

SALL

SCHOOLS
AS LIVING
LABS

A road map for schools





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In this short “roadmap” you will find some practical instruments and guidelines to engage in, and develop, a Living Lab Project. You can use, transform, and adapt them for your own context. Remember the 3 characteristics that really define a Living Lab project:

- 1 **Real issue**, real solution, making use of the participants' personal experience
- 2 **Co-creation**, involving all impacted societal actors
- 3 **Quick prototyping**, with ideas immediately put in practice and tested.

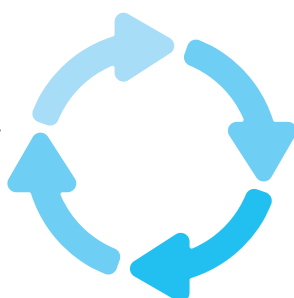


Co-creation

Select issues, identify needs and produce a wide range of ideas.

Evaluation

Validate, discuss, improve or dismiss the solutions.



Exploration

Turn ideas into use case scenarios and prototypes, explore opportunities.

Experimentation

Test in real-life situations.

THE GENERAL STRUCTURE

Phase 0 PREPARATION

The Food System theme

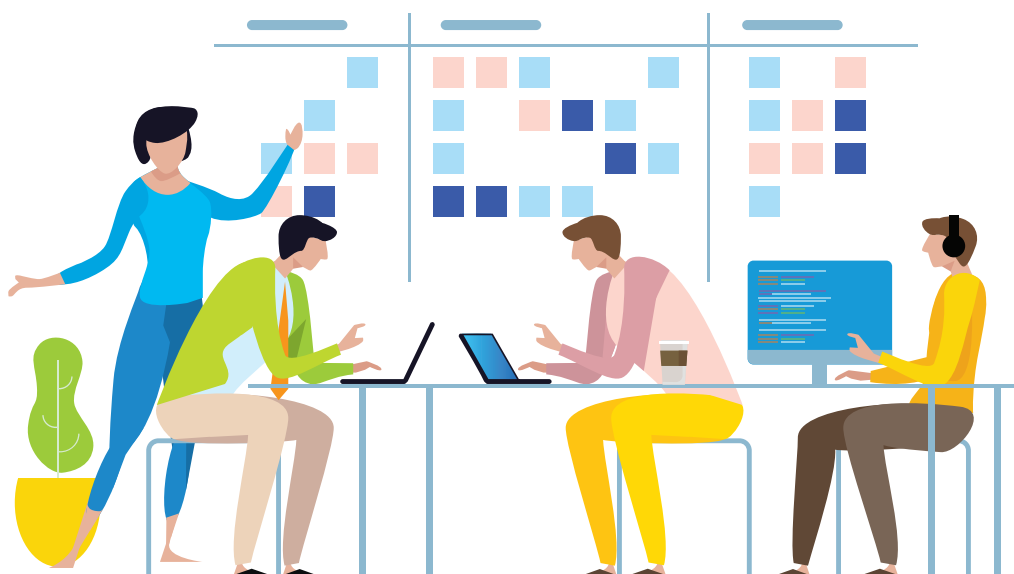
The topic

Societal actors

SALL project evaluation



Phase 1 STEPS OF THE LL METHODOLOGY



Step 1

Co-creation

Step 2

Exploration

Step 3

Experimentation

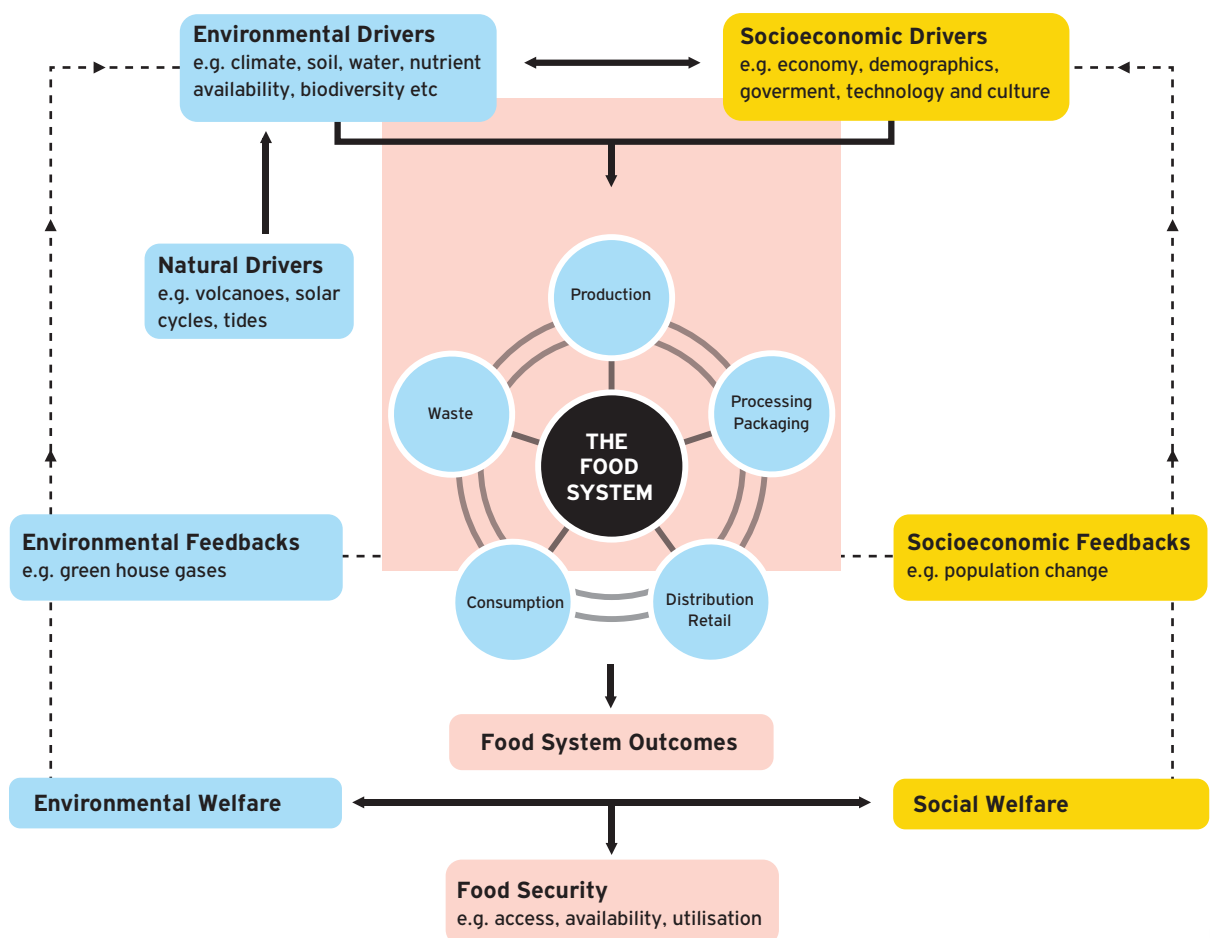
Step 4

Evaluation

THE FOOD SYSTEM THEME

From pitchfork to fork: which challenges for our food system?

