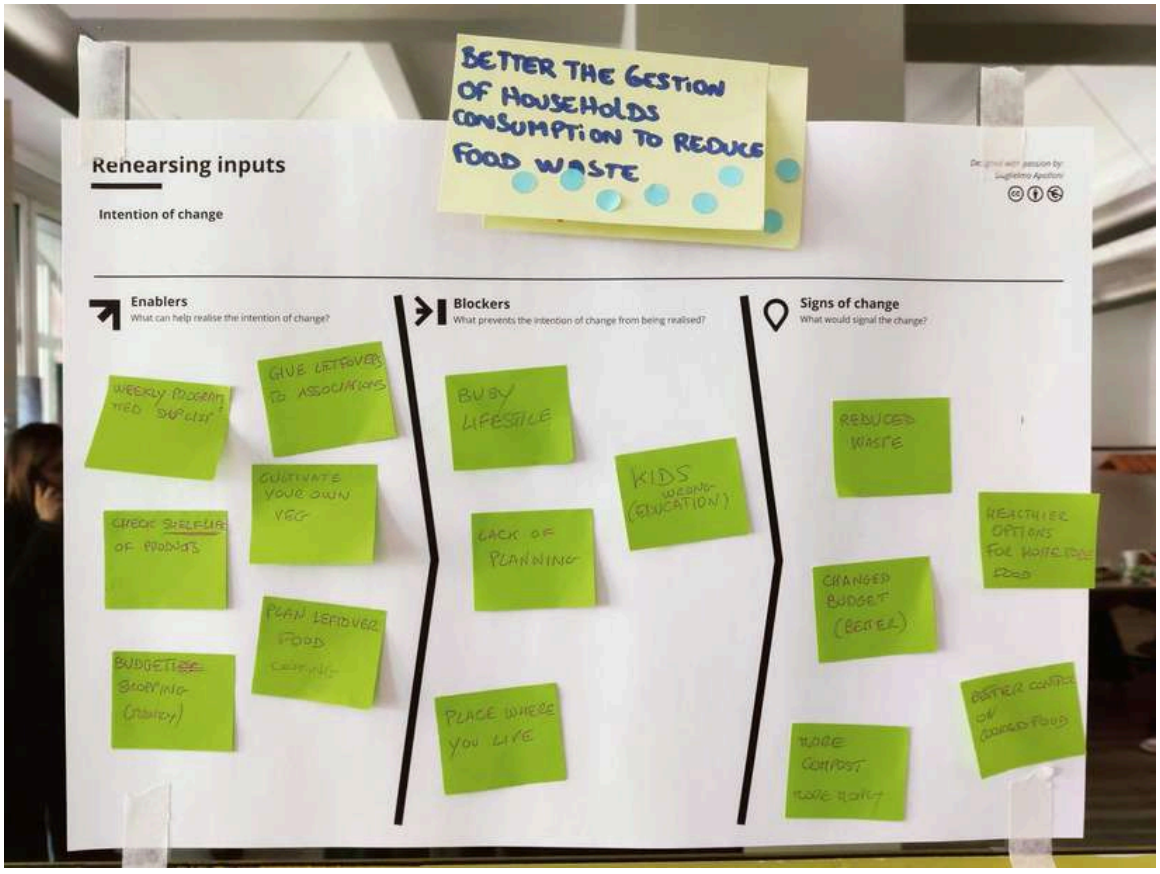
2.2 / Populate the Canvas

As a team, discuss and note down:

- **Signs of change.** What would indicate that the intended change is happening or has occurred?
- **Blockers.** What prevents this change from being realized? Think of systemic, cultural, infrastructural, or behavioral factors.
- **Enablers.** What could support or accelerate this change? Include both actors (people, institutions, networks) and resources (tools, spaces, materials, time, etc.).

Participants are encouraged to think broadly and divergently. The facilitator may guide this step by asking probing questions or encouraging all voices to contribute.

Example from the Workshop Test – Food Waste Reduction



One team worked with the intention:

"Better the gestion of households consumption to reduce food waste."

On their canvas:

- **Signs of change** included: *reduced waste*, *improved budgeting*, *healthier food options, better control of home-cooked meals.*
- **Blockers** noted: *busy lifestyle, lack of planning, place where you live, children's eating habits.*
- **Enablers** listed: *weekly food planning, leftover donation, shopping lists, budgeting tools, home gardening, and education.*

This step gave the group a **multifaceted view of the challenge**, revealing both expected and less obvious dynamics at play.

- *"Liked the procedure cause it explained the steps needed."*
- *"To take into account human resources & natural resources."*
- *"Can the unspoken be heard?"*

These comments reflect how the canvas helped create a **structured yet open space** for thinking through complexity, and sparked reflections on what often remains invisible.

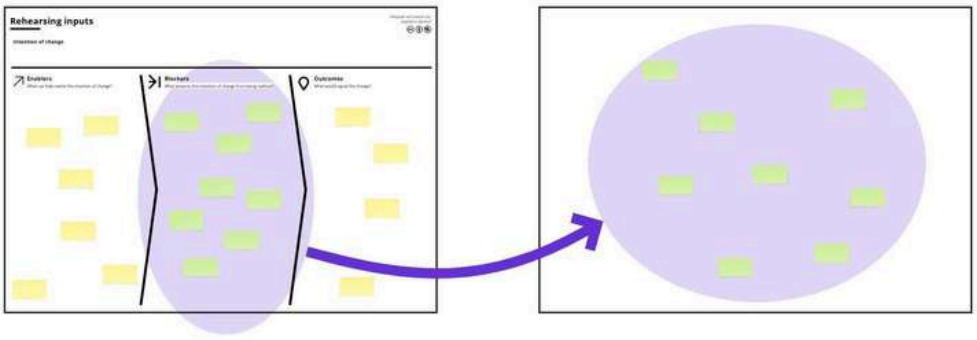
3 / Prioritizing Obstacles: Building a Cause-Effect Map

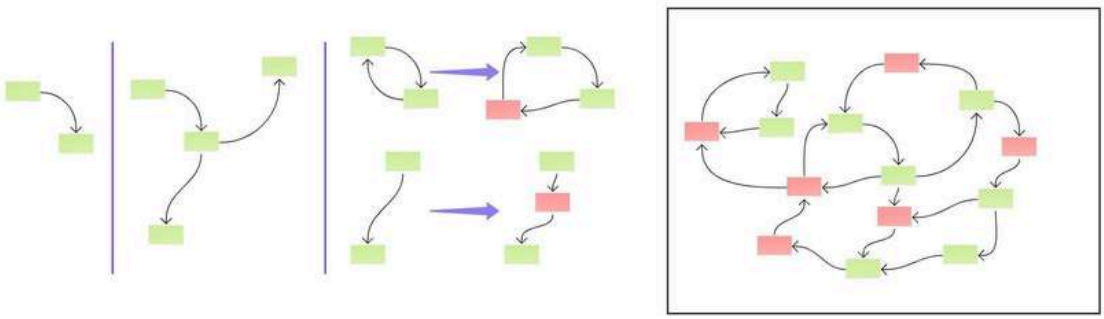
This module guides teams in constructing a **cause-effect map** of the main **blockers** identified in the previous step. Moving from listing to **structuring**, participants now shift into a systemic design mode: making visible the interconnections between factors that prevent the desired change from occurring.

Rather than using a predefined canvas, this module introduces a more **explorative format on blank paper**, giving participants the freedom to arrange blockers spatially, link them through causal relationships, and introduce new intermediate or missing elements. The result is a **systemic map** that deepens the collective understanding of the dynamics at play and identifies key leverage points for action.

Instructions for Participants

Using a large white paper or table surface, teams work together to create a **cause-effect map** of their blockers.





The process unfolds in four steps:

3.1 / Move the blockers

Take the blocker notes from the previous canvas and **reposition them freely** on the white sheet.

