

# ROADMAP FOR LIVING LABS IN EDUCATION

SCHOOLS  
AS LIVING  
LABS

**SALL**



# SUMMARY

INTRODUCTION .....	1
THE GENERAL STRUCTURE .....	3
<b>PHASE 1: PREPARATION</b> .....	4
HOW TO CHOOSE A PROJECT TOPIC .....	5
ENGAGING SOCIETAL ACTORS .....	9
HOW TO MOTIVATE SOCIETAL ACTORS .....	11
<b>PHASE 2: LIVING LAB STEPS</b> .....	13
STEP 1: CO-CREATION .....	14
STEP 2: EXPLORATION .....	17
STEP 3: EXPERIMENTATION .....	21
STEP 4: EVALUATION (OF THE PROTOTYPE) .....	24
AN EXAMPLE OF PROTOTYPING .....	28



# INTRODUCTION

THE ROADMAP FOR LIVING LABS IN EDUCATION IS MADE TO INSPIRE AND HELP YOU TRANSFORM THE WAY YOU PLAN AND IMPLEMENT EDUCATION PROJECTS USING THE LIVING LAB METHODOLOGY. IT TAKES ITS ROOTS IN **OPEN SCHOOLING**.

THE GOAL IS TO EMPOWER STUDENTS TO BECOME ACTORS IN THEIR EDUCATIONAL JOURNEY AND PROVIDE MEANING TO WHAT THEY LEARN AT SCHOOL BY BUILDING SUSTAINABLE SOLUTIONS WITH THEIR COMMUNITY.

THIS HANDS-ON MANUAL WILL PROVIDE YOU WITH AN EASY AND FLEXIBLE METHODOLOGY, SOME INSPIRING EXAMPLES OF EXISTING LIVING LABS PROJECTS IN EDUCATION AND PRACTICAL TOOLS THAT HAVE BEEN TESTED AND APPROVED BY EDUCATORS ACROSS EUROPE. IT CONTAINS, AMONG OTHER THINGS, ICEBREAKING, PRACTICAL ACTIVITIES TO CREATE A SUPPORTIVE AND CARING COMMUNITY AND THE RECORDINGS OF MASTERCLASSES EXPLORING WHAT THE APPROACH CAN BRING TO CULTURE AND EDUCATION.

THE **LIVING LAB** APPROACH HOLDS THE POTENTIAL TO BENEFIT STUDENTS, TEACHERS, SCHOOLS AND THE LOCAL COMMUNITY. IT HAS YIELDED NUMEROUS BENEFITS FOR ALL PARTICIPANTS, AMONG THEM A POSITIVE IMPACT ON SCIENCE ATTITUDES, CIVIC ENGAGEMENT AND MOTIVATION.

THIS METHODOLOGY CAN REQUIRE A STRONGER MOTIVATION THAN MORE TRADITIONAL APPROACHES, BUT IT'S SO REWARDING! DON'T BE TOO AMBITIOUS IN THE BEGINNING AND START SMALL. A PROJECT CAN ALWAYS GROW LATER. THERE ARE ALSO MANY REWARDING POSSIBILITIES TO BUILD AROUND EXISTING PROJECTS THAT YOU HAVE ALREADY IMPLEMENTED.

THIS ROADMAP FOR LIVING LABS IN EDUCATION WILL HELP YOU GATHER A STRONG COMMUNITY AROUND YOUR INITIATIVES AND BUILD NEW RELATIONSHIPS INSIDE AND OUTSIDE YOUR INSTITUTION.



## WHAT IS OPEN SCHOOLING (OS)?

OS IS AN APPROACH IN WHICH PURPOSEFUL COLLABORATIONS ARE BUILT BETWEEN SCHOOLS AND THEIR WIDER COMMUNITIES. FAMILIES AND OTHER EXTERNAL PARTNERS COLLABORATE WITH TEACHERS AND STUDENTS TO ADDRESS RELEVANT LOCAL CHALLENGES, CONTRIBUTE TO COMMUNITY DEVELOPMENT, AND PROMOTE AN ACTIVE GLOBAL CITIZENSHIP ATTITUDE.

OS OFFERS STUDENTS THE OPPORTUNITY TO LEARN TOGETHER IN THE REAL-LIFE SETTINGS AND WIDENS THEIR HORIZONS TO LEARN FROM PEOPLE OTHER THAN THEIR TEACHERS.

## WHAT IS A LIVING LAB?

LIVING LAB IS AN OPEN-INNOVATION METHODOLOGY WHERE PEOPLE PARTICIPATE HORIZONTALLY IN AN INNOVATION PROCESS TO CO-CREATE SOLUTIONS TO REAL PROBLEMS. IN EDUCATION, LIVING LABS ARE PLACES WHERE STUDENTS, SCHOOLS, CITIZENS, AND ORGANISATIONS COME TOGETHER TO CO-CREATE (IDEAS AND TOOLS). LIVING LABS ARE BASED ON OPEN INNOVATION METHODS.