The food system is a complex web of activities involving the production, processing, transport, and consumption of food. This can include many different aspects, such as food waste management, cultures and traditions of food, carbon footprints of the food system, agriculture, physiology of taste, packaging, local circulation of food, health issues, economy, aesthetics, ... Each school will define what is most relevant for them. Some ideas about the food system:



The food system and its drivers. Adapted from Ericksen 2008
<https://www.futureoffood.ox.ac.uk/what-food-system>

In a Living Lab project, identifying and engaging societal actors and choosing a topic are conducted side by side, because each societal actor has a say in how the topic will be shaped. It is important not to have too strict a definition of the topic until all societal actors are aboard.

Yet, the narrowing of the topic will also lead to a better identification of some actors that were not necessarily thought of in the first place. The project will start with a few core group of actors, among which the school will be the first one to board. This core group will then define new actors that need to be approached (see the “engaging societal actors” section).

At this stage, it might be useful to have a rough idea of what the topic will be. It will be easier to approach new partners with a topic, even though some might be more interested in the Living Lab process and/or the opportunity to work hand in hand with the school.



How to explore the food system theme with a school team, or with a class of students?

Here are a few tips and examples that may inspire you:

- Ask everyone which ideas, examples, thoughts or elements are linked with the “Food System” theme, at both local and global levels. You may then group some elements together, see the main topics arise, and demonstrate that there is actually a lot of knowledge and diverse perspectives in the room!
- Ask everyone what actions they do every week in relation to food (buying, growing, eating, wasting food...). Or ask them what actions the school do every week in relation to food (school meals, a garden, waste, etc.). This can be a great way to explore the topic in a very personalized way.
- Start the project with a shared meal, where everyone brings a dish from their own culture. First of all, it's a joyful way to start, that also brings awareness of the multi-cultural environment in the school. Moreover, this may highlight the diversity of relationships and approaches related to food, and foster inspiration or ideas for the future projects.

THE TOPIC

List of guiding questions to engage discussion

- 1 What is the characteristic of a "topic"?
- 2 The local context must be analysed: Which are the main concerns? Who can act about it?
- 3 The topic must be defined with all the actors: What topic would get you involved in a project?
- 4 It is important to remain open, the topic can change: Is there a way that transforming the topic will get you more involved?



Tool: collage for all partners to share their views and understanding of the topic



Most important: Walk in the neighborhood, chat with the people who live there... (For the National Coordinators, the teachers, all those who lead the project!)

How to choose the topic with a school team, or with a class of students?

Here are a few tips and examples that may inspire you:

- If you had a common exploration of the Food System theme, ask everyone: what are the elements that strike you, and why? Are there some elements that seem particularly important to you? Which elements are relevant for us, as individuals, as a class, as school, as a city...?
- Examine the specific resources and partners you could find in your local areas: is there a farm, a fisherman, a food factory, a recycling center? Do you have some fast food, or some posh restaurants you could work with? These may orient your choice of topic.
- Some elements are often perceived as unfair – or even revolting – by students: excessive food waste, animal cruelty, homeless people, pollution or ecological damage... If you identify such a sensitivity on a classroom, you can target the topic adequately to increase the students' engagement and motivation.



ENGAGING SOCIETAL ACTORS

Societal actors need to be identified and brought into the project from the start. They are full partners of the project from day 1. As the project evolves it is possible that the group will realize that some important societal actors have not been identified. It is never too late to bring someone new on board.

A. IDENTIFYING SOCIETAL ACTORS

- Listing all possible stakeholders
- Drawing up of criteria
- Stakeholder analysis
- Selecting a shortlist

B. APPROACHING SOCIETAL ACTORS

- Get in touch
- Persuade
- Reduce the risk
- Be open!

C. WORKING WITH SOCIETAL ACTORS

At the start of the project:

- Take time to get to know each other
- Define goals and ambitions
- Discuss resources
- Discuss constraints
- Organize a kick-off meeting
- Discuss the topic of ownership
- Agree on communication and project management
- Organize regular meetings
- Document and share findings
- Add missing actors.

During co-creation sessions:

- Actively involve all actors
- Document all decisions
- Promote good communication
- Determine a location
- Foster intrinsic motivation

D. BUILDING SUSTAINABLE CONNECTIONS WITH STAKEHOLDERS

- Take the time to evaluate the collaboration after the project ends
- Celebrate the successes!



Find further information and examples about this point in the SALL Report "Methodology for the Engagement of School Living Labs with Stakeholders" (Deliverable D3.1).



<https://www.schoolsaslivinglabs.eu/resources/methodology-for-the-engagement-of-school-living-labs-with-stakeholders/>

POSSIBLE MOTIVATIONS FOR STAKEHOLDERS

Stakeholders can have different motivations to join a Living Labs project. Below is a list of possible motivations:

- Assistance in solving the stakeholder's problem
- To be aware of new environmental friendly solutions
- Corporal industrial responsibility
- To be socially involved
- Interest in the subject
- To get to know the neighborhood
- Interest in the problem
- To give a social dimension to my brand
- Networking with other community agents
- To help and be an active citizen
- Personal interest in the subject
- To improve services/ products
- Professional challenge
- To learn young people's opinions
- Professional curiosity
- To pilot a new product (or solution)
- Promoting academic research by providing data
- To promote my brand
- Helping in academic research by being a subject in citizen science
- To promote vocations
- To attract students to scientific careers/universities
- To test new solutions or products
- To test their products with different targets
- To work with other stakeholders



In previous Living Labs projects, it has been observed that in each project, multiple motivations can usually be found during the course of the project. Below are a few examples of Living Labs projects in connection to the list above.

Examples

Farmers helping farmers

In this Living Labs project, the aim was to help farmers use their land in a more sustainable way. When approaching farmers who might be willing to participate via email and telephone proved unsuccessful, one team member decided to directly approach a farmer that already applied different strategies for improving biodiversity and sustainability on their farmland. Together, they educated a different farmer with a less sustainable business on how to increase biodiversity and sustainability on their farmland. The motivations for stakeholders to participate in this project were: Assistance in solving the stakeholder's problem; To work with other stakeholders; To be aware of new environmental friendly solutions

An apple a day...

This Living Labs project focused on helping an elementary school provide their students with healthy and sustainably grown fruits. The team approached a local farmer, who agreed to deliver a weekly fruit basket to the school. The motivations for stakeholders to participate in this project were: To work with other stakeholders; To be socially involved.

*An **APP**etizing way to reduce food waste*

A lot of food is wasted on the consumer side of the chain, which is a problem that was addressed in this Living Lab. The team tried approaching big super market chains or big name producers of food stuffs, but found these to be less open to a collaboration. Eventually, they found a group of stakeholders within their own community: a teacher of the school (the owner of an organization that aims to increase sustainability in schools) as well as two parents of students working in the Living Labs team (a cook in a local care facility and the owner of a local take-out restaurant) agreed to participate in the project. By conducting a brainstorming session involving all stakeholders and students working on the project, the students were able to gather a lot of information on reducing food waste. This led to the idea of creating an app that educates consumers on how to reduce food waste. The different motivations for stakeholders to participate in this project were: To work with other stakeholders; Personal interest in the subject; To be socially involved.