3.2 / Connect the blockers

Draw arrows to represent **cause-effect relationships** between blockers. Ask yourselves:

"Which obstacle causes or contributes to another?"

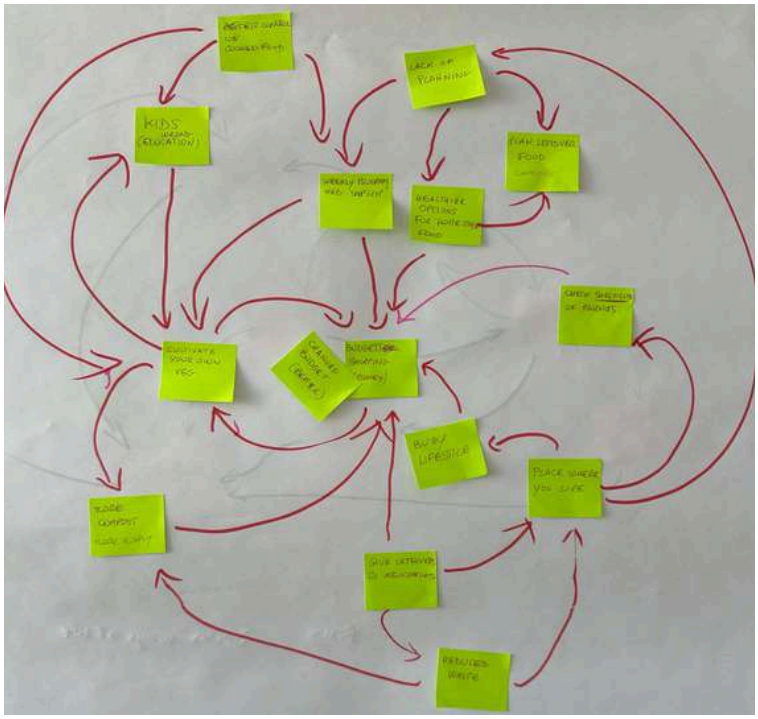
3.3 / Visualize causal chains

Don't stop at one-to-one links. Explore **chains**, **loops**, and **multiple causes**. Let the structure emerge organically as a reflection of your team's shared understanding.

3.4 / Add missing elements

Introduce **intermediate variables** or **missing steps** to clarify logical gaps. These may be conditions, actors, or underlying assumptions not yet surfaced. Repeat the process as needed. The goal is not to make a perfect diagram, but to explore complexity and identify patterns.

Example from the Workshop Test – Food Waste Reduction



One team working on household food waste created a map linking blockers such as:

- *busy lifestyle → lack of planning → overbuying food → increased waste*
- *no awareness in kids → lack of family coordination*
- *place where you live → limited composting options*

They also added intermediate ideas like *meal planning habits* and *educational gaps*, enriching the diagram and clarifying the systemic nature of the problem.

Participant Feedback Highlights

- "Awareness of obstacles: being able to picture obstacles from different points of view."
- "To realize a cause-effect map, it is necessary to know more about the needs."
- "Blockers can be pathways: an obstacle can reveal something we hadn't seen before."
- "Surprising obstacles, and turning them into something positive."

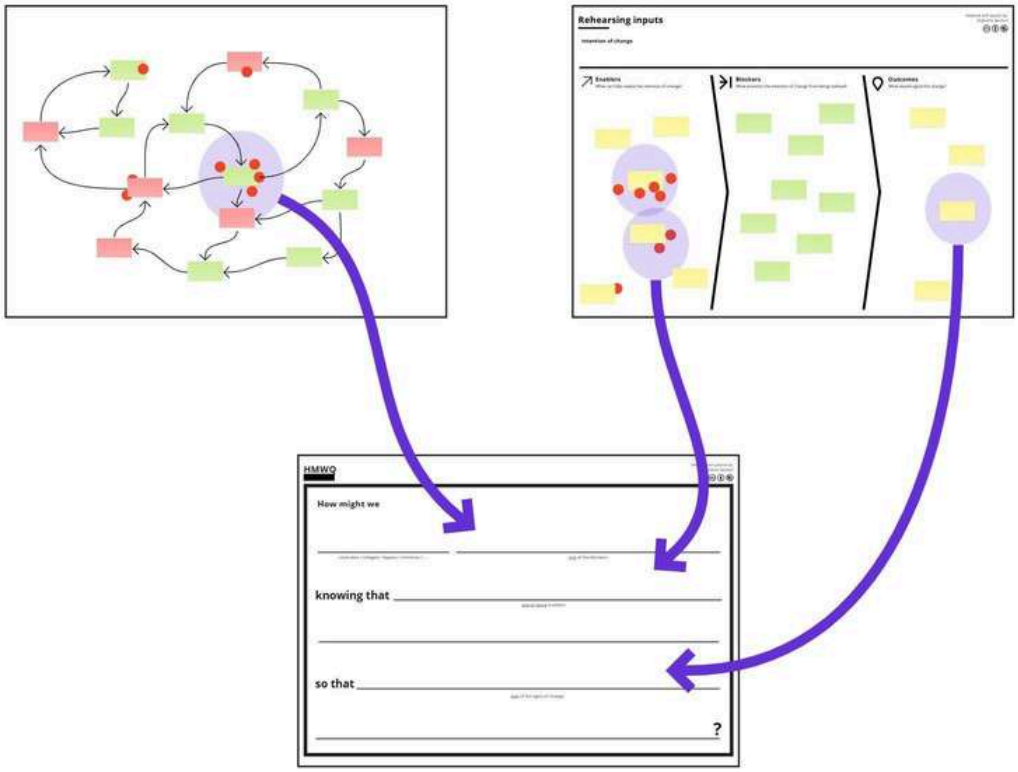
This feedback reveals how the mapping process fosters **deeper analysis**, surfaces **emerging insights**, and even invites participants to **reframe intention of change** as potential opportunities.