# THE GENERAL STRUCTURE

## PHASE 1: PREPARATION

THE THEME

THE TOPIC

SOCIETAL ACTORS

THE ISSUE

## PHASE 2: STEPS OF LL METHODOLOGY

### CONVERSATION

SELECT ISSUES, IDENTIFY NEEDS AND PRODUCE A WIDE RANGE OF IDEAS

### EXPLORATION

TURN IDEAS INTO USE CASE SCENARIOS AND PROTOTYPES, EXPLORE OPPORTUNITIES

### EXPERIMENTATION

TEST IN REAL-LIFE SITUATIONS

### EVALUATION

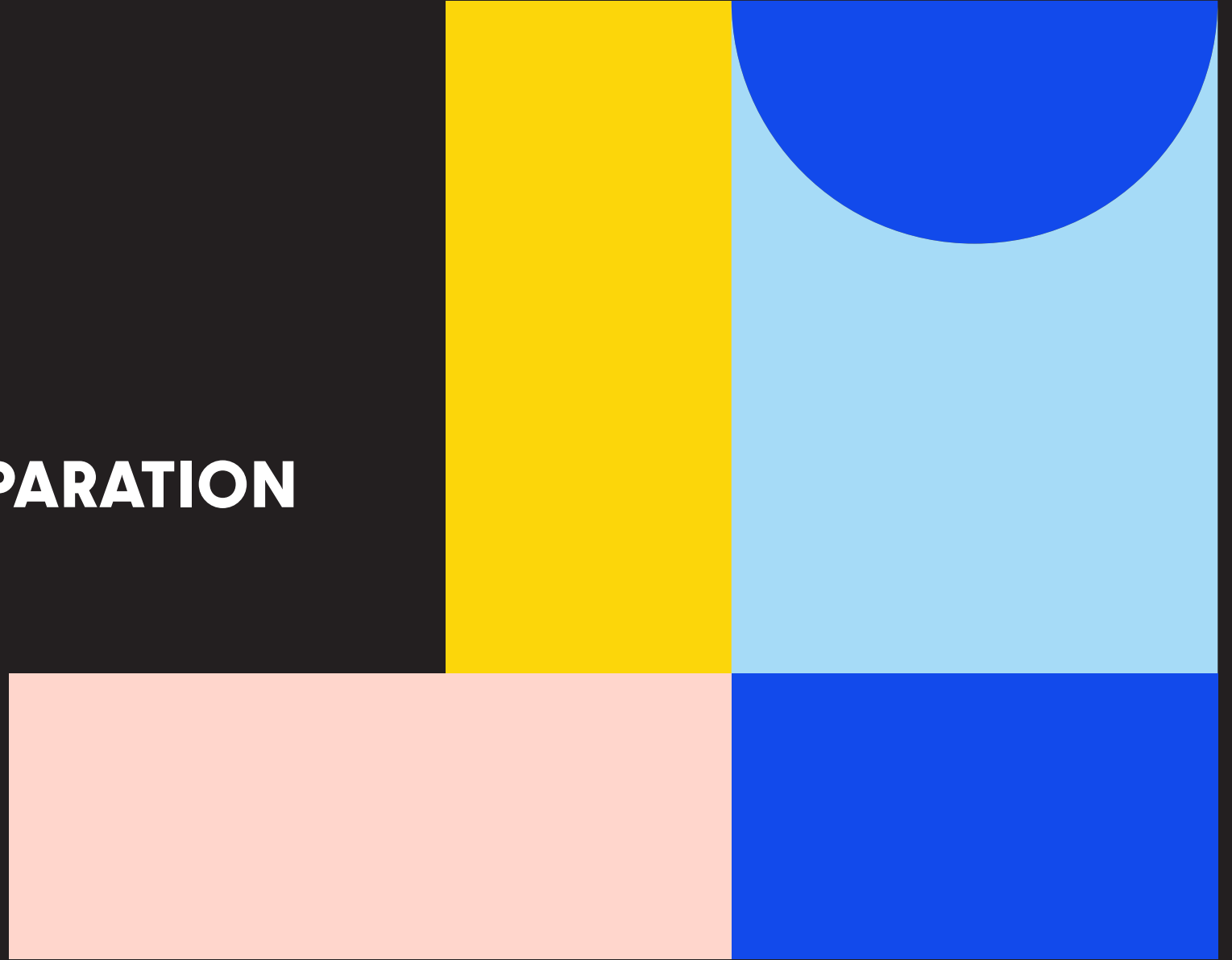
VALIDATE, DISCUSS, IMPROVE OR DISMISS THE SOLUTIONS

- 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

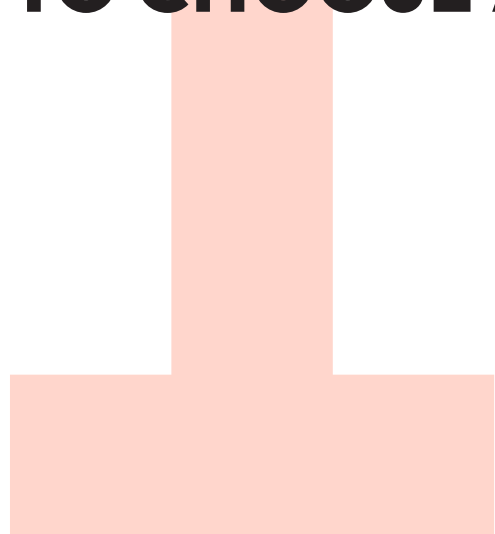
IN THIS "ROADMAP" YOU WILL FIND SOME PRACTICAL INSTRUMENTS AND GUIDELINES TO ENGAGE IN AND DEVELOP, A LIVING LAB PROJECT. YOU CAN USE, TRANSFORM, AND ADAPT THEM FOR YOUR OWN CONTEXT.

**THE 3 CHARACTERISTICS THAT REALLY DEFINE A LIVING LAB PROJECT:**

# PHASE 1: PREPARATION



# HOW TO CHOOSE A PROJECT

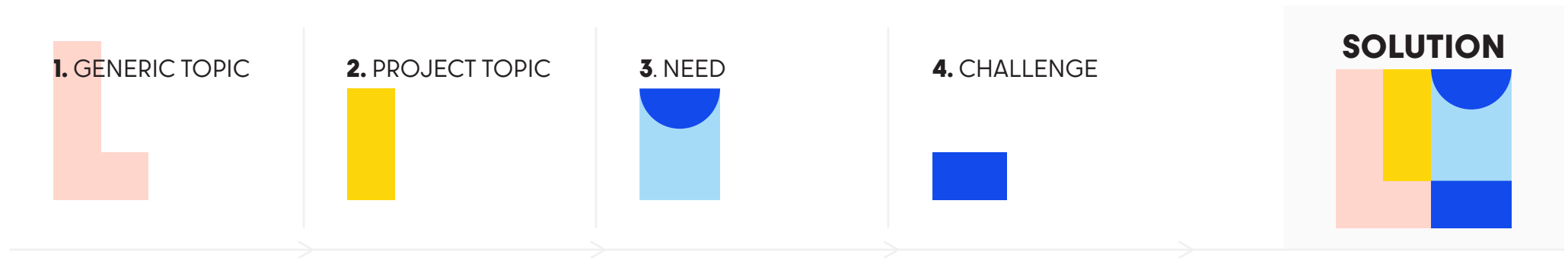


# WHAT ARE WE GOING TO MAKE?

# WHAT PROBLEM ARE WE GOING TO SOLVE?

## YOU CAN USE THIS 4-STEPS PROCESS

EVERY TOPIC CAN LEAD TO A GOOD LIVING LAB PROJECT



## HERE ARE A FEW TIPS AND EXAMPLES THAT MAY INSPIRE YOU

**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 MULTICULTURAL ENVIRONMENT IN THE SCHOOL.

IN ADDITION, YOU CAN **ASK EVERYONE TO COME UP WITH AN ANECDOTE** OR AN ACTION THEY DO RELATED TO A THEME IN ORDER TO SHARE VARIOUS EXPERIENCES. FOR SURE, THERE IS A LOT OF KNOWLEDGE AND DIVERSE PERSPECTIVES IN THE ROOM!

**THE LOCAL CONTEXT MUST BE ANALYSED:** THE MAIN CONCERNS AND WHO CAN ACT ABOUT IT? WHICH TOPIC WOULD GET YOU AND YOUR PARTNERS INVOLVED IN A PROJECT?