Paper or plastic?

The students in this Living Labs project really wanted to reduce the amount of plastic used in supermarkets, specifically by reducing the amount of plastic shopping bags used. The local supermarket happened to be right at the transition point going from plastic bags to bags made of other materials. To help, the students conducted a questionnaire amongst the residents in the neighbourhood who shop at the supermarket. They aimed to find out which materials the costumers preferred, how much money they were willing to pay for a reusable shopping bag and whether they were more or less likely to buy such a bag for the same or a slightly increased price point as compared to the usual plastic bags. The results of this questionnaire were presented by the students to the supermarket, that then used this information to make a plan for their transition that ideally suits their customers. The different motivations for stakeholders to participate in this project were: Assistance in solving the stakeholder's problem; To get to know the neighbourhood; To improve services/products.

SALL project evaluation

A pre-post design will be followed for administering the evaluation tools of the SALL project, in order to identify changes in the four participation levels as a result of the implementation of the SALL methodology. During the implementation activities in schools, the partners will provide support to the participants and collect data and feedback when needed.

	YEAR 1 FOCUS COMMUNITY			YEAR 2 WIDER COMMUNITY		YEAR 3 WIDER COMMUNITY	
Participation level	Pre-Year 1	Post-Year 2		Pre-Year 1	Post-Year 2	Pre-Year 1	Post-Year 2
Students	Questionnaires	Questionnaires		Questionnaires	Questionnaires	Questionnaires	Questionnaires
Teachers				Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach
Schools	Expectancies SWOT	Impact SWOT	Case studies	Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach
Societal Actors				Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach	Beliefs questionnaire towards SALL approach



Pilot study year 1 (in-depth analysis):

Students questionnaires:

- Science Attitudes
- Civic Engagement

SWOT Analysis

(Strengths, Weaknesses, Opportunities, Threats)

- Expectancies SWOT (before)
- Impact SWOT (after)

Case studies



Take some time to reflect on what happened:

- List all the elements that seem to work well, and all the assets you found that your idea has.
- List all the elements that seem to be problematic, to be weak or to fail.
- List all the opportunities that the tests have uncovered: are there some people that were particularly interested? Some possible new places or environment for your solution? Some ways to use your idea in a different way? Some new people or organization that could play a role in your idea?
- List all the possible threats that have been identified: is there something that will make your idea obsolete? Some situations (e.g. bad weather, strike...) that will prevent your idea from working? Can your idea be used in a wrong way, that would make things worse?
- Now, how could your idea be improved? If it is obvious or simple enough, let's implement the change! If it seems too complicated, you may need a new brainstorming session, a bit of documentation, and discussions with all partners to find a way to improve.
- When your idea is improved, what is the next step? First of all, CELEBRATE!!! You have ended a whole Living Lab cycle, congratulations! If you still have time and resources, you can prototype the improved idea and test it again. If the idea seems good enough... What would it take to launch it for real?



STEP 1: CO-CREATION

AIM: Identify needs and articulate ideas (of products, services, solutions) from all participants. Define the issue.

Define the issue: Once the topic is selected and relevant societal actors are on board, it is time to choose the issue the project partners will address. It is important that all partners have ownership of the issue to be addressed.

A

Identify the needs and expectations of societal actors

Understanding not only the needs of the project participants but also that all concerned societal actors have ownership of the chosen issue.

B

Build a common project culture

A culture of acknowledging each other's expertise and contribution is reaffirmed through little actions and activities. Some of them will be carried on all through the project and become "community rituals".

C

Get creative!

Foster imagination and wild thinking

It is important that all participants' voices are heard. The students', of course, but all other societal actors' as well. This is the first stage where all actors learn how to really work with each other on equal terms. Any appropriate creativity method is welcome. It is good to propose various exercises that allow different types of expression (i.e. speaking, writing, drawing, moving, discussion, etc), and where participants can take turn in facilitating.

D

Monitor how we are doing

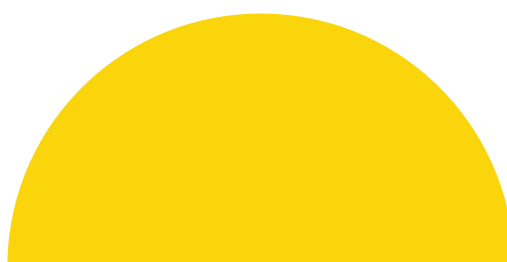
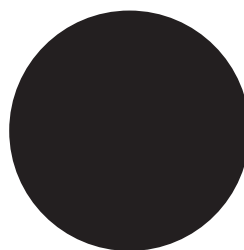
There are not many tangible outcomes at this stage, yet the project might have been going on for a while already. To keep everyone on track it can help to monitor how things are going, how people feel in the project. If a little loss of energy and sense of purpose is observed, remember that this is likely to disappear as the project moves to the exploration phase:

- ▶ Open discussion or questionnaire: "how I feel?": in general, about the process, with the result
- ▶ Reflect throughout the process on how each actor is contributing
- ▶ Don't forget to acknowledge that listening IS contributing
- ▶ Take some time to look back at the overall planning of the project

How to co-create ideas?

Here are a few tips and examples that may inspire you:

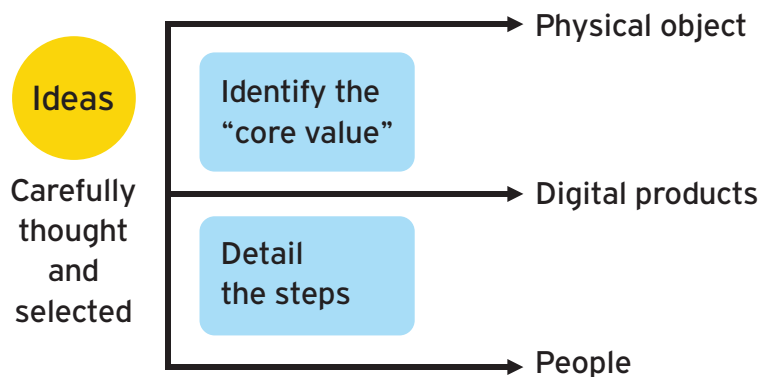
- Before asking them for solutions, have a playful activity to boost the students' confidence, such as an icebreaker activity.
- Have a brainstorming session where students generate a maximum of ideas to respond to one or several issues, and then select the ones they will work on. Trying to find a big quantity of (good and bad) ideas, rather than a few good ones, often decreases the pressure and enable to speak freely. Many good ideas are born from "tweaking" bad ones!
- If they stall on their first ideas, stimulate them with other possibilities: is it possible to find a solution using nature? Using an organization of people, helping each other? Using a pen and a notebook? Using geolocalization (through a smartphone or a GPS device)? What if the solution has to be an object? A smartphone app? A book?
- Have students search the internet for solutions that have been tried in other places, as inspiration.
- There are a huge number of ways to change the format of a brainstorming session, to adapt and vary the creative processes. You can have all students transform all the ideas with a *World café*, have them practice their oral skills with a timed *sixty second elevator pitch*, or, if your class loves competition, use another class as a jury, to select their favorite idea and celebrate it!!!



