

# TEDDY

# 2023



Co-funded by the  
Erasmus+ Programme  
of the European Union

# TOOLKIT

for digital and  
green skills in the  
classroom

*Developed by*

**TEDDY:** Teacher's Experiential Development of  
Digital skills through the Young innovator's  
program



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# 1. What is this Toolkit about?

This toolkit provides an **overview of tools and skills for teachers** seeking to harness the benefits of digital education for climate change education. It provides guidance on key tools that can be used in educational practices. This menu of tools is complemented by a learning process based on climate challenges that can be worked on across different subjects and learning spaces. This Toolkit is the result of collaborative work between the organizations listed below as leaders of the **TEDDY:Teacher's Experiential Development of Digital skills through the Young innovator's program** project in order to install digital and green skills in teachers and educators around the world. The project is also supported by Climate-KIC Young Innovators and is funded by Erasmus+, the European Union fund.

## STT

*A Dutch non-profit organization, working on sustainability through technology education. Primary and secondary schools are their main target groups. Energy transition, circular economy, climate adaptation, and the UN's Sustainable Development Goals (SDGs) are the main topics of the many education programs of the foundation.*

## 2811

*A social change platform, based in Germany that works on installing social change and climate action methodologies in the education system, universities and colleges. Today 2811 is a global platform for social innovation working on projects in Europe, North America, and South America.*

## AESS

*An energy agency based in Modena, Italy founded in 1999. It is a non-profit organization providing consultancy, professional training, and other services in the field of sustainability and energy in particular. Its main target are local authorities. Apart from strictly technical support, AESS supports municipalities in setting up their energy and mobility planning strategies.*

## S4TP

*An award-winning social enterprise that has been operating for eight years in the space of environmental entrepreneurship, education, and green innovation. Since 2013, their flagship initiative, the Big Ideas program, has involved over 20,000 students from more than 50 schools to support young people in developing their confidence, ideas, skills, and knowledge around STEM, sustainability, and entrepreneurship.*





## 2. Why apply sustainability based learning?

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### 1 Pedagogical responsibility

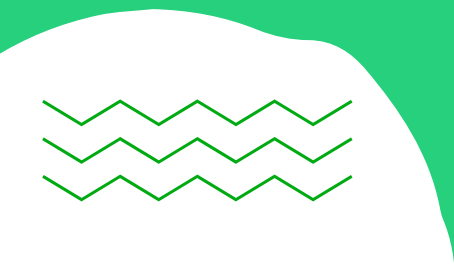
As we learn about the existential threat to the lives of vulnerable communities and future generations of an economic system driven by expansion, we as educators we have to take on the responsibility of helping youth learn how to tackle complex challenges and contribute to system innovation.

### 2 Challenge Based Learning

Challenge based learning is a great way to learn how to make a difference while making a difference. By focusing on real-life challenges with multiple solutions, students are taught to bring together multiple disciplines and encouraged take an active role in their community.

### 3 Learning Journey

In this toolkit we take you through a step-by-step process in which you first pick a local manifestation of a global challenge and then analyze the system to understand the components and interactions at play. Following a thorough understanding of the problem, you and your team can brainstorm possible solutions and get your community on board.



# 3. Learning Journey





# COMPETENCES

THAT STUDENTS WILL GAIN THROUGH THIS  
LEARNING JOURNEY

## Low-carbon lifestyle:

Ability to change one's own behaviour and habits for others that are healthier, coherent and coherent and consistent with sustainable development.

## Problem Solving:

Ability of defining a problem; determining the cause of the problem; identifying, prioritizing, and selecting alternatives for a solution; and implementing a solution.

## Managing uncertainty

Ability to adopt a flexible attitude to the ambiguity and ambiguity and constant changes that define the current reality of the climate crisis.

## System thinking

Ability to approach knowledge with curiosity, motivation and rigour, perceiving reality as a whole, as a system; knowing how to observe the complexity of interrelationships in order to find opportunities for opportunities for improvement.

## Digital Skills

Ability to use digital devices, communication applications and networks to access and manage information in order to communicate and collaborate, to develop and share digital content and to solve problems in a world of working anywhere.

## Entrepreneurial spirit

Ability to proactively seek opportunities in a context, and to implement projects on the basis of generated ideas.