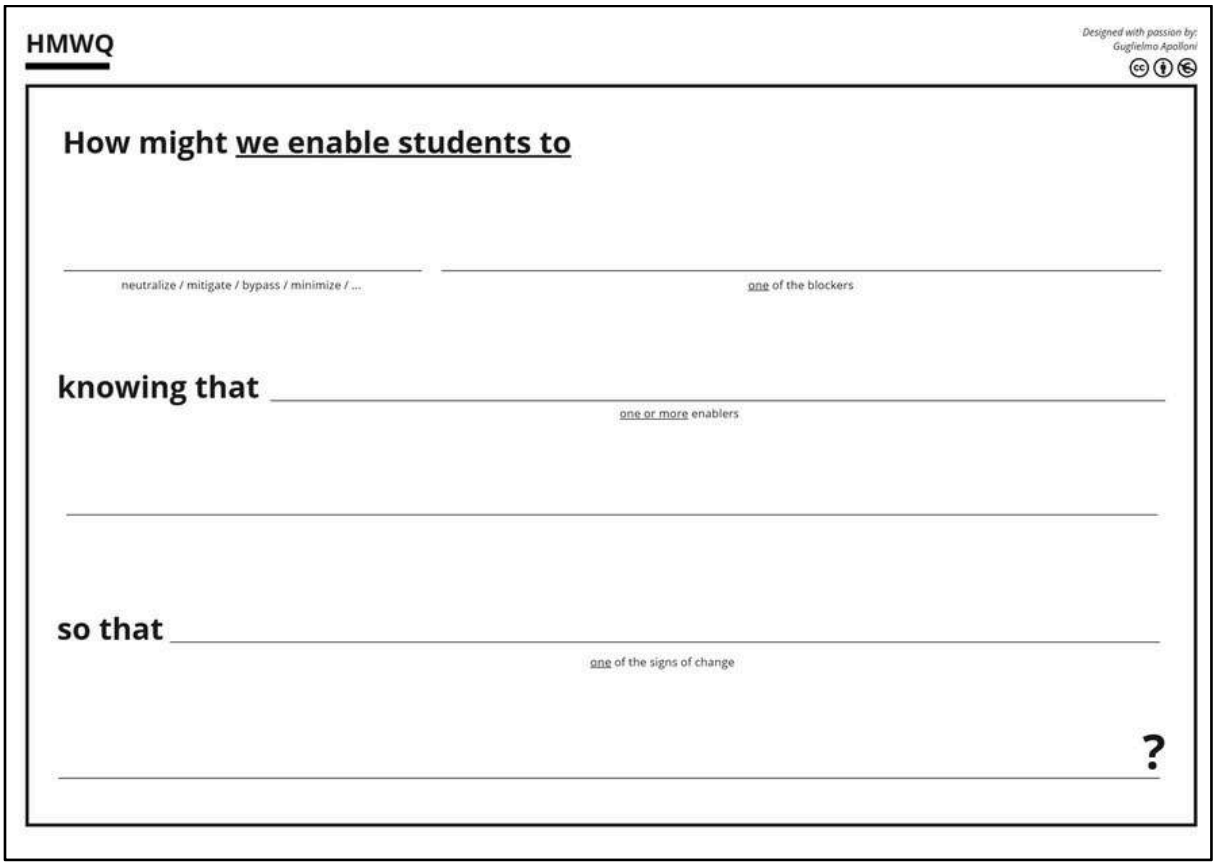
4 / HMWQ Formulation

In this module, participants are invited to **transform system obstacles into design opportunities** by formulating *How Might We Questions* (HMWQs). This creative reframing technique allows teams to build **bridges between blockers, enablers, and desired outcomes**, shifting from diagnostic exploration to **generative challenge-setting**.

Instructions for Participants

Each team member works with the **HMWQ Canvas** to formulate one or more *How Might We Questions*, using the blocker, enabler, and sign of change previously identified. This step reframes problems into actionable and focused design challenges.





Follow the steps below:

4.1 / Choose a verb

Begin your question with a generative action verb such as:

neutralize, mitigate, bypass, reduce, minimize...

4.2 / Insert a blocker

Select one **blocker** from your cause-effect map that your team considers particularly relevant or pressing.

4.3 / Add one or more enablers

Identify one or more **enablers** (from the Rehearsing Inputs or earlier reflections) that could realistically help address that blocker. These can include people, tools, strategies, or resources.

4.4 / Describe a sign of change

End the sentence by stating a **visible and desirable outcome**: a *sign* that the proposed change is being achieved.

Each question should follow the format:

How might we enable students to **[verb] [blocker]**,

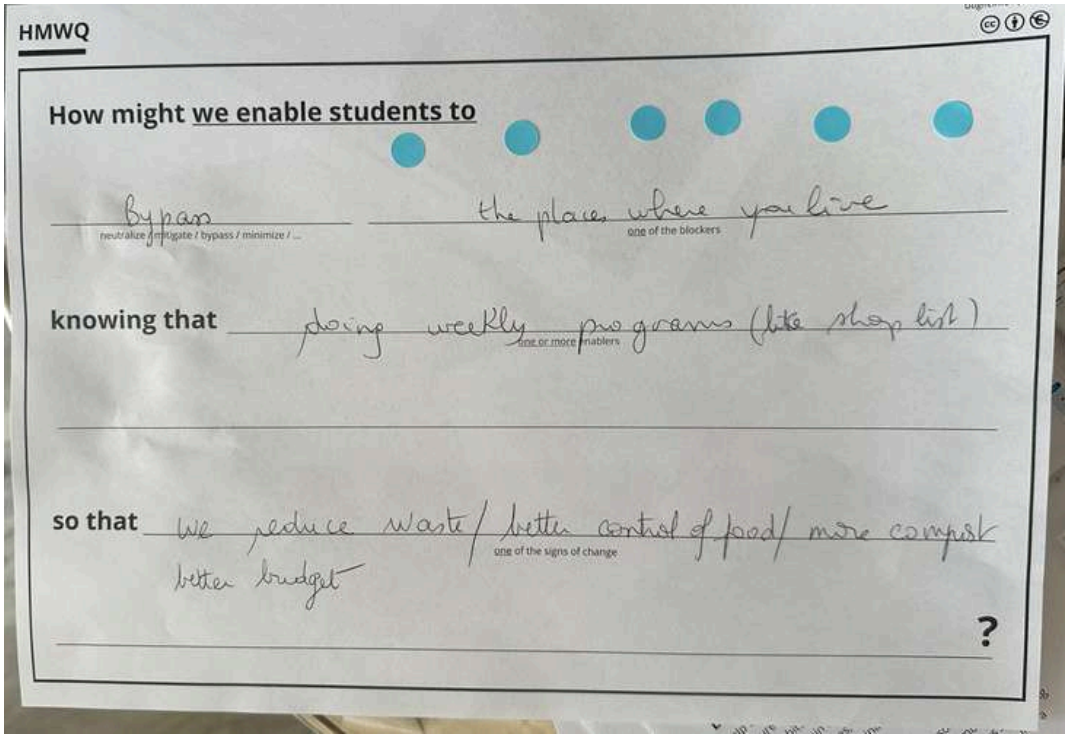
knowing that **[enabler]**,

so that **[sign of change]**?

4.5 / Dot Voting on HMWQs

Once all team members have completed their HMWQs, display them together.
Each person receives **three voting dots** to select the questions they feel are most compelling, relevant, or inspiring to explore further.
The most voted HMWQs will be used in the next phase as the **starting points for ideation**.

Example from the Workshop Test – Food Waste Reduction



One participant created the following design question:

How might we enable students to bypass the place where they live, *knowing that weekly programs (like to-do lists) help to control food consumption, so that they can reduce food waste and save budget?*

This HMWQ emerged from a mapping where **"place where you live"** was seen as a limiting factor (e.g., lack of infrastructure, access, or autonomy), and **weekly planning habits** were recognized as a concrete enabler. The **signs of change** focused on tangible benefits: reduced waste and improved financial awareness.

Participant Feedback Highlights

- *"Loved how you could see the connections."*
- *"More about motivation for children."*
- *"(Exploring) the ways to motivate children."*

This feedback confirms how the HMWQ format successfully helps participants **connect abstract systemic elements** into **concrete design challenges**, while maintaining openness for creative exploration.

5 / Coffee Break & Setup for Ideation

This pause is more than just a moment to recharge: it creates the necessary space for participants to mentally transition from **problem-framing to idea generation**. It is also a key window for the **facilitator** to reset the room, preparing a physical environment that invites **creativity, autonomy, and movement**.

Facilitator Setup Instructions

While participants enjoy a break, the **facilitator prepares the space** for the next activity (brainstorming), setting up one large poster for each selected **How Might We Question (HMWQ)**. Each poster will serve as a **creative zone** dedicated to one design challenge.

For each poster:

- **Title**:

Stick the **How Might We Question canvas** at the top. This will bethe focal prompt for ideation.