**ALWAYS REMAIN OPEN:** THE TOPIC CAN CHANGE TO GET MORE PEOPLE INVOLVED!



# EXAMPLE

## STEP 1

CONSIDERING YOUR LOCAL CONTEXT, YOU HAVE TO SELECT A LOCALLY RELEVANT **GENERAL TOPIC**



## STEP 2

BY INDIVIDUAL OR GROUP WORK, IDENTIFY SOME SUB-TOPICS (YOUR POSSIBLE **PROJECT TOPICS**) IN THIS LIST SOME TOPICS CAN'T BE CONSIDERED BECAUSE OF FEASIBILITY ISSUES OR LACK OF CONCERNED LOCAL PARTNERS, FOR EXAMPLE

FLOODS, WATER POLLUTION, WATER SAVING, RECREATIONAL ACTIVITIES, WATER SOURCES, DESALINATION, WATER SHORTAGE, DROUGHT

## STEP 3

YOU WILL THEN THINK ABOUT THE LOCAL **NEEDS** LINKED TO THE REMAINING TOPICS

- POLICY MAKERS / AUTHORITIES (PUBLIC USE)
- DOMESTIC WATER SUPPLIERS / CIVILIANS / RESIDENTS (DOMESTIC USE)
- TRAVELERS / TRAVEL EQUIPMENT SUPPLIERS (OUTDOOR USE)
- FARMERS (AGRICULTURE)
- INDUSTRIES (FACTORY MANAGERS)

## STEP 4

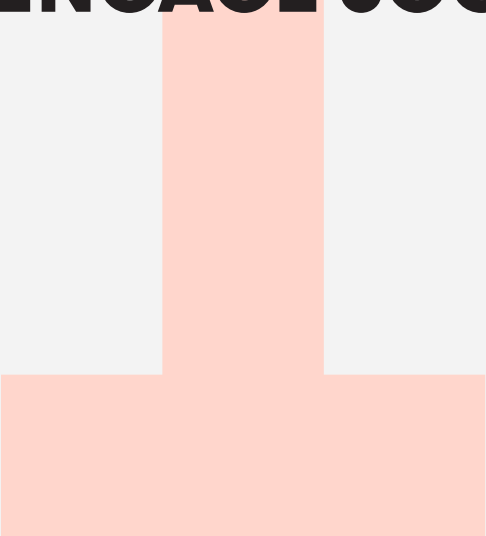
BY COMBINING THESE POSSIBLE PROJECT TOPICS AND LOCAL NEEDS, YOU SHOULD BE ALREADY VERY CLOSE TO DEFINING YOUR **CHALLENGE**.

- HOW CAN WE PURIFY WATER WITH A PORTABLE DEVICE?
- HOW CAN WE UTILIZE SEWAGE IN AGRICULTURE?
- HOW TO SELF-CHECK WATER QUALITY?

## YOUR FINAL CHALLENGE SHOULD BE

- OPEN-ENDED; THERE IS MORE THAN ONE POSSIBLE ANSWER
- MEANINGFUL AND RELEVANT
- PRACTICAL AND FEASIBLE WITHIN THE TIME FRAME, SKILLS AND TOOLS

# HOW TO ENGAGE SOCIETAL ACTORS



SOCIETAL ACTORS ARE IDENTIFIED AND BROUGHT INTO THE PROJECT FROM THE START. THEY ARE ANYONE WHO HAS AN INTEREST IN, OR IS AFFECTED BY, THE OUTCOMES OF THE PROJECT. AS THE PROJECT EVOLVES, THE GROUP MAY REALIZE THAT SOME IMPORTANT LOCAL PARTNERS NEED TO BE IDENTIFIED. IT IS NEVER TOO LATE TO BRING SOMEONE NEW ON BOARD.

### A. IDENTIFYING SOCIETAL ACTORS

- LISTING ALL POSSIBLE STAKEHOLDERS
- DRAWING UP OF CRITERIA
- PARTNER 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:

- DEFINE SHARED GOALS AND AMBITIONS
- AGREE ON WHAT THE CONTRIBUTION OF EACH PERSON WILL BE
- DISCUSS THE ROLES OF EVERYONE
- AGREE ON THE WAYS OF COMMUNICATION

### C. BUILDING SUSTAINABLE CONNECTIONS WITH STAKEHOLDERS

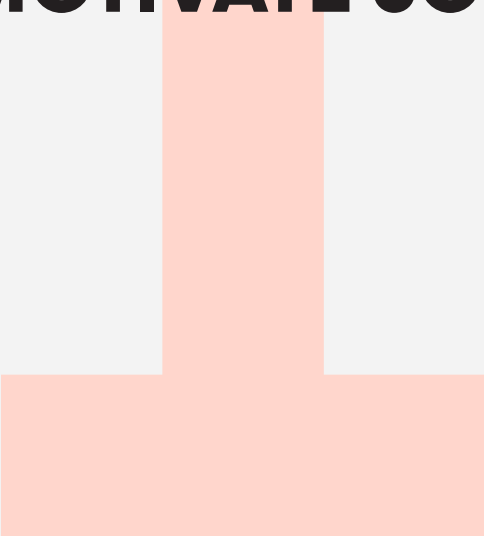
- TAKE THE TIME TO EVALUATE THE COLLABORATION AFTER THE PROJECT ENDS
- CELEBRATE THE SUCCESSES!



FIND FURTHER INFORMATION AND EXAMPLES ABOUT THIS POINT IN THE SALL REPORT  
[“METHODOLOGY FOR THE ENGAGEMENT OF SCHOOL LIVING LABS WITH STAKEHOLDERS” \(DELIVERABLE D3.1\)](#)



# HOW TO MOTIVATE SOCIETAL ACTORS



SOCIETAL ACTORS CAN HAVE DIFFERENT MOTIVATIONS TO JOIN A LIVING LAB PROJECT.  
 BELOW IS A LIST OF **POSSIBLE MOTIVATIONS**:

- **LISTING ALL POSSIBLE STAKEHOLDERS**
- **DRAWING UP OF CRITERIA**
- **PARTNER ANALYSIS**
- **SELECTING A SHORTLIST**

BEFORE APPROACHING THE SOCIETAL ACTORS, TRY TO THINK ABOUT WHAT RESULT THEY WANT FROM THE PROJECT AND WHAT THE ADDED VALUE OF THE PARTNER IS FOR THE PROJECT.