STEP 2: EXPLORATION

AIM: Deepen some ideas > Identify the main questions or elements to be tested > Confront the solutions to the real world > Face feedback, unexpected perspectives, new questions.

PROCESS



Build a physical prototype

Build a digital prototype

Build a story of the service

Build a low-fidelity version of the service with real people

Build a dramatic representation



OUTPUTS

- ▶ The details about the products and services prototyped
- ▶ The prototypes, representations, low-fidelity models
- ▶ The main opportunities that have been spotted and that could be tested
- ▶ The main questions arising from the work

FROM THE IDEA TO THE PROTOTYPE

So, you have an idea?

Let's do a bit of analysis first. What are the main questions the project participants should ask themselves?

- What does our idea need to be successful?
- What seems to be a critical element for the idea?
- How can we make it easy to use, simple and reliable?
- What could increase its impact, help more people, make it more efficient?
- How can we ensure people will actually use it?
- What part of the idea is likely to work well? Where will the issues most probably come from?
- Are there some ethical issues linked to the idea? Some social or political issues? Are there some acceptability issues?

Based on this analysis, which aspect of your idea would you like to test? What question should the test give an answer to?

(Examples: *is the **program** of my event **attractive** to my audience? Will **people actually use** the new compost? **What time and place** is best to give food to homeless people?*)

The test should answer the question: ...

So, now you have one or several testing questions!

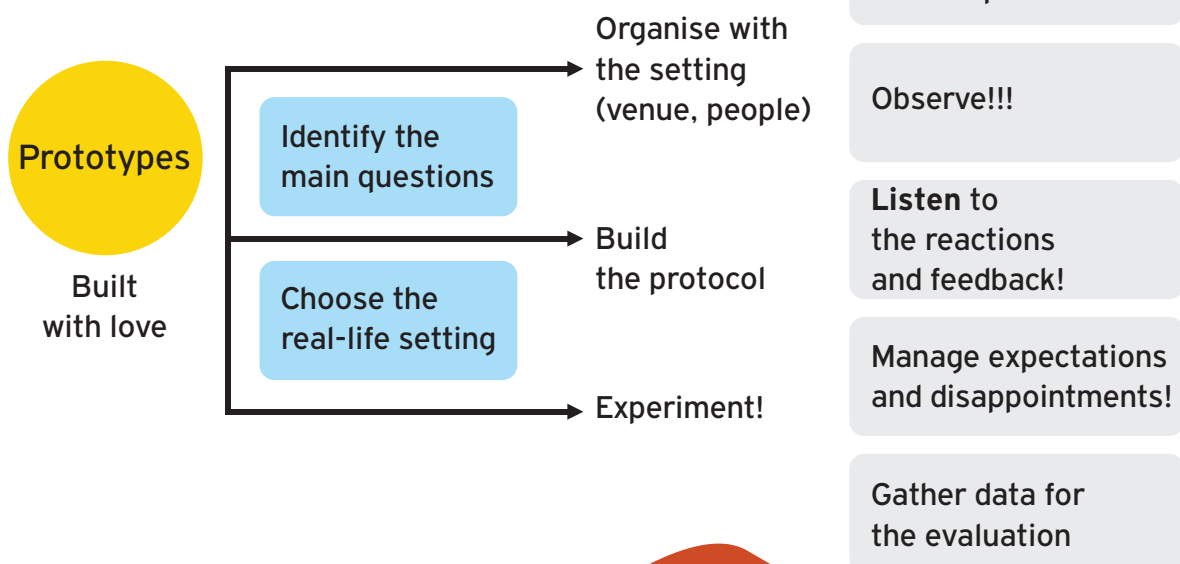
Which kinds of prototypes will allow me to answer the question through a test? Let's be as simple as possible: for example, is it possible to test that aspect with paper (e.g.: a flyer showing the program of a conference, drawings of the screens of the smartphone app...)? With a questionnaire (e.g.: "would you pay 1€ each month to decrease the school carbon footprint?")? With a simple homemade object, made of cardboard or basic materials? With a storyboard (e.g. you can use www.storyboardthat.com/) to explain clearly the service to people? With a model made of building blocks or Lego blocks?



STEP 3: EXPERIMENTATION

AIM: Try out of the prototype or scenario in a real world setting

P R O C E S S



O U T P U T S

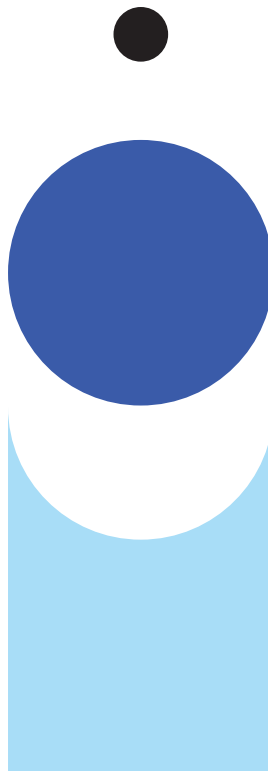
- ▶ Protocols of experimentation
- ▶ Documentation of the experimentation itself
- ▶ Data for the evaluation



Make sure your students are well prepared before they experiment!