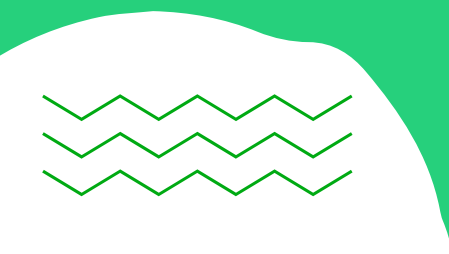
# RECOMENDATIONS

## TO CREATE SAFE LEARNING ENVIRONMENTS

In order to achieve the skills mentioned above, it is important to create safe spaces where creative learning is encouraged through constructive dialogue and assertive communication. To this end, we suggest following the recommendations below and establishing group norms:

### Steps

- 1 Assign a moderator:** It should be someone who makes sure that the group stays focused and that everyone has the opportunity to communicate their ideas.
- 2 Assign a time-keeper:** This person will control time and prioritise time for decision-making. If it is a large or complex decision, it is recommended that you set aside time each day or divide the team into groups to discuss different sub-sections.
- 3 Record everything that comes to mind,** good or bad, and without judging it or the person who came up with it. Can be written (on a white board, chalk board, sticky notes, paper, etc) or drawn. Whatever works for the team to communicate their ideas.
- 4 Take some breaks and activate the team.** In order to keep the team focused, awake and creative, take as much as small breaks as necessary or suggest dynamics to activate or relax the team. Assign the **wellbeing person** if necessary to check and coordinate this.



# 3.1 Challenge Definition

## 1 What is this step about?

Sustainability is an incredibly broad concept. In this first step, students become motivated and engaged to work on the problem by breaking it down into a more concrete and actionable local challenge. A good challenge statement presents an opportunity of significance, urgency and priority. To truly understand the challenge, they have to know the who, where, what and why of the challenge. Therefore, we invite first students to talk and interview to the people surrounding them to understand the challenges that different stakeholders are observing and choose the ones they want to tackle. In order to define the challenge, we invite students to develop the following activity.

## 2 Activities

### Activity 1: Identify the challenge

[Download template here](#)



Who?	Students in the school.
What?	They don't have any green learning space.
Where?	In the school / playground / close areas.
Why?	There is no space to plant flowers, enjoy nature or relax in the playground. It's all urban area.



## Activity Template: Identify the challenge



**Who?**

**What?**

**Where?**

**Why?**

# Example Challenges for CLIMATE ACTION

Scan the QR with your phone or **click in the QR** to go to the website!

To help you in your challenge based journey, we prepared several ready-made challenges for you and your students to work on or to use them. as examples. These challenges are based on real experiences of real organizations.

How can we involve the local community more in the protein transition?



**Food Transition Challenge**

How can we process excess textile into something that is attractive to the youth?



**Fashion Transition Challenge**

How can we realize living and working places on the pier in a sustainable way?



**Urban Design Transition Challenge**



# 3.2 Systemic Thinking

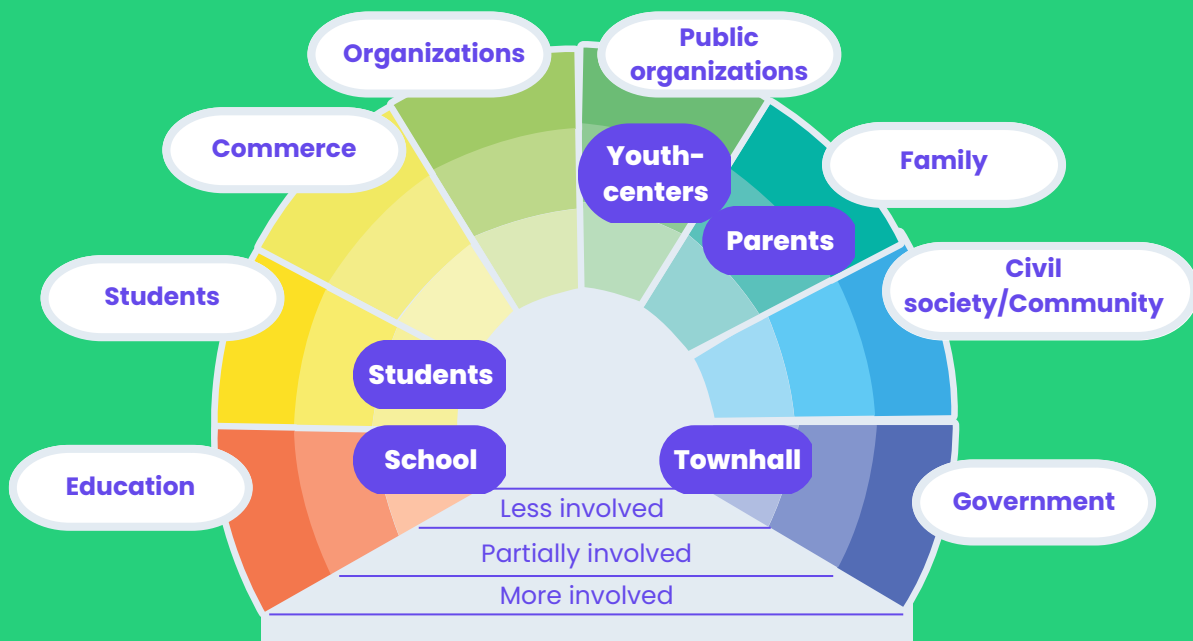
## 1 What is this step about?