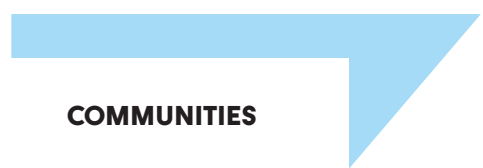
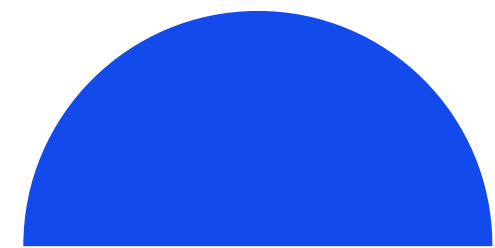
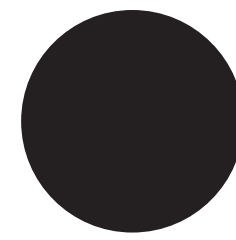
- **LISTING ALL POSSIBLE STAKEHOLDERS**
- **DRAWING UP OF CRITERIA**
- **PARTNER ANALYSIS**
- **SELECTING A SHORTLIST**

**POSSIBLE SOCIETAL ACTORS:**

NEIGHBORS	FRIENDS	ACQUAINTANCES	UNIVERSITY TEACHERS
ASSOCIATIONS	MUNICIPALITY	NGOS	RESEARCHERS
SCHOOLS	LOCAL SHOPS		

- ▲ LOOK THROUGH YOUR CONTACTS LIST IN YOUR PHONE, EMAIL, OR ON SOCIAL MEDIA
- ▲ HAVE YOUR STUDENTS ASK THEIR PARENTS/GUARDIANS FOR THEIR IDEAS
- ▲ TALK ABOUT THE PROJECT WITH FRIENDS AND FAMILY AND ASK FOR THEIR IDEAS

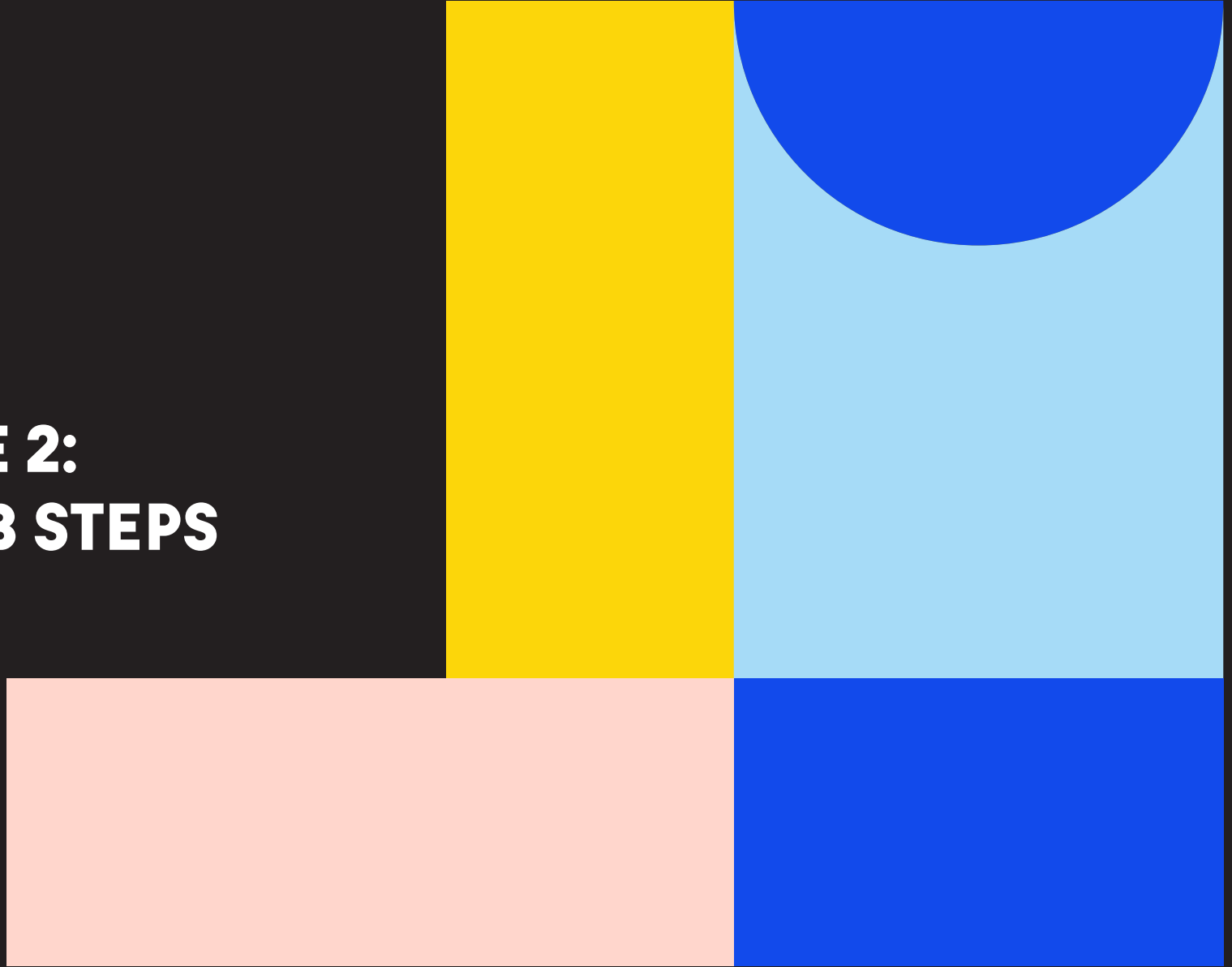
TO SEE EXAMPLES OF SOCIETAL ACTORS AND THE ROLE THEY PLAYED IN VARIOUS PROJECTS, YOU CAN VISIT OUR [PLATFORM](#) OR READ [OUR PORTFOLIO](#).



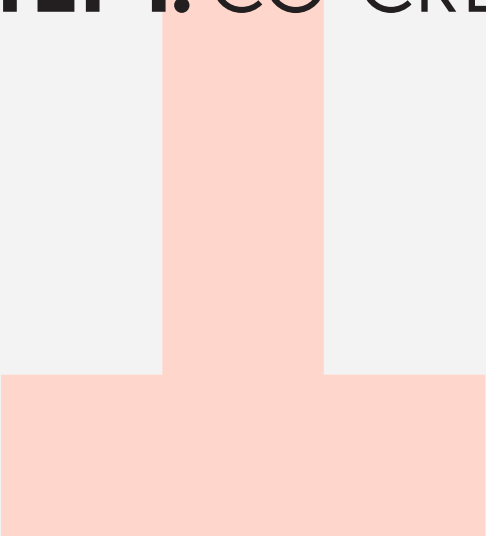
**COMMUNITIES**



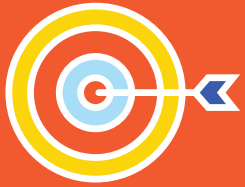
# PHASE 2: LIVING LAB STEPS



# STEP 1: CO-CREATION







## AIM

IDENTIFY NEEDS AND ARTICULATE IDEAS (OF PRODUCTS, SERVICES, ETC) 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' OWNERSHIP OF THE ISSUE WILL 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 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, DISCUSSING, ETC), AND WHERE PARTICIPATION IS FACILITATED.