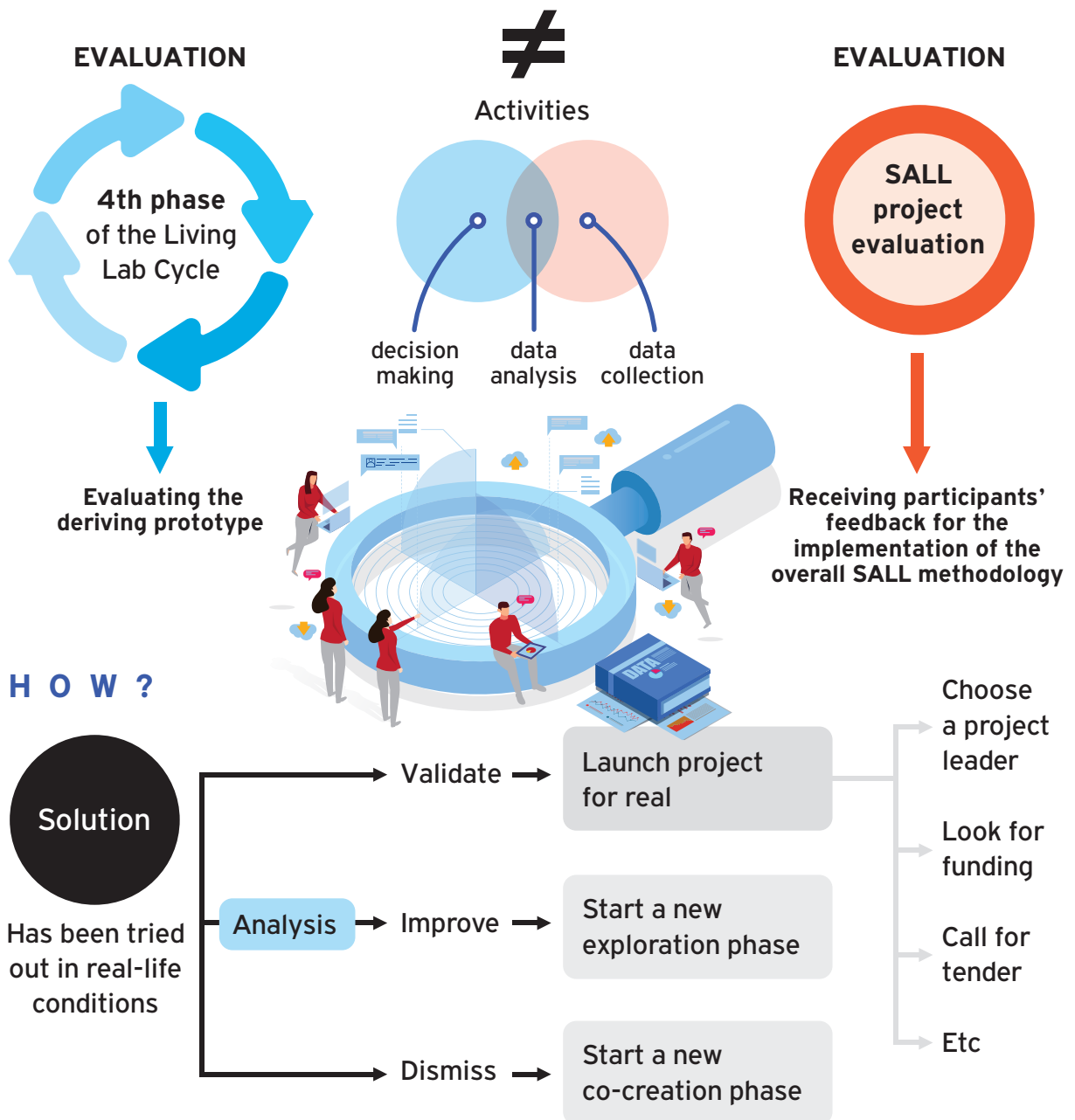
They should be made aware of the following:

- When preparing, ask yourself: what are the main questions the test should answer, and how?
- Are there some specific people that should test the prototype? Some specific categories? Where is the best place to find them?
- Experimentation is NOT about proving that your idea is good. It's about finding out what is wrong. It will be frustrating to see things fail or to hear people tell you that your idea is wrong, but greet it all with a calm smile... Be thankful for the unexpected issues that arise!
- Experimentation is not the time to react and fix your ideas, even if it is tempting... Focus mainly on the tests, and you will fix things later during the evaluation phase.
- Be kind to people participating to your experimentation: they give you their time, attention and feedback. Even if the feedback is difficult to hear, show your gratitude.
- You may become aware of unexpected perspectives, such as ethical concerns, political views, etc. that may influence the users. Use these moments to build empathy and understand the others' perspective (which does not mean you agree with them!).
- You will discover much more by looking carefully at what happens, and by listening at the feedback with attention, than by showing and explaining.



STEP 4: EVALUATION (of the prototype)

AIM: Analyze the experimentation results to validate or improve the solution



OUTPUTS

A document (or a blog, or a map....) with :

- ▶ the description of each “prototype”
- ▶ the data gathered in the experimentation phase
- ▶ the lesson learned from the experimentation phase
- ▶ the decision made regarding each solution

This “document” is accessible (as easy to read and understand by anyone) and available to all participants as well as to the local community at large.

At the end of an evaluation phase, all participants will know which solution will be transformed into a long lasting solution OR decide for a new cycle starting at co-creation or exploration.

AN EXAMPLE OF PROTOTYPING

Our issue:

Too much organic waste in the school

Our solution:

To install a composter near the school canteen, where the organic food waste should be disposed.

After analysis, we raised the following questions:

1. What are the best materials to build the composter?
2. At what distance should the composter be from the school canteen?
3. What types of food (organic waste) can be placed in the composter?
4. How will the organic waste be separated from the rest of the canteen waste?
5. Who is going to place the food waste in the composter?
6. With which frequency the food waste is going to be disposed in the composter?
7. Where does the brown residues needed to put in the composter (leaves, twigs, etc.) come from?
8. With which frequency the obtained compost (organic matter) should be harvested from the composter?
9. Where will the harvested compost should be placed?
10. Who is going to manage (harvest and use) the formed compost?

The above questions follow a line of reasoning that starts with **placing a composter in the school**, going through **managing the food waste** that can go to the composter, until the final step of **managing the compost** that was formed. Here are three examples of tests that tackle those three aspects.

1. Placing a composter

- a. **What is being tested?** The quality of the materials used to build the composter, the size of the composter
- b. **Who is testing it?** Project participants + canteen staff + experts on composter (the last two may be already involved as societal actors)
- c. **What kind of prototype could be developed?**
Physical prototype (object): a low-fi composter that could be used to evaluate the quality of the materials (wood vs. plastic, wide vs. narrow net, etc.)
- d. **Questions that will be answered with this tests:** 1

2. Managing the food waste

- a. **What is being tested?** The path that food waste has to take to reach the composter
- b. **Who is testing it?** Project participants + canteen staff + canteen users (students, teachers, other staff) + experts on composting (if not already involved as societal actors)
- c. **What kind of prototype could be developed?**
Role play: This technique can be useful, for example, to understand how the separation

of organic waste can be done in the canteen (a special line and area for students to “clean” the dishes after the meal?) and if the solution would not introduce chaos in the normal function of this area.

Storyboard: A storyboard (handmade or digital) would allow to see in great detail the needed changes to manage the food waste, for example, how the “visits” to the composter could be added to the regular work/school schedule of those responsible for the task.

Model: Through a model (made of paper cuts or even playmobil pieces) it would be possible to visualize the new canteen arrangement with the waste separation, for example, and even to visualize the location of the composter in relation to the canteen.

d. Questions that will be answered with this test: 2, 3, 4, 5, 6, 7

3. Managing the compost

a. What is being tested? The process of harvesting and using the compost that will be formed in the composter

b. Who is testing it? Project participants + canteen staff + canteen users (students, teachers, other staff) + experts on composting + people responsible for the green areas of the school (the last two if not already involved as societal actors)

c. What kind of prototype could be developed?

Role play: This technique can be useful, for example, to understand the process of collecting the compost from the composter and take it to the nearby vegetable garden (if the vegetable garden is not in the school, is there enough time to those responsible for the task to go outside during a regular school day?)

Storyboard: A storyboard (handmade or digital) would allow to analyse in detail the process of harvesting and using the compost.