Today's challenges are incredibly complex. Therefore, in this step, students reflect on how external factors can influence their challenge paths and how these influences could either be barriers or enablers in their search for a solution. During the following two activities we present, we aim students to think about all stakeholders and actors that might be connected somehow to the challenge identified in the first step. Finally, students get a good sense of who to involve in their project for making it a success.

## 2 Activities

### Activity 2: Actors map

[Download template here](#)



## Activity 3: Stakeholder analysis

[Download template here](#)

<b>Stakeholder</b>	<b>Power</b> Their ability to stop or change the project	<b>Interest</b> Why would they like this project to work?	<b>Engagement Strategy</b> What is the best way to engage them?
<b>Science Teacher</b>	Access to teachers' board	Do some practical work around their subject	Mentor the project and be the teachers' representative at the teachers' meeting.
<b>Youth centers</b>	Have co-creation and extra-curricular spaces with students	Engage and empower students	Invite them to check the school spaces and offer some free time for this project in their learning spaces.
<b>Townhall</b>	Offer a close green public space to the school project	Boost local sustainable development strategy	Organize with science teacher and youth center a meeting with the city council.

### Some instructions:

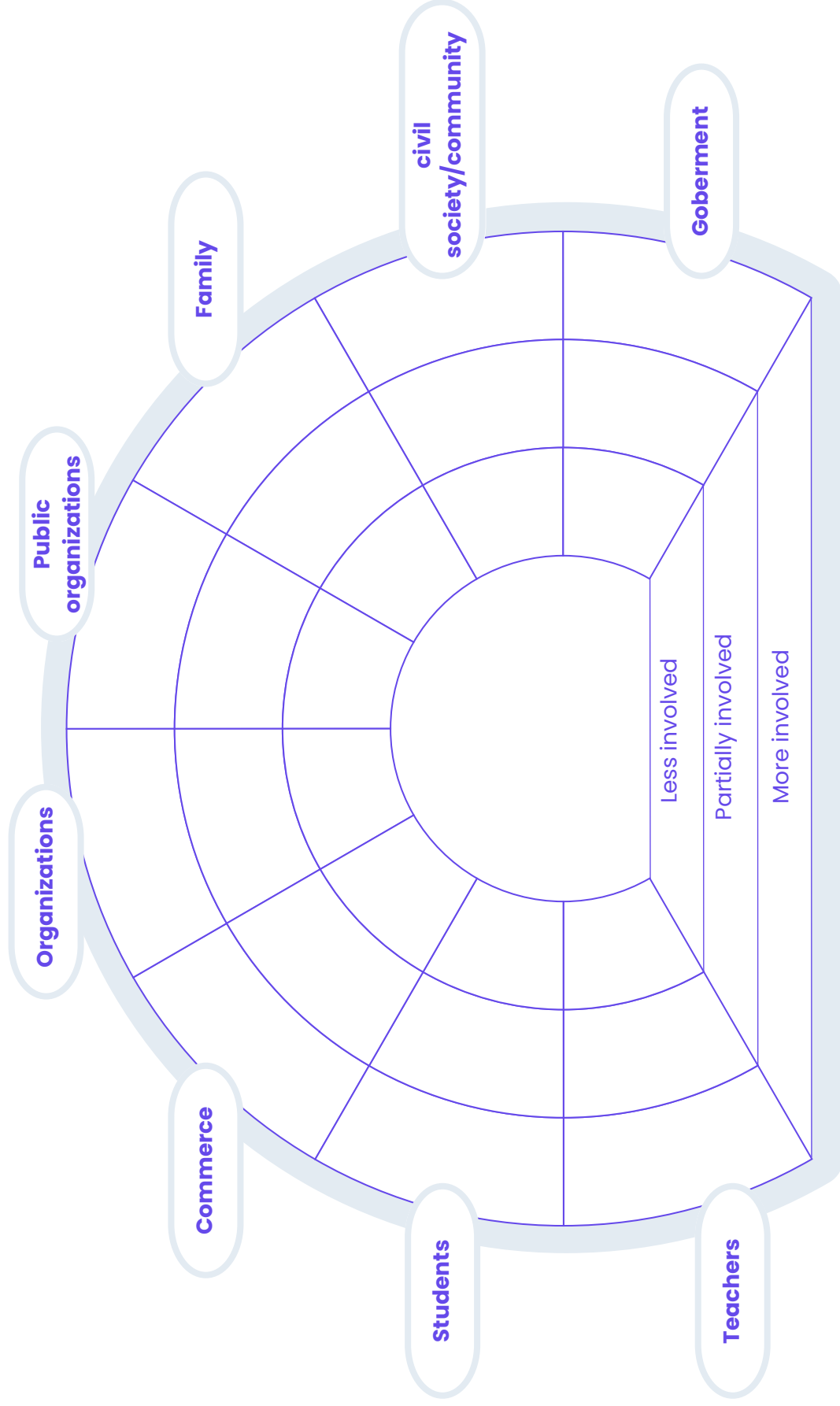
#### Activity 1:

Brainstorm around all actors that can influence or are affected by the challenge. Rank them based on their level of involvement. Discuss the connections between these actors.

#### Activity 2:

Pick all or the most relevant stakeholders of the actors map and reflect and write them down in the "Stakeholder" column. Reflect and write down the rest of the characteristics that are written down in the template columns. The final step is to start understanding the needs and influence of the most important stakeholders. At the end of this exercise they will know how to involve them in their journey towards solutions.

# Activity Template: Actor map





# 3.3 Designing Solutions

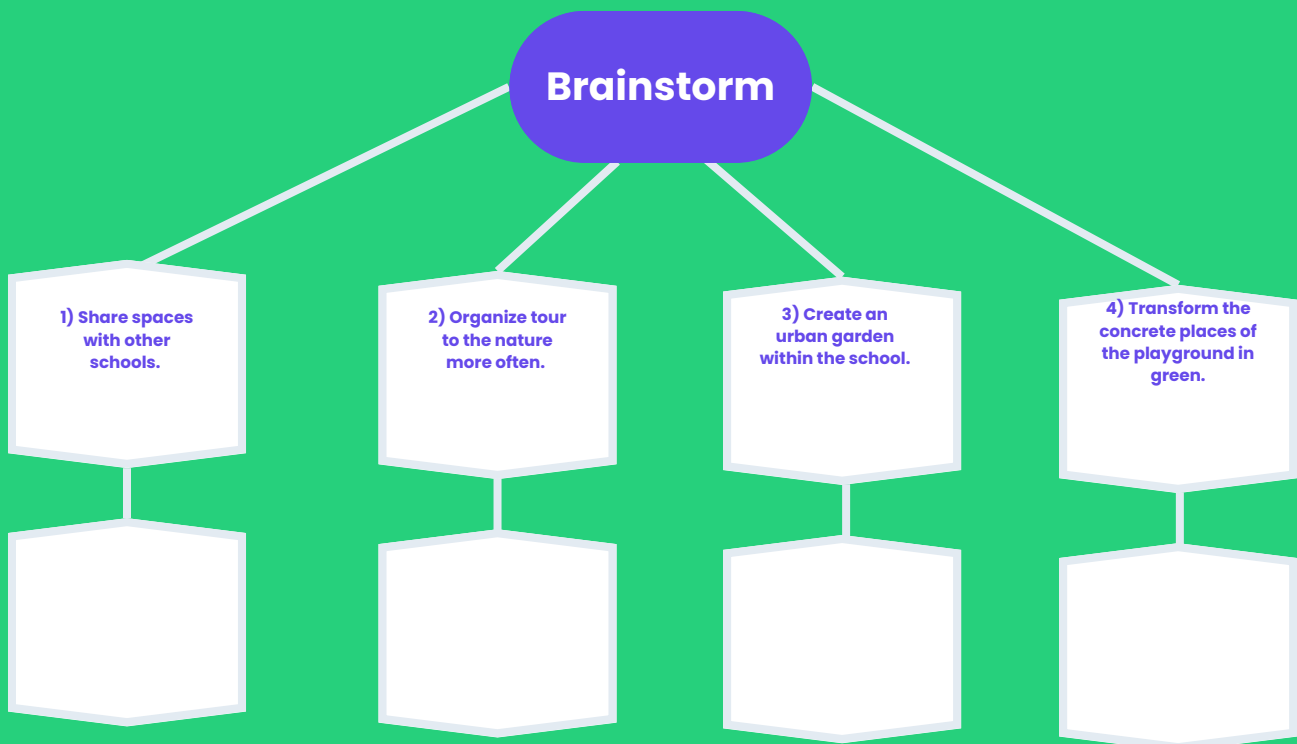
## 1 What is this process about?