### ICEBREAKER ACTIVITY

- ▲ SMALL GAME WITH ALL NAMES OF PARTICIPANTS
- ▲ RELATIVE POSITIONING IN THE ROOM (TOWARD THE TOPIC OR SOMETHING ELSE)

### BRAINSTORMING

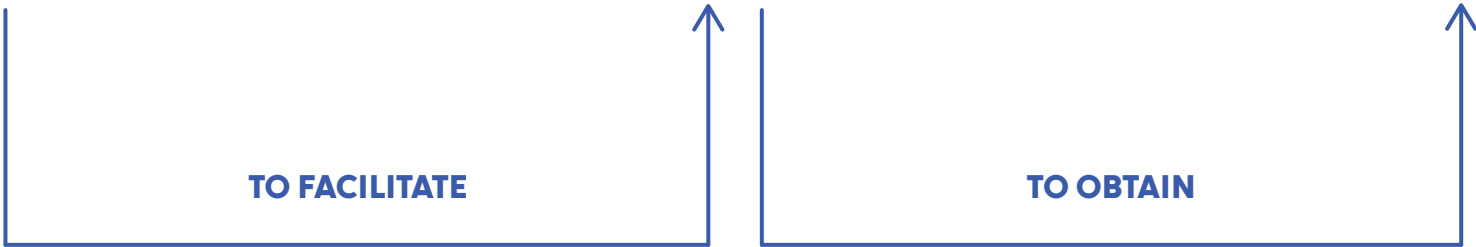
NEED HELP FOR INSPIRATION?

- ▲ INTERNET RESEARCH
- ▲ WORLD CAFÉ
- ▲ MAKE SOME PROPOSITIONS (TO USE NATURE, NGOS, SMARTPHONE APP, BOOK...)

### LOTS OF GOOD AND BAD IDEAS

(IT'S IMPORTANT TO CONSIDER BOTH)

- ▲ NEED HELP WITH CHOOSING?
- ▲ SIXTY SECOND ELEVATOR SPEECH
- ▲ USE ANOTHER CLASS AS A JURY

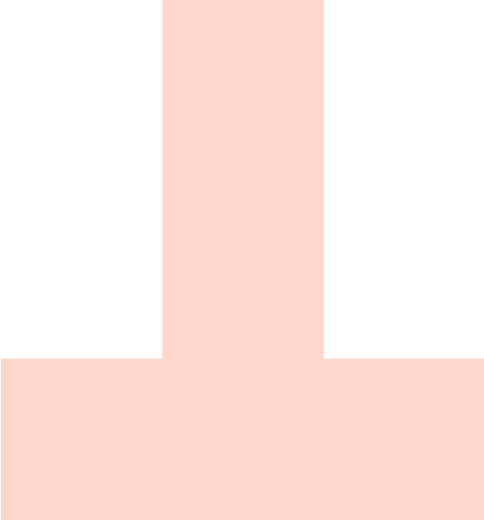


- ▲ **OPEN DISCUSSION OR QUESTIONNAIRE: "HOW DO I FEEL?":**  
IN GENERAL / ABOUT THE PROCESS / WITH THE RESULT
- ▲ **REFLECT THROUGHOUT THE PROCESS ON HOW EACH ACTOR IS CONTRIBUTING**
- ▲ **DON'T FORGET TO ACKNOWLEDGE THAT LISTENING IS CONTRIBUTING**
- ▲ **TAKE SOME TIME TO LOOK BACK AT THE OVERALL PLANNING OF THE PROJECT**





# 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

### IDEAS

CAREFULLY THOUGHT AND SELECTED

IDENTIFY THE "CORE VALUE"

DETAIL THE STEPS

**PHYSICAL OBJECT**

**DIGITAL OBJECTS**

**SERVICE / EVENT**

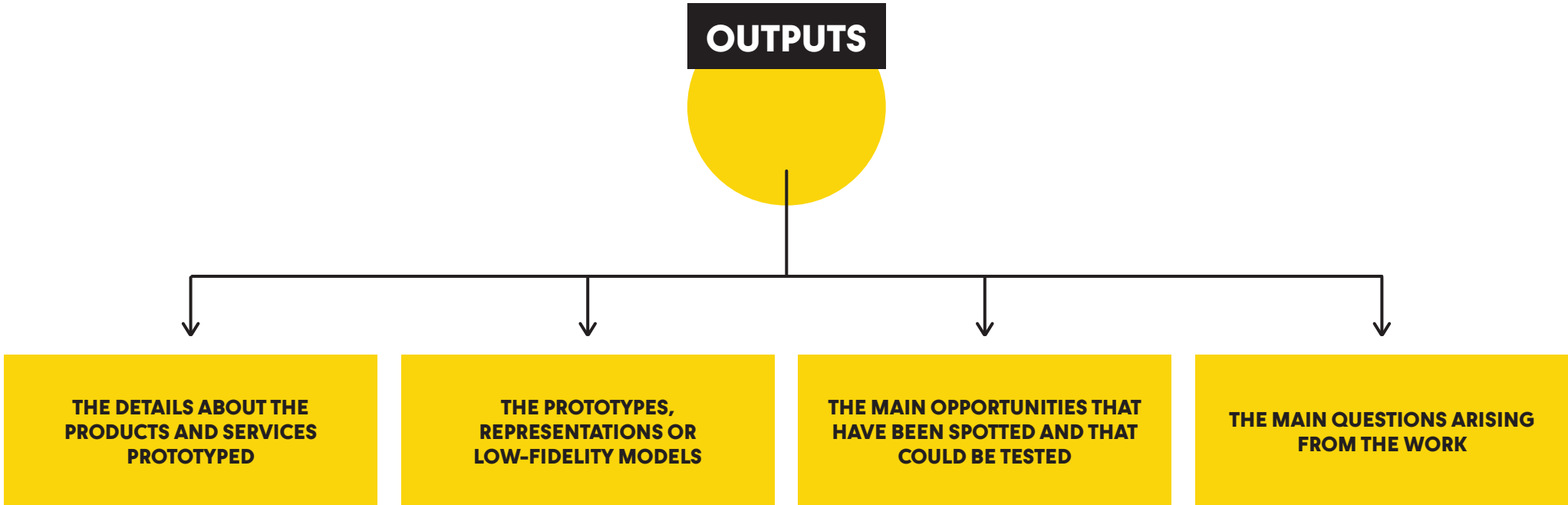
**BUILD A PHYSICAL  
PROTOTYPE**

**BUILD A DIGITAL  
PROTOTYPE**

**BUILD A STORY  
OF THE SERVICE**

**BUILD A LOW-FIDELITY  
VERSION OF THE SERVICE  
WITH REAL PEOPLE**

**BUILD A STORYTELLING  
REPRESENTATION**



# FURTHER DISCUSSION: 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 SEEMS TO BE A CRITICAL ELEMENT OF THE IDEA?
- HOW CAN WE MAKE IT INTUITIVE TO USE, SIMPLE, AND RELIABLE SO PEOPLE EASILY USE IT?
- WHAT PART OF THE IDEA IS LIKELY TO WORK WELL? WHERE WILL THE PRACTICAL 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