- **Materials**:

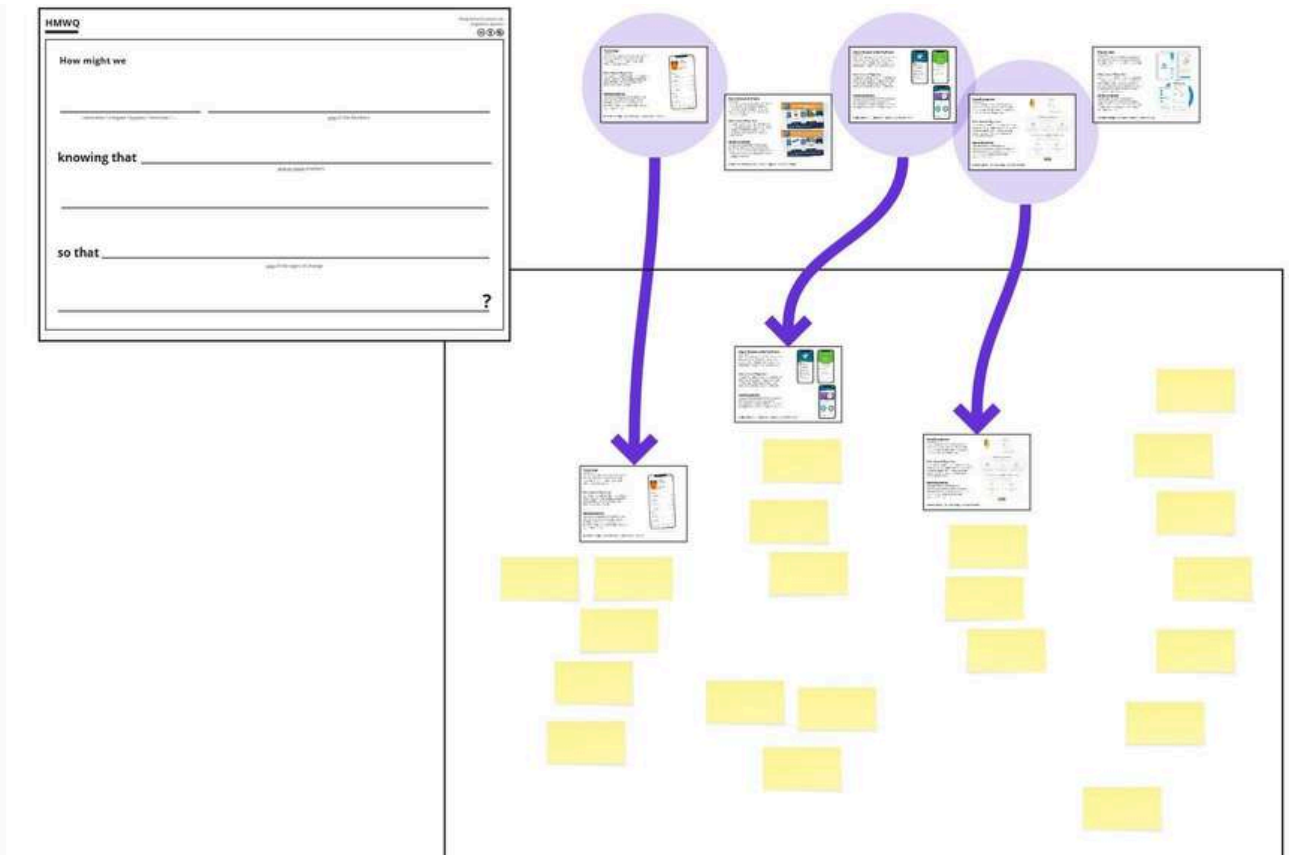
○ Place a **stack of post-its** (1 block per participant) nearby.
○ Provide **fine-tip markers** (1 per participant) to ensure legibility during idea sharing.
○ Arrange a set of **Idea Cards** (see annex A). These contain examples of **game-based tools and educational strategies** used in other contexts. They serve as **inspiration triggers** to expand the creative field and help participants think beyond obvious solutions.

6 / Brainstorming: Generating and Selecting Ideas

This module guides teams in creatively **generating solutions** in response to their *How Might We Question* (HMWQ). After analyzing blockers and enablers, participants now **shift into ideation mode**, expanding the space of possibilities and **imagining practical, game-based interventions**.

Each team works around a **poster dedicated to their selected challenge**. These posters already feature the team's HMWQ, surrounded by a curated set of ***Idea Cards*** that showcase examples of playful educational tools from other contexts. Teams are encouraged to reuse, remix, and build upon these inspirations, or create entirely new ideas. A **light taxonomy of solution formats** (e.g. escape games, quizzes, roleplay, outdoor activities, board games...) can also serve as a prompt to help teams anchor their thinking in concrete modes of interaction.

Instructions for Participants



The process unfolds in three main steps:

6.1 / Defining the solution formats

Before dividing into teams, the facilitator leads a short plenary activity to surface a **shared vocabulary of possible solution formats**: this becomes a *taxonomy* that each group will later use as a prompt during brainstorming.

Prompt:

> "What types of game-based or educational formats do you know?"

Participants are encouraged to call out or write down formats they are familiar with, such as *board games, card games, quizzes, storytelling, simulations, escape rooms, outdoor games*, and more. As formats are mentioned, each group notes them down on **individual post-its** and places them at the edge of their table. These formats will act as **creative scaffolds** when teams are prompted to invent new ideas based on the question driving the brainstorming:

> "If my solution to this challenge were a [game format], what would it be? How would it work?"

6.2 / Explore the Idea Cards

Each team gathers around their poster to begin the ideation process. The goal is to explore a wide range of potential solutions, combining creativity, collaboration, and lateral thinking.

Begin by reading through the available *Idea Cards*. These describe real-world educational or game-based tools and are meant to trigger ideas that might respond to your HMWQ. Select the cards that resonate most.

6.3 / Adapt and build

Now work with the selected ideas. Modify them to better fit your team's challenge. You might:

- change the audience, format, or objective;
- combine multiple cards into hybrid ideas;
- add features or steps based on your own experiences;
- build on your teammates' inputs using "yes, and...".

Write **each idea on a separate post-it** (or sketch it). Stick it below or around the related card, or start a new idea cluster if it's entirely original.

6.4 / Add original ideas

Go beyond the provided cards. Generate your own ideas inspired by your challenge, your team's past discussions, or even personal experience.

6.5 / Final Voting

To close the session, each team member receives **3 voting dots** to indicate the ideas they find most promising or exciting to prototype. Use your dots to highlight what you'd like to take forward in the next module.

Rules of Brainstorming To support open and collaborative ideation, keep in mind these seven guidelines:

- **Defer Judgment** – No idea is too weird.
- **Encourage Wild Ideas** – Bold thoughts lead to bold solutions.
- **Build on Others' Ideas** – Use "yes, and..." as your motto.
- **Stay Focused** – Keep your HMWQ in sight.
- **One Conversation at a Time** – Everyone gets heard.
- **Be Visual** – Sketch or write every idea.
- **Go for Quantity** – More ideas, more chances.

Example from the Workshop Test – Food Waste & Students



In one session, participants worked on reducing food waste among students. Their HMWQ prompted ideas such as:

- a treasure hunt with sustainable food clues,
- a board game about reducing home emissions,
- a recipe-building challenge with visual cards,
- a class leaderboard tracking sustainable behaviors.

Ideas were clustered around formats like *story-based*, *tactical*, *construction*, or *escape-game*, based on the initial plenary. The group used dot voting to choose the most engaging idea for further development.