Model: Through a model (made of paper cuts or even playmobil pieces) it would be possible to visualize the location of the composter in relation to the vegetable garden (or other place) where the compost would be disposed.

d. Questions that will be answered with this test: 8, 9, 10



ANNEX

Student's template

Dear students,

We would like to know about your Living Lab Project, so we invite you to tell us your story. Tell us how you agreed upon the challenge in your community, what and how you knew about it; who, how and when you worked with; the different steps that drove you to the outcome; the difficulties and achievements in the process; etc.

Here you have some topics and questions that may help you in the storytelling or you can expand your creativity and tell us your story in a totally free way.

Storytelling option # 1: Overcoming a Monster

StoryTelling option #2: The Quest

StoryTelling option #3: the creative board

StoryTelling option #4: the visual template

You can write the story as you progress in the project, go back and forward in the narrative, or you can tell the whole story once you have finished.

We look forward to hearing about your adventure on this experience!

Storytelling option # 1: Overcoming a Monster



<https://www.leaderonomics.com/articles/functional/ig-storytelling-structures-to-improve-presentations>

Structure:	Content	Details
First Scene:	Who or what does the story focus on? What is the difficulty/obstacle you tried to overcome? (the monster)	
Second Scene:	What did you do in order to prepare to confront this difficulty/obstacle?	
Third Scene:	The monster revealed – What else did you learn about the difficulty/obstacle? How did you deepen your understanding of the difficulty/obstacle?	
Forth Scene:	The first battle – What happened? Why is the difficulty or obstacle not overcome?	
Fifth Scene:	A different approach - Who helped you to find ways to overcome the difficulty/obstacle? How? What changed? How do you know that you managed to deal with the difficulty/obstacle?	
Sixth Scene:	Defeating the Monster = Overcoming the difficulty/obstacle What was your idea? What was different this time? What was your weapon to defeat the monster? What did you build to beat? Which ethical issues you considered?	

StoryTelling option #2: The Quest



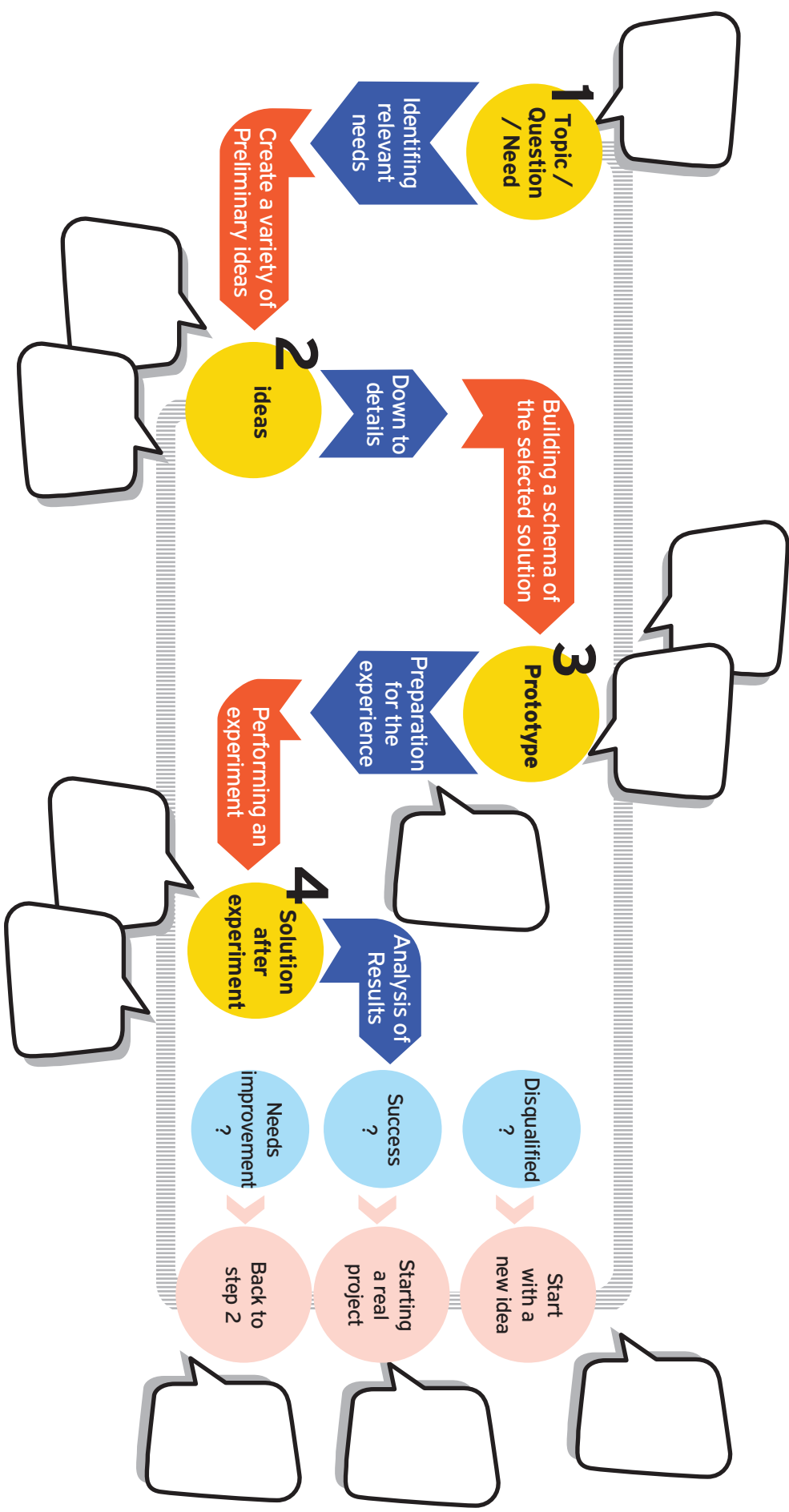
Structure:	Content	Details
First Scene:	Team received mission Who is on the team? What is your mission? What did you try to achieve?	
Second Scene:	Describe the difficulties and obstacles your team encounters and overcome in your journey to find the solution? Who and what helped you to overcome these difficulties?	
Third Scene:	Final dangerous test – What are the most challenging issues your team encountered? Who and what helped you to overcome these difficulties?	
Forth Scene:	The final test accomplished – After finding your solution, what did you test? How do you know if you met the challenge?	
Fifth Scene:	The team wins the prize - What did you accomplish in your project? Who will benefit from your solution? Which ethical issues you considered?	