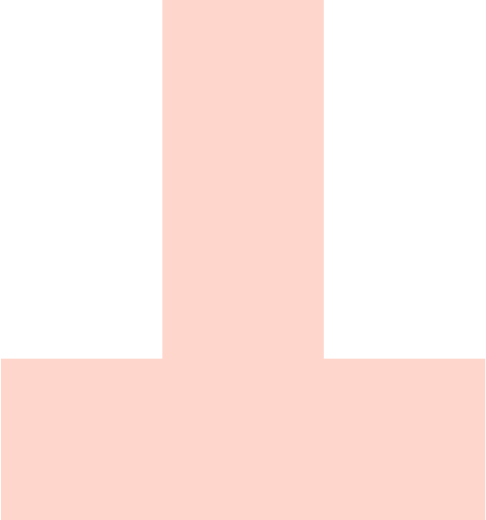
### SO, NOW YOU HAVE ONE OR SEVERAL TESTING QUESTIONS!

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/](http://WWW.STORYBOARDTHAT.COM/)) TO EXPLAIN CLEARLY THE SERVICE TO PEOPLE?
- WITH A MODEL MADE OF BUILDING BLOCKS OR LEGO BLOCKS?



# STEP 3: EXPERIMENTATION





## AIM

ANALYZE THE EXPERIMENTATION RESULTS TO VALIDATE OR IMPROVE THE SOLUTION

## PROCESS

**PROTOTYPES  
BUILT WITH LOVE**

IDENTIFY THE MAIN QUESTIONS

CHOOSE THE REAL-LIFE SETTING

**ORGANISE WITH  
THE SETTING  
(VENUE, PEOPLE)**

**BUILD  
THE PROTOCOL**

**EXPERIMENT!**

**FACE THE COMPLEXITY  
AND THE PERTURBATIONS**

**OBSERVE!!!**

**LISTEN TO THE REACTIONS  
AND FEEDBACK!**

**MANAGE EXPECTATIONS  
AND DISAPPOINTMENTS!**

**GATHER DATA FOR  
THE EVALUATION**



## HERE YOU ARE GETTING DATA FOR THE EVALUATION AND EVERYONE SHOULD BE AWARE OF THE FOLLOWING:

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... YOU WILL DISCOVER MUCH MORE BY LOOKING CAREFULLY AT WHAT HAPPENS, AND BY LISTENING AT THE FEEDBACK WITH ATTENTION, THAN BY SHOWING AND EXPLAINING.

BE KIND TO PEOPLE PARTICIPATING IN 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, THAT MAY INFLUENCE THE USERS. USE THESE MOMENTS TO BUILD EMPATHY AND UNDERSTAND THE OTHERS' PERSPECTIVE (WHICH DOES NOT MEAN YOU AGREE WITH THEM!).