Participant Feedback Highlights

- *"Organisation and clarity of purpose."*
- *"What type of game fits best?"*
- *"Loved how you could see the connections."*

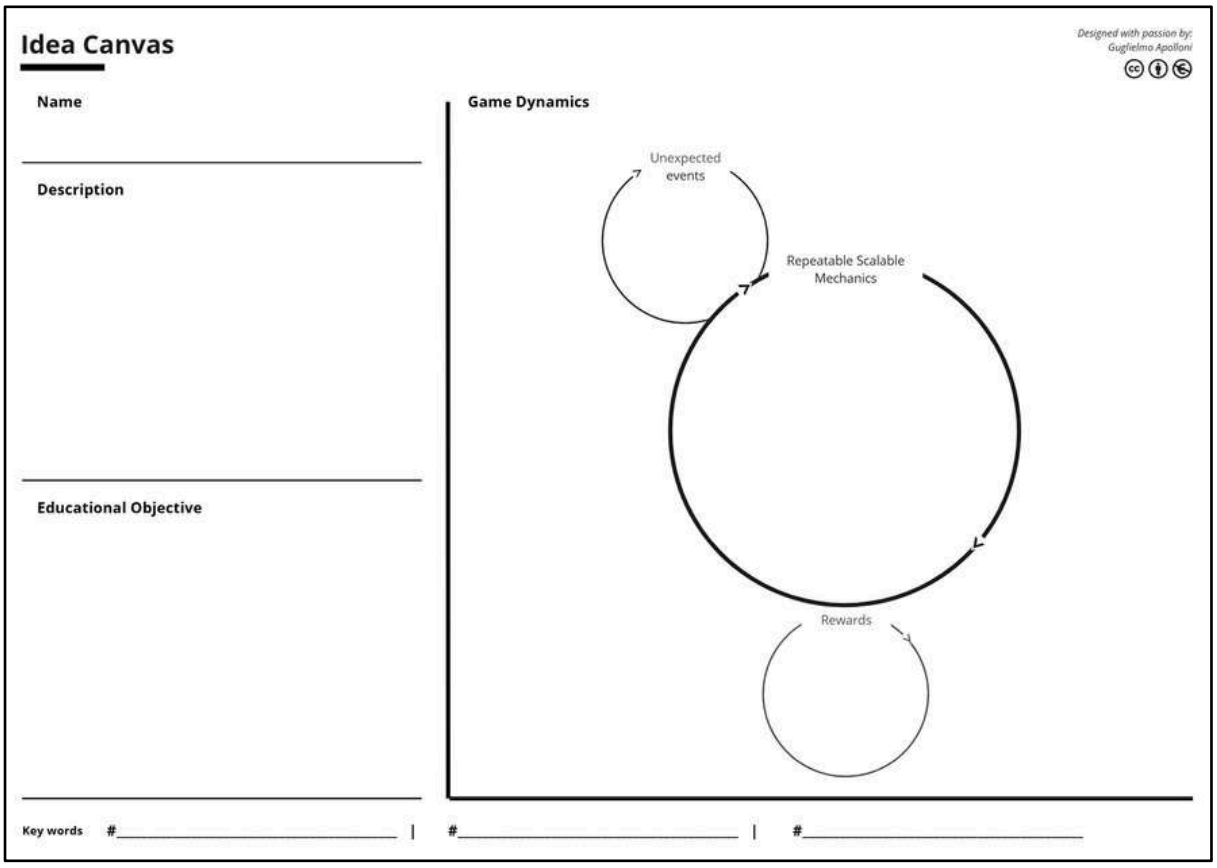
This feedback underscores the value of balancing playful thinking with structured space and framing. Teams that anchor their ideation in shared understanding often reach more inventive, yet grounded, outcomes.

7 / Idea Canvas: Structuring the Game Idea

In this module, teams **transform their most voted idea into a structured game concept**, using the Idea Canvas to detail its core mechanics, educational intent, and player experience. The canvas helps turn a rough creative spark into a well-defined prototype direction.

This step marks a key transition: from divergent ideation to convergent design. It's where teams make critical decisions about how the game will work, what it aims to teach, and how it will engage its players.

Instructions for Participants



Working as a team, fill in the Idea Canvas to define the **essential components** of your concept. Let the canvas guide you through six focused steps:

7.1 / State the educational goal

Clearly define the **learning objective** of your game. What knowledge, awareness, or skills should participants gain? This helps frame your design choices.

7.2 / Describe the repeatable game mechanics

Think about what players will repeatedly do in the game. These actions form the core of the player experience. Are they collecting, trading, solving, building, negotiating? Make it actionable and engaging.

7.3 / Define the rewards

What makes the game worth playing? Define the way players **gain points, win rounds, or unlock progress**. Rewards drive motivation and signal achievement.

7.4 / Add unexpected events

Boost engagement by including surprise elements or uncertainty. These could be random challenges, mystery cards, or changing rules. Think of ways to keep the experience fresh and dynamic.

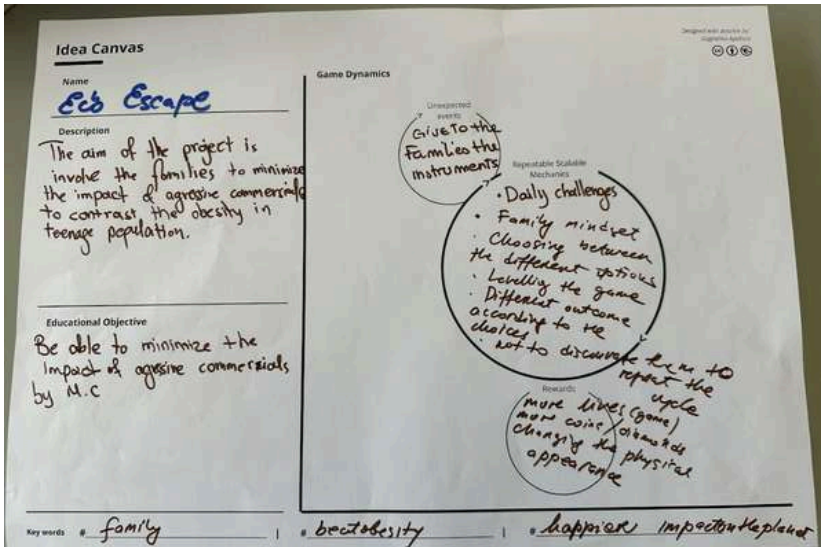
7.5 / Sketch further details

Imagine how the game comes to life. Describe or draw the **setting, characters, tone of voice**, or props. These elements add flavour and personality to your idea.

7.6 / Name and tag your game

Give your idea a **catchy name**, write a **brief description**, and select a few **keywords** to summarize it. This helps others understand and remember your concept.

Example from the Workshop Test – "EduEscape"



One team designed *EduEscape*, a family-oriented game tackling teenage obesity and the impact of aggressive advertising. Key features included:

- **Educational goal**: Raise awareness and skills to critically evaluate food commercials.
- **Mechanics**: Daily family challenges where players choose from themed food baskets and face difficult trade-offs.
- **Rewards**: Progress through correct choices; success measured in points or story chapters.
- **Surprise event**: Randomly drawn "media influence" cards changing the game context.
- **Extra details**: Physical movement, family role play, supportive app.

Participant Feedback Highlights

- *"**Loved it!**"*
- *"To realize an Idea Canvas, it is better to involve the **end user**."*