StoryTelling option #3: the creative board

Scene # 1	Scene #2	Scene #3
Characters:	Characters:	Characters:
Text:	Text:	Text:

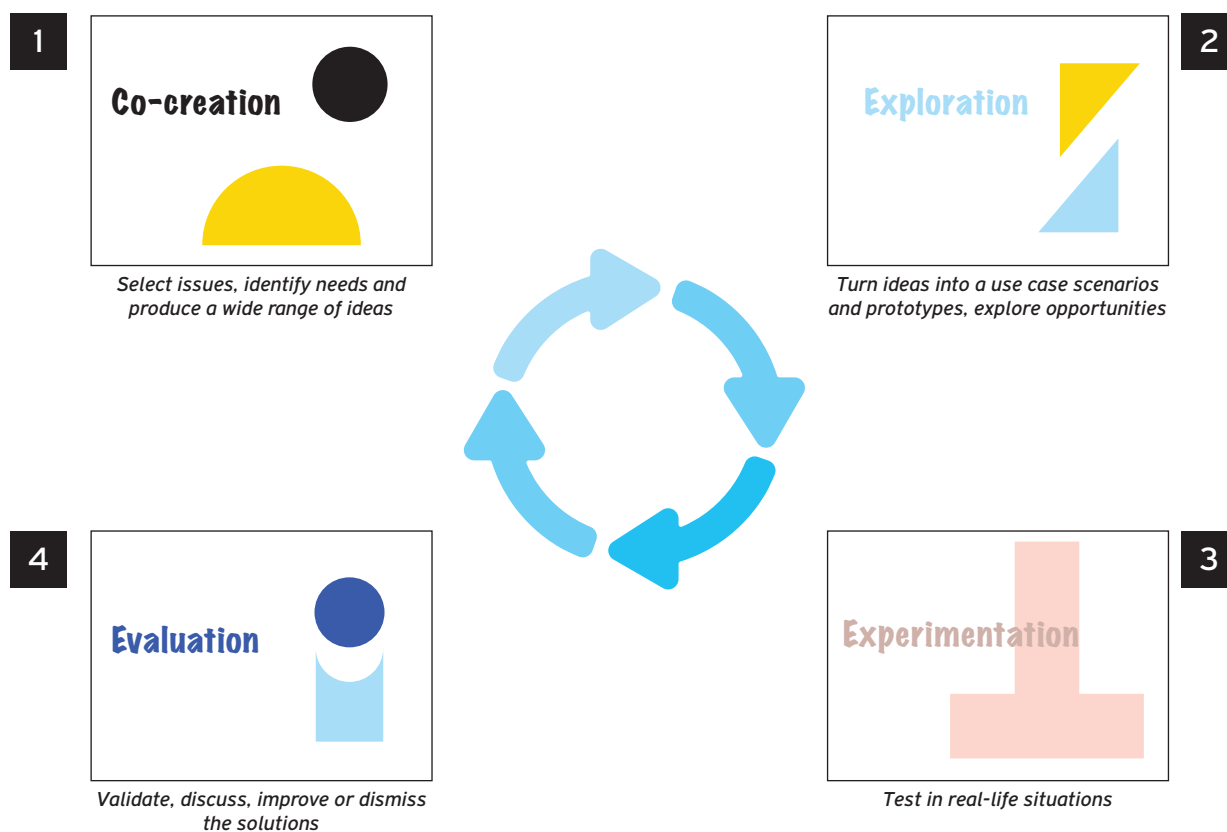
Scene #4	Scene #5	Scene #6
Characters: 	Characters: 	Characters:
Text: 	Text: 	Text:

StoryTelling option #4: the visual template

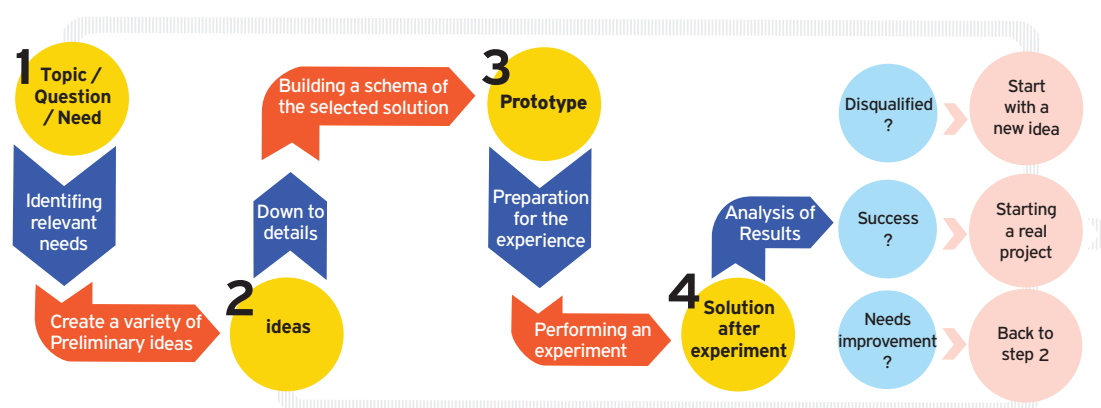


Student's template

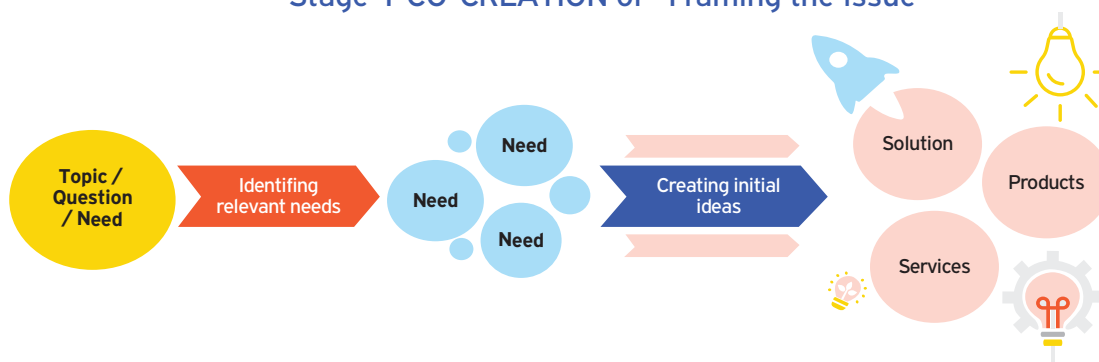
The main phases



Main stages of the Living Lab



Stage 1 CO-CREATION or “Framing the issue”



What: It relates to problem framing, or defining the issue, the challenge the group wants to answer. This needs to be co-created with relevant stakeholders. A co-creation activity aims to identify needs and articulate ideas (of products, services, solutions) from all participants. Select or clarify the issue, question, and problem or challenge to be addressed.

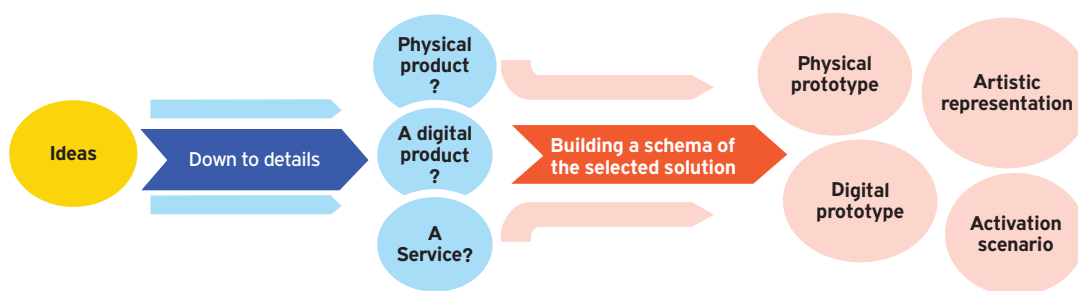
How: Very often, it takes the form of a creativity session. Examples: brainstorming, mindmap, appreciative inquiry, contributive wall of ideas, world café, etc.