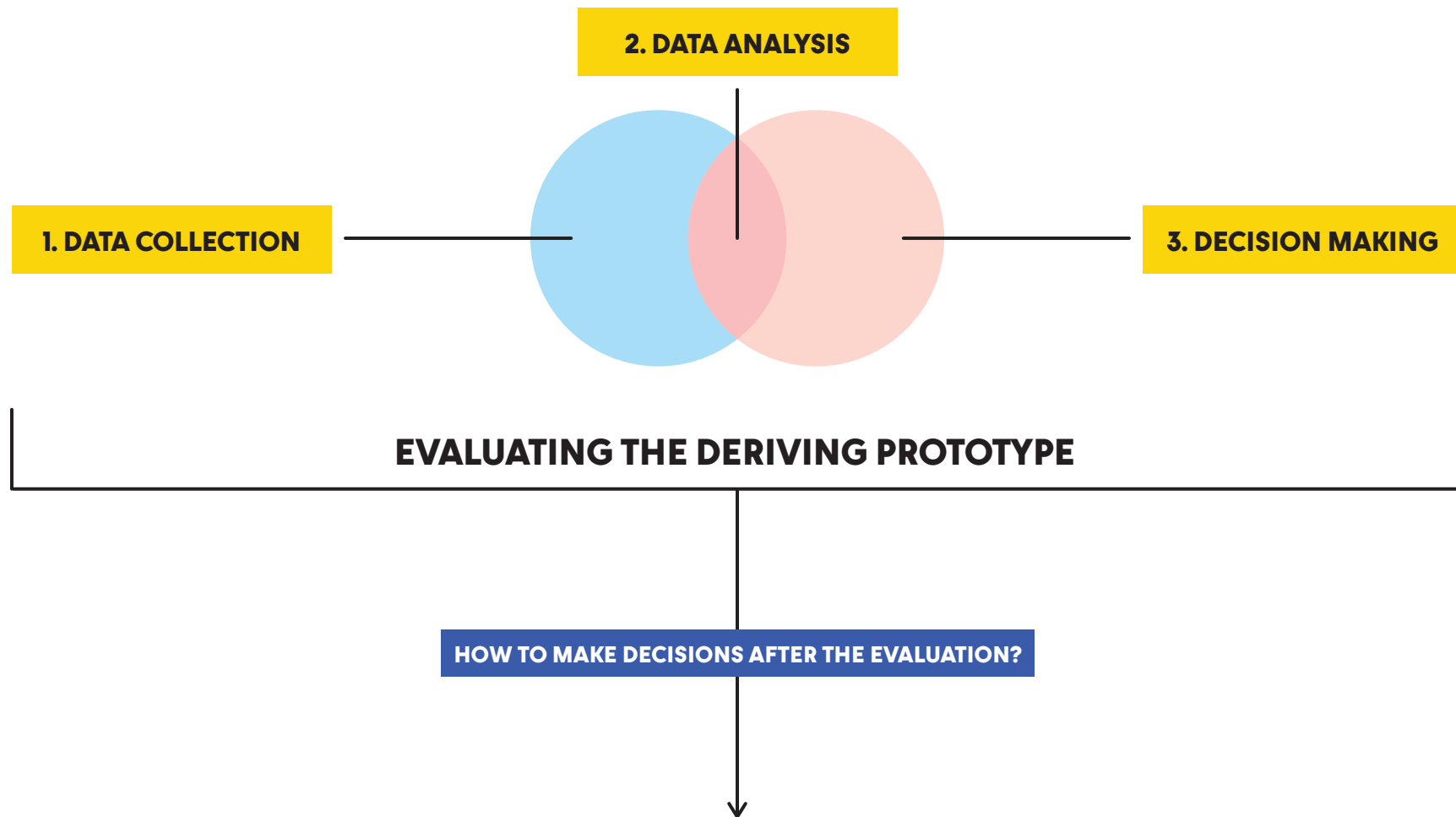


# STEP 4: EVALUTATION (OF THE PROTOTYPE)

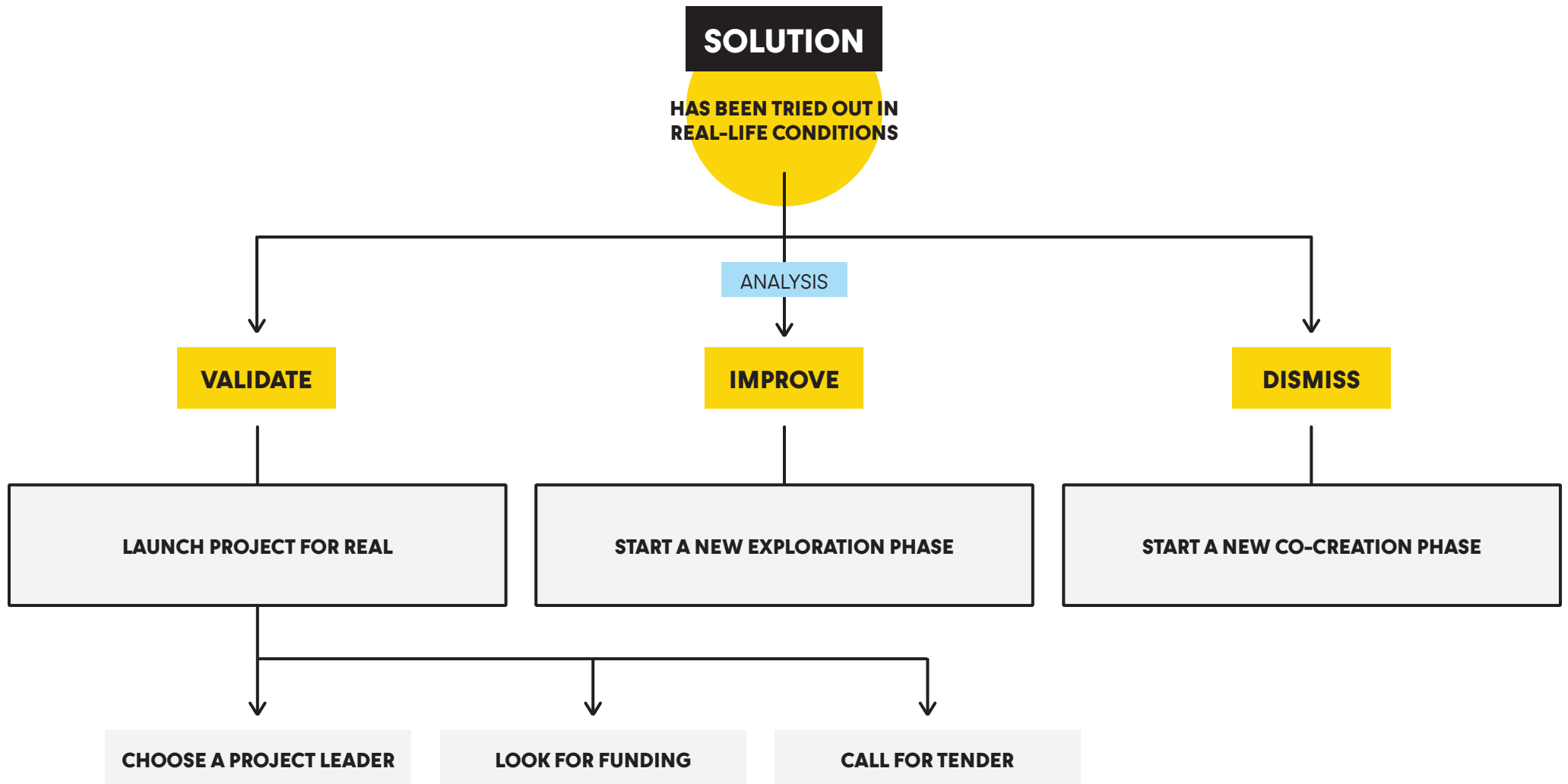


## AIM

ANALYZE THE EXPERIMENTATION RESULTS TO VALIDATE OR IMPROVE THE SOLUTION

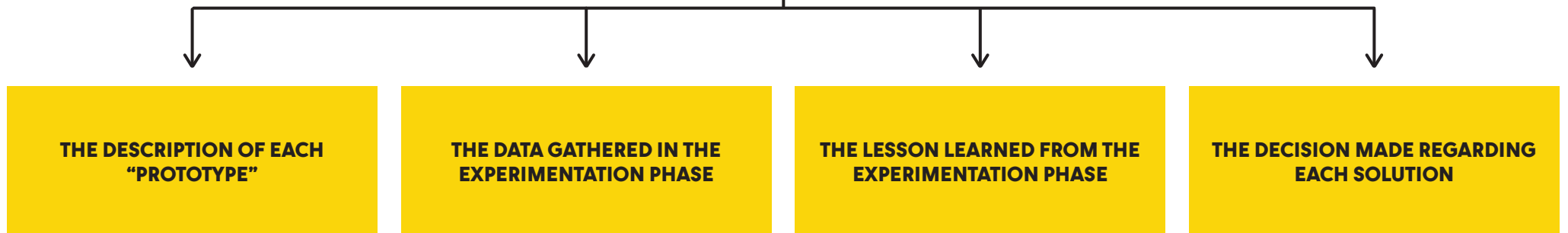


# HOW TO MAKE DECISIONS AFTER THE EVALUATION?



## OUTPUTS

A DOCUMENT (OR A BLOG, OR A MAP...) WITH:



AT THE END OF THE EVALUATION PHASE, ALL PARTICIPANTS SHOULD HAVE ACCESS TO THIS DOCUMENT. THEY WILL ALL KNOW WHICH SOLUTION WILL BE KEPT, IMPROVED, DISMISSED, OR DECIDED TOGETHER ON A NEW CYCLE STARTING WITH STEP 1 OR 2.