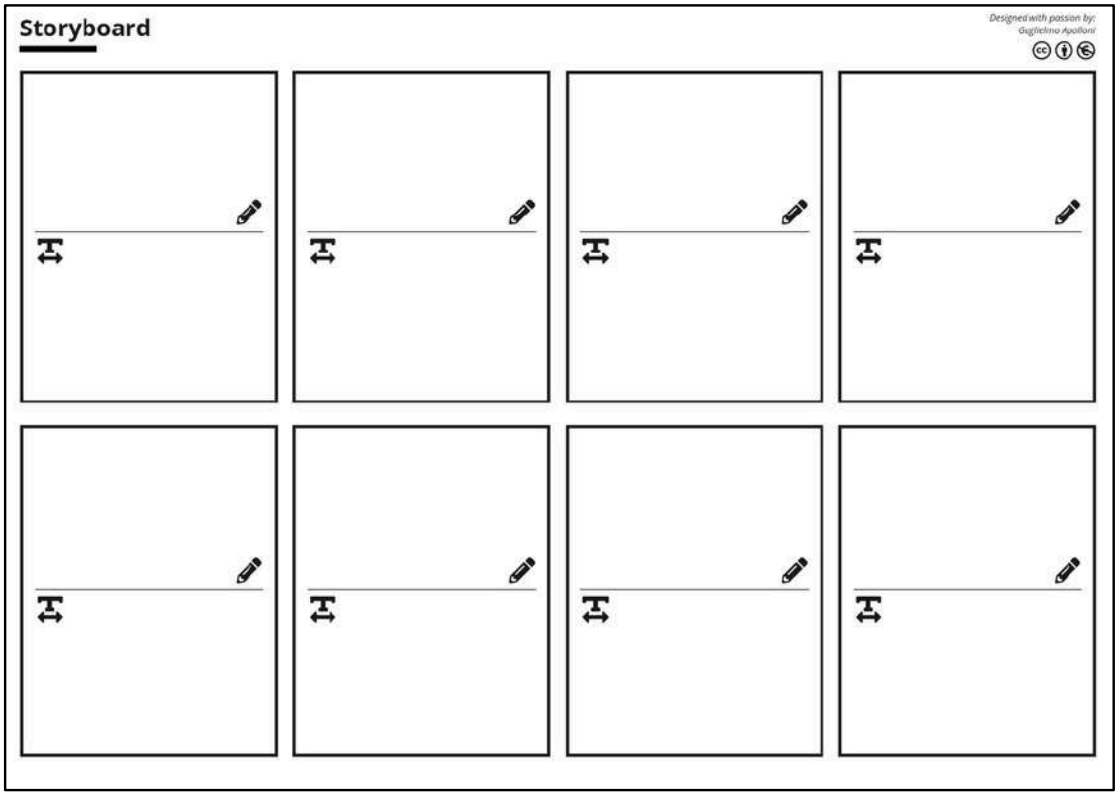
This feedback shows how the canvas not only helps structure ideas, but also encourages teams to design with empathy and clarity. Participants appreciated how this tool supported detailed thinking while making the creative leap toward real-world implementation.

8 / Storyboard

In this module, teams visualize how a user will interact with their game idea from beginning to end, using the **Storyboard canvas** to illustrate key moments in the experience. While the Idea Canvas defined what the game is and how it works, this step explores **how it feels** to engage with it.

This exercise invites teams to adopt a *user-centered lens* and bring their concept to life as a sequence of scenes. It supports both storytelling and critical reflection, helping participants refine the flow, pacing, and emotional arc of their solution.

Instructions for Participants



Working as a team, use the **Storyboard canvas** to illustrate the user journey of your game idea in a series of scenes. You can sketch, use symbols, or rely on simple visual language: clarity is more important than artistry.
The process unfolds in two main steps:

8.1 / Sketch the experience (min. 5 – max. 8 scenes)

Think of the entire experience from the user's point of view:

- What happens before the game starts?
- How do they get involved?
- What do they do throughout the game?
- What happens at the end?

Draw each moment in a dedicated frame. Make sure you capture **transitions**, **key actions**, and **turning points** in the story.

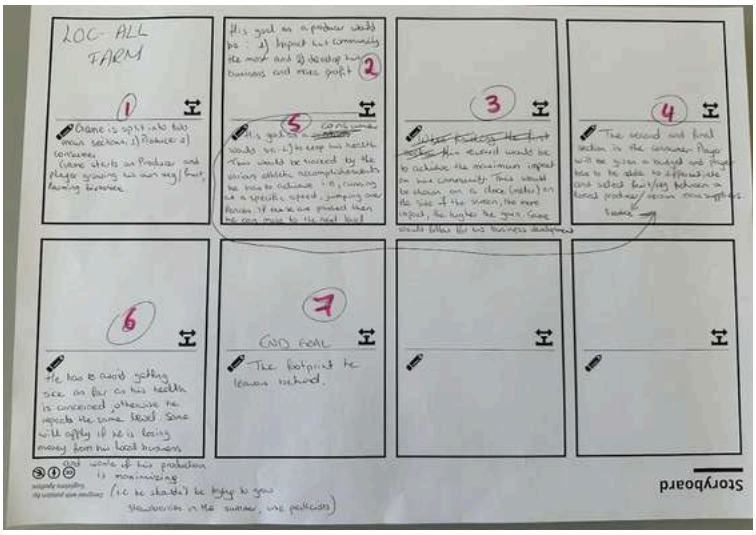
8.2 / Describe what happens in each scene

Below each sketch, write a short caption explaining what the user is doing, feeling, or thinking in that moment. This helps clarify the purpose and logic of each phase and gives life to the characters or contexts involved.

Use this storytelling process to evaluate:

- Is the experience engaging and understandable?
- Are there moments of surprise or satisfaction?
- Does the story reflect the educational objective?

Example from the Workshop Test – "EduEscape"



One team storyboarded *Loc All Farm*, a game teaching local food choices and seasonal awareness. Their storyboard mapped a narrative journey through:

- A farmer's goal to maximize community impact
- Market-based choices with real trade-offs
- Scenarios shaped by health, economy, and environment
- A rewarding outcome based on long-term decisions

The storyboard clarified the user's path, decisions, and motivations, surfacing new insights into the player experience.

Participant Feedback Highlights

- "**Creativity** and working as a team made this step really fun."
- "**Teamwork was great**, we had to agree on the story and the order."
- "What makes the game **unique**, and sets it apart from others?"
- "How can we transpose our desire to **share knowledge** into something playful?"

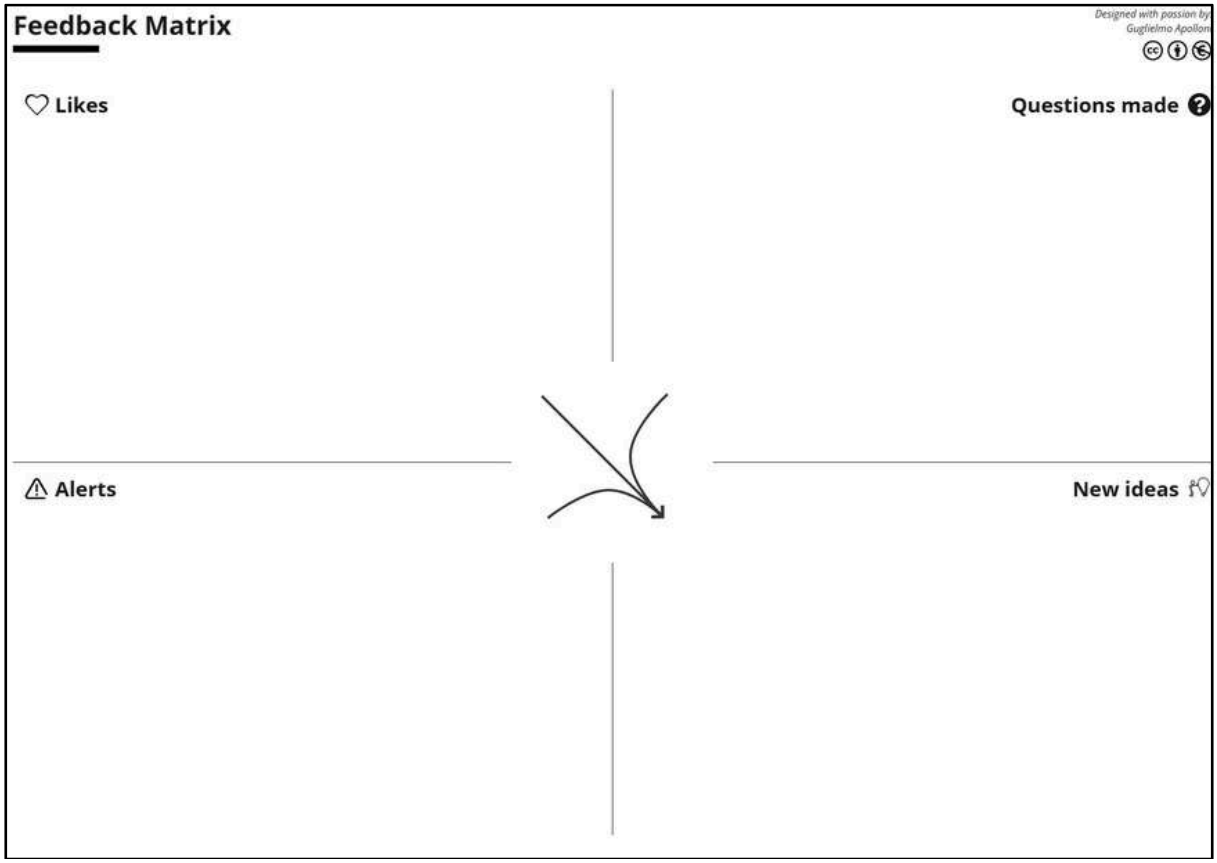
These reflections show that storyboarding encouraged teams to think critically and playfully at once. It helped surface the emotional and narrative dimensions of their solution, bridging **abstract concept** and **real-world interaction**.