Expected outputs: At the end of a co-creation phase, all participants will have:

- An overview of identified expectations, needs, constraints, values ... of all participating societal actors (share and acknowledge)
- A common understanding of the issue to be solved (clarify – narrow down)
- A common vocabulary (respect and understand each other)
- A set of ideas on how to address the issue that will be explored during the next phases (use imagination)

Steps	Tasks	Relevant Stakeholders	Type of collaboration	Date	Resources
1. Identify the topic, the real problem or challenge in the community					
2. Identify and engage stakeholders					
3. Create initial ideas to solve the problem					
4. Introducing the food subject to students and getting them motivated					

Stage 2 EXPLORATION or “Think by doing”



What: We deepen one or some of our ideas and elaborate a large number of details about their use. We identify the “core value” of each idea and spot opportunities for new uses, new markets, better experiences. We build representations and low-fidelity models of the services or products in the ideas.

How: We have to identify the core value of the carefully thought and selected ideas. It forces us to identify its core principles, detail the way it is used and spot new opportunities. Tools we can use: Wireframe¹, Makey Makey, Google Cardboard, StoryboardThat, Thinglink, TimelineJS, etc.

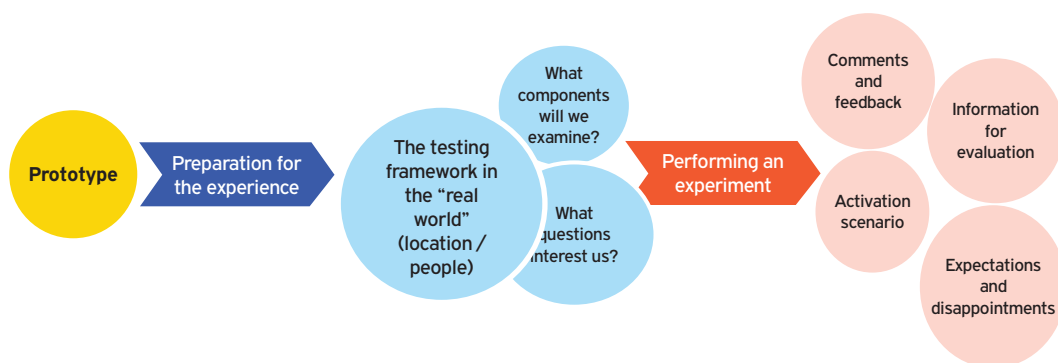
Expected outcome: A physical or digital prototype, story of the service, low-fidelity version of the service with real people, dramatic representation, etc.

- The details about the products and services prototyped.
- The prototypes, representations, low-fidelity models.
- The main opportunities that have been spotted and that could be tested.
- The main questions arising from the work

Steps	Tasks	Relevant Stakeholders	Type of collaboration	Date	Resources
1. Evaluate the different ideas and choose one					
2. Design the final product					
3. Build the prototype					

¹ <https://wireframe.cc/>
<https://www.storyboardthat.com/>
<https://www.thinglink.com/>
<https://timeline.knightlab.com/>

Stage 3 EXPERIMENTATION or “take it to the real world”



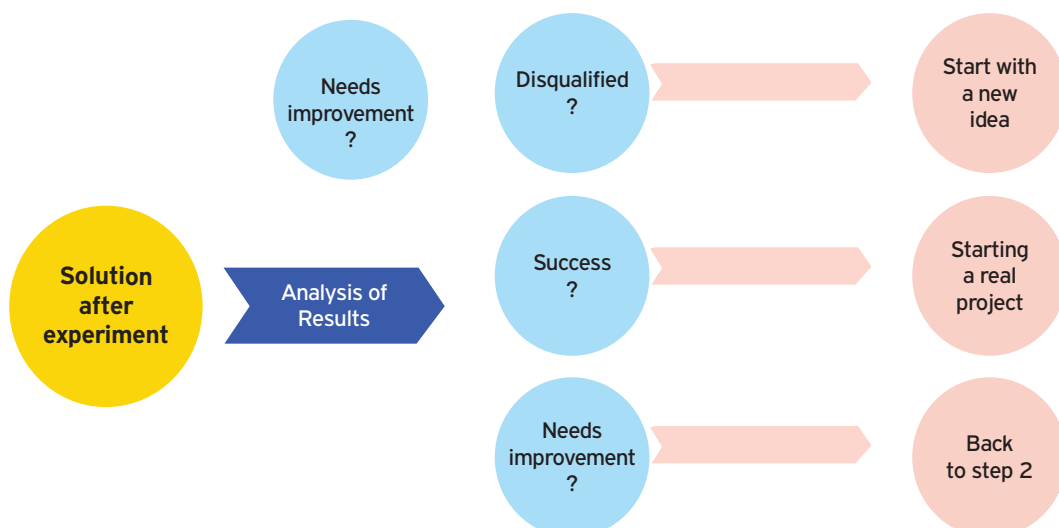
What: We want to try out the prototype or scenario in a real world setting, confront the solutions to the real world and face feedback, unexpected perspectives and new questions. With the experimentation, we have to set up the evaluation framework and answer questions such as what do we want to know, from whom, and how?

How: We have to identify the main questions regarding the built prototype and choose the real-life setting for experimentation. Organize with the setting, build the protocol and, experiment! The environment may be physical or digital, during a short or long timeframe (for a special event, during a whole term, etc.).

Expected outcome: Protocols of experimentation, documentation of the experimentation itself and data for the evaluation.

Steps	Tasks	Relevant Stakeholders	Type of collaboration	Date	Resources
1. Design the experiment					
2. Perform the experiment					
3. Collect data					

Stage 4 EVALUATION or “and now, what?”



What: Analysis of the experimentation results, initially aimed to validate or improve the solution. The evaluation can be used to set up debates or critical reflexions, raising ethical or societal questions.

How: The evaluation method may vary, and be more or less participatory (i.e. vote, grade, articulate questions or critical reflexions, exchange, observation, etc.). The evaluation may create public restitutions (i.e. data visualization, videos, webdocs, etc.), to share the work with a wider audience. The analysis may lead to:

- Disqualified? Dismiss and start with a new co-creation phase.
- Needs improvement? Start a new exploration phase, back to step 2.
- Success? Launch a project for real: choose a project leader, look for funding, call for tender, etc.

Expected outcome: At the end of an evaluation phase, all participants will know which solution will be transformed into a long lasting solution or decide for a new cycle starting at co-creation or exploration. Implication of each participant for the next step is discussed. Any participant is free to get or not get involved.

Steps	Tasks	Relevant Stakeholders	Type of collaboration	Date	Resources
1. Process data					
2. Evaluate the information					
3. Obtain conclusions					