# AN EXAMPLE OF PROTOTYPING

## OUR ISSUE:

TOO MUCH ORGANIC WASTE IN THE SCHOOL.

## OUR SOLUTION:

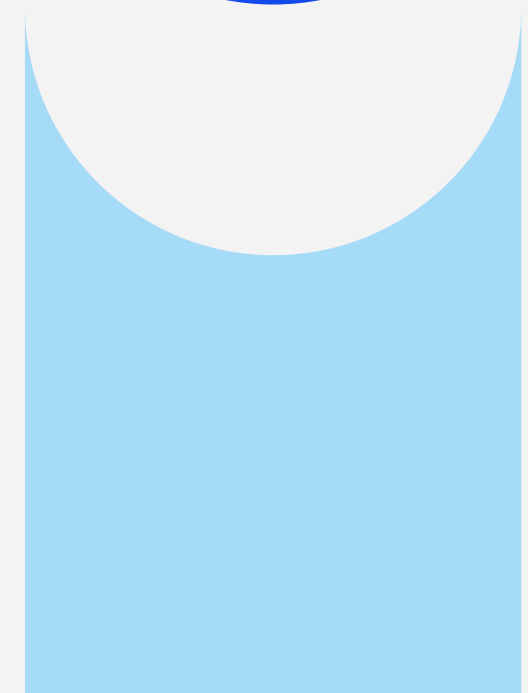
TO INSTALL A COMPOSTER NEAR THE SCHOOL CANTEEN, WHERE THE ORGANIC FOOD WASTE SHOULD BE DISPOSED.

### 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. AT WHICH FREQUENCY THE FOOD WASTE IS GOING TO BE DISPOSED OF IN THE COMPOSTER?
7. WHERE DO THE BROWN RESIDUES NEED TO BE 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 TEST:

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:

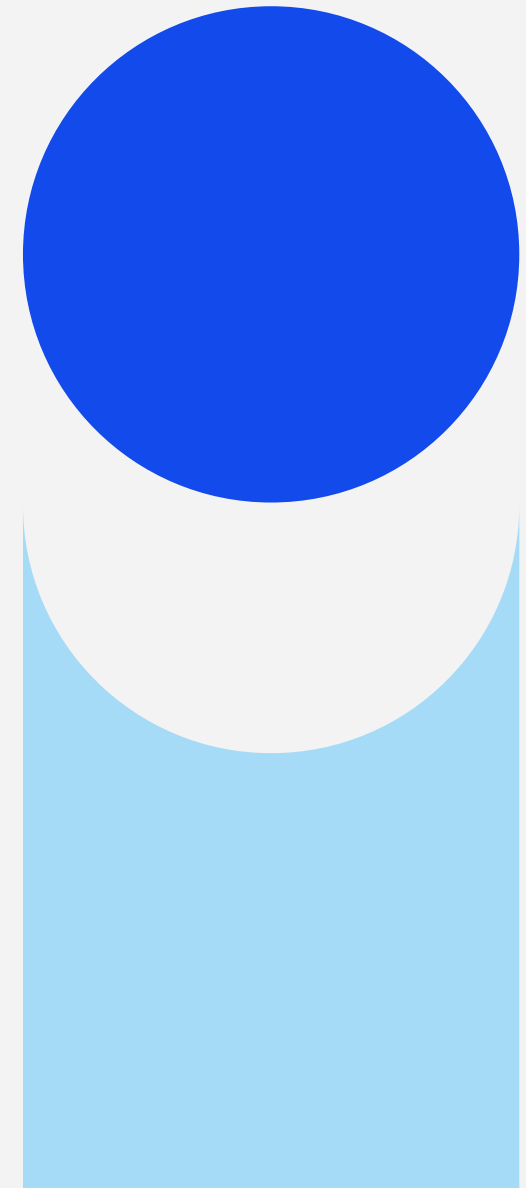
A STORYBOARD (HANDMADE OR DIGITAL) WOULD ALLOW TO SEE IN GREAT DETAIL THE NEEDED CHANGES TO MANAGE THE FOOD WASTE, FOR EXAMPLE, HOW THE “VISITS” TO THE COMPOSTER COULD BE ADDED TO THE REGULAR WORK/SCHOOL SCHEDULE OF THOSE RESPONSIBLE FOR THE TASK.

#### 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 COMPOSTER

#### 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 TAKING 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:

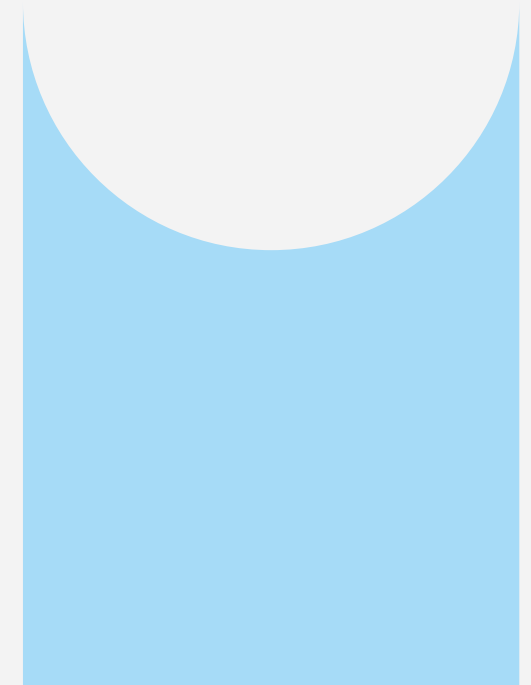
A STORYBOARD (HANDMADE OR DIGITAL) WOULD ALLOW US TO ANALYSE IN DETAIL THE PROCESS OF HARVESTING AND USING THE COMPOST.

##### 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.



IN DELIVERABLES **2.4 SUPPORT AND TRAINING MATERIALS FOR SCHOOLS AS LIVING LABS** AND **2.5 FINAL DISSEMINATED METHODOLOGY AND SUPPORT AND TRAINING MATERIALS** YOU WILL FIND SUPPORT AND TRAINING MATERIALS FOR SALL PROJECTS. **DON'T HESITATE TO TAKE A LOOK AT IT, YOU MIGHT FIND SOME HELPFUL RESOURCES!**

IF YOU WANT SOME INSPIRATION GO VISIT OUR PLATFORM: YOU WILL FIND EXEMPLARY CASES CALLED ACCELERATORS. THERE IS ALSO A PORTFOLIO CONTAINING VARIOUS EXAMPLES OF PROJECTS FROM ALL ACROSS EUROPE.

#### TOOLBOX



#### SUPPORT



#### RESOURCES