9 / Pretotyping (Presentations)

This module marks the moment where ideas leave the page and come to life: visually, physically, or performatively. Through **pretotyping**, each team shares a **low-fidelity representation** of their game idea with the broader group, using sketches, role-play, props, or storytelling to **simulate how the experience might unfold**.

Pretotyping is not about polished execution: it's about **provoking reactions, inviting feedback, and sparking iteration**. By making ideas tangible, participants gather essential insights on how their concept is perceived, what resonates, and what needs refinement.

Instructions for Participants



Each team stages their idea through a quick 5-minute presentation. The goal is to **convey the experience** of the game or tool as clearly and vividly as possible, even if still rough or incomplete.

You can choose your preferred style of pretotyping:

- Act out a short sequence of the game using basic props or post-its
- Simulate how a user would interact with the tool
- Narrate the journey as a storyboard or guided walkthrough
- Use physical elements (cards, objects, mock interfaces) to demonstrate gameplay

Focus on expressing the **core mechanics**, **emotional flow**, and **educational value** of the idea. Think of it as a mini pitch where the audience "feels" what playing or using the tool would be like. After each presentation, the rest of the group is invited to give collective feedback using the **Feedback Matrix** (Module 10), capturing:

- what worked
- what raised questions
- what risks emerged
- and what ideas it inspired

Participant Feedback Highlights

The test sessions showed how powerful this moment can be, both for those presenting and for those observing. Here's what some participants shared:

- "It was very clear what was needed to be done. Great team work."
- "Sum up and present to others the idea."
- "Go out of the ordinary!"
- "Very little time for the story to be created and presented."
- "We had to run a bit, and maybe not everybody feels good in acting."

These comments highlight the value of fast prototyping in revealing **unexpected strengths**, **clarity gaps**, and **collaborative energy**, as well as reminding facilitators to be mindful of participants' comfort with performance-based activities.

Annex

A / Input Sessions: From Knowledge to Action

The training began with two input sessions that grounded participants in the real-world challenges of **nutrition, health, and sustainability**. These sessions combined expert insight with practical data to frame a clear **intention of change**, guiding the rest of the co-design journey.

1. Rethinking Nutrition and Health in Schools

The first talk focused on the **growing gap between nutritional knowledge and habits**, particularly among adolescents and teachers. Drawing on cross-country data from the GARDENS project, the session highlighted key issues:

- **Widespread confusion** about macronutrients, portion sizes, and hydration, even among teachers.
- **High consumption of processed foods** and sugary drinks, paired with underuse of fresh produce and water.
- **Physical inactivity**, with 81% of teens failing to meet WHO guidelines, especially girls, whose activity levels are consistently lower than boys' across all countries.
- A **dual burden** of malnutrition: both undernutrition and obesity co-exist, alongside rising rates of eating disorders, stress, and poor body image during adolescence.

The session emphasized the need to **empower teachers as role models**, promote **food literacy**, and make health practices like **hydration tracking and movement** a daily school habit, not an exception.

2. Sustainable Eating: How Your Diet Shapes the World

The second input zoomed out to explore the **ecological footprint** of what we eat. Starting from FAO's definition of sustainable diets, the session explored how food systems can nourish both people and the planet:

- Most students and teachers **lack awareness** of how food choices impact water, land, and biodiversity.
- Topics like **carbon emissions, food miles, and packaging waste** are rarely integrated into food education.
- **Food production accounts for 26% of global GHG emissions**, uses 70% of freshwater, and is the leading cause of biodiversity loss due to land- use change.
- Despite rising food insecurity, **60% of food waste** globally occurs in households, a pattern confirmed in GARDENS partner countries, with Italy and Serbia showing particularly high household waste levels.

This session encouraged participants to see **food choices as environmental choices**, highlighting how even small actions, like eating local, reading labels, or reducing waste, can ripple outward.

B / Idea cards

Yuka App

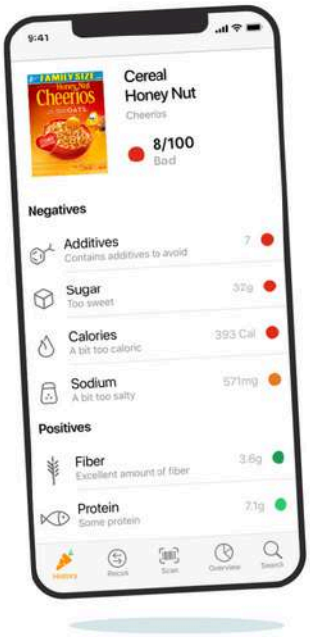
Yuka is a mobile app that scans food and cosmetic products, providing health impact scores and suggesting healthier alternatives to promote informed consumer choices.

Educational Objective

Yuka can be integrated into educational settings to enhance students' understanding of food health and sustainability, and to encourage critical thinking about dietary choices.

Game Dynamics

Yuka employs a gamified scoring system (0–100 scale with color codes) that engages users by providing immediate feedback on product healthiness, motivating healthier choices through a game-like experience.



#Barcode Scanning | #Health Scoring | #Color-Coded Feedback

Fooducate

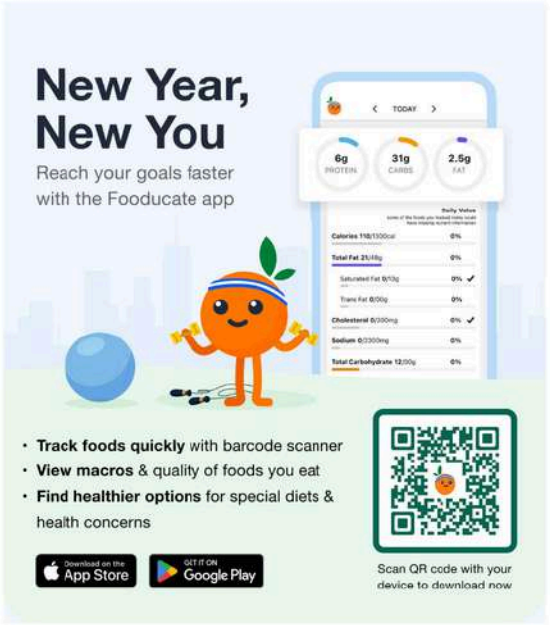
Fooducate is a mobile app that helps users make healthier food choices by scanning product barcodes to reveal nutrition grades, ingredient insights, and healthier alternatives.

Educational Objective

To empower students to critically assess food products by understanding nutritional information and ingredient quality, fostering informed decisions about health and sustainability.

Game Dynamics

The app assigns letter grades (A–D) to foods based on their nutritional value, providing immediate feedback and encouraging users to "level up" their food choices in a gamified manner.



#Barcode scanning | #Nutrition grading | #Ingredient alerts

Eat & Move-O-Matic

Eat & Move-O-Matic is a free educational app that helps students understand the relationship between food intake and physical activity by comparing calories in foods with the exercise needed to burn them.

Educational Objective

To enable students to make informed decisions about their dietary habits by understanding how different foods fuel their bodies and the importance of balancing energy intake with physical activity.

Game Dynamics

The app uses an interactive interface where students can select various foods and see the corresponding physical activities required to burn off the calories, making the learning experience engaging and relatable.



#Calories vs. Activity | #Food-Exercise Comparison | #Visual Learning

Fitoons

Fitoons is an interactive app where kids train quirky characters in various sports and prepare meals, learning the balance between healthy eating and exercise through playful activities.

Educational Objective

To help students understand the relationship between nutrition and physical activity, encouraging healthy lifestyle choices and demonstrating how digital tools can make learning about health engaging.

Game Dynamics

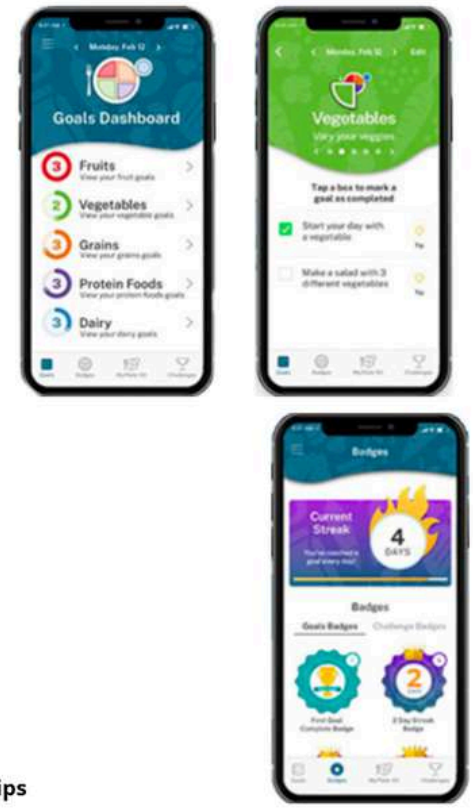
The app offers a free-play experience where children can choose from over 20 sports and 45 foods, observing how different combinations affect their characters, thus reinforcing learning through cause-and-effect gameplay.



#Character Customization | #Cause-Effect Learning | #Free-Play Exploration

Start Simple with MyPlate

Start Simple with MyPlate is a free USDA app that helps users set daily food group goals, track progress, and earn badges, promoting healthy eating habits through simple, actionable steps.



Educational Objective

To empower students to make informed dietary choices by setting and achieving personalized nutrition goals, fostering awareness of food sustainability and health through digital tools.

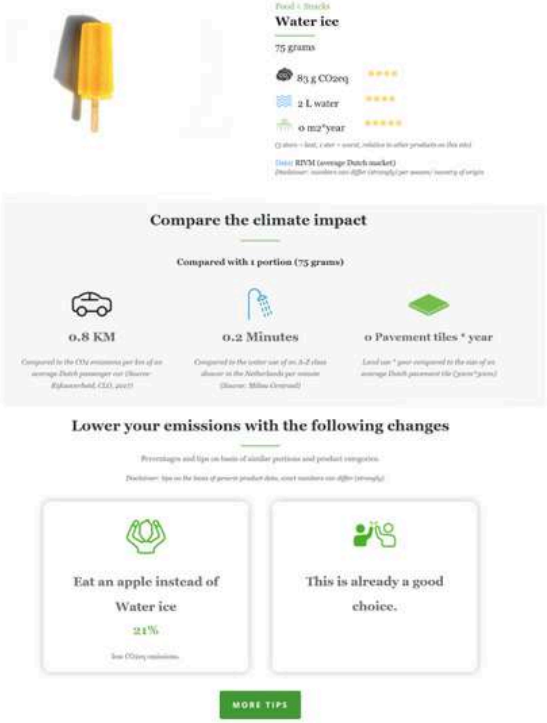
Game Dynamics

The app incorporates gamified features such as earning badges for completing goals and participating in challenges, enhancing motivation and engagement in building healthy eating habits.

#Daily Food Goals | #Real-Time Progress | #Educational Tips

FoodFootprint

FoodFootprint lets learners search any food, instantly see its CO_2, water and land footprint, compare swaps, and get science-based tips to shrink their personal climate impact.



Educational Objective

Enable students to locate and repurpose a ready-made digital tool to explore how diet choices affect climate and health, building shared strategies—and confidence—for promoting sustainable, healthy eating in school.

Game Dynamics

A five-star rating plus "impact-as-km-driven/shower-minutes" visuals turn footprint reduction into a high-score quest where students compete to choose foods that beat their classmates' CO_2 totals.

#Food footprint | #Healthy swaps | #Impact visualizer

Eco

Eco is a multiplayer planet-sim where students mine, farm and trade, then debate laws—backed by live ecosystem graphs—to stop a looming meteor while keeping their shared world healthy.





Educational Objective

Leverage Eco so students can adapt an existing game platform to analyse how food production, land use and pollution affect climate and community health, then co-design school-wide policies for sustainable diets.

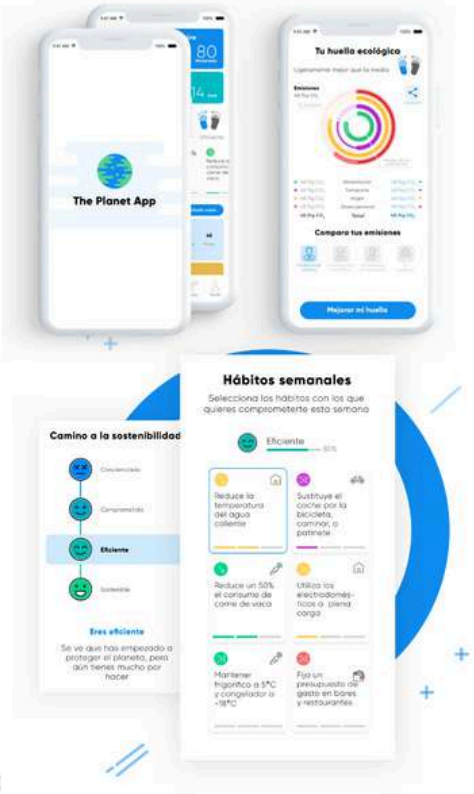
Game Dynamics

Eco's standout mechanic is its player-run government: learners harvest scientific data, draft bills and vote on laws that tax or limit carbon-heavy actions—turning over-logging or hunting for food into high-stakes political showdowns that decide whether the class averts the meteor.

#Ecosystem simulator | #Data dashboards | #Classroom collaboration

Planet App

Planet App merges a carbon-footprint quiz, bite-size courses and weekly challenges so students track, plan and compete to lower food, travel and home emissions.



Educational Objective

Help students repurpose an existing digital tool to measure the climate and health impact of their eating habits, co-design school-wide reduction plans, and gain hands-on confidence using game mechanics (scores, habits, courses) to engage peers on food sustainability.

Game Dynamics

Learners earn one of four persona tiers ("Aware"→"Planet Hero"), plus climb real-time leaderboards that compare their class's shrinking footprint—turning everyday habit swaps into a social, high-score race.

#Weekly challenges | #Gamified quizzes | #Habit tracking

Cleanopolis VR

Cleanopolis VR is a free mobile + cardboard game: guide Captain Clean through 4 city districts, beat 8 mini-games & quizzes, shrink the CO_2 cloud and restore a greener, brighter Cleanopolis.



Educational Objective

Give students a ready-made VR sandbox to measure and cut a city's carbon footprint, link everyday food-energy choices to climate and health, and practice game-based strategies for driving whole-school sustainability actions.



Game Dynamics

Each mini-game victory visibly lowers the city-wide CO_2 meter and unlocks cosmetic upgrades, turning collective eco-actions into an immediate, shared "beat-the-smog" win loop.

#Quiz challenges | #City makeover

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