The design of the solution is a crucial part of the development of a project, as it is at this stage that we must think about how to solve the problems that arise throughout the project. In addition, during this process they will learn to co-create solutions collectively by activating listening, empathy and creativity. .

## 2 Activities

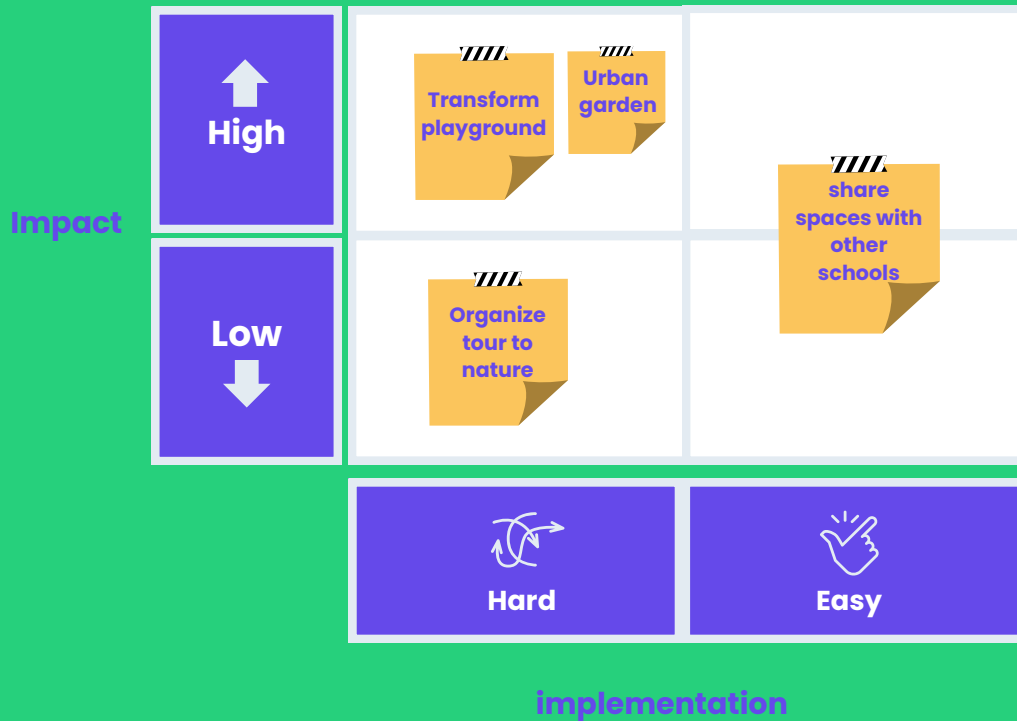
### Activity 4: Brainstorming

[Download template here](#)



## Activity 5: Filtering ideas

[Download template here](#)



## Activity 6: Project definition

[Download template here](#)

<b>Project Name:</b>	Create an urban garden at school	<b>Location:</b>	Berlin
<b>Team:</b>	Sara, Mike and Noa.	<b>Date:</b>	September 2023
<b>Challenge:</b>	Have more green spaces within the school.		
<b>Solution:</b>	Create an urban garden in the playground as a curricular project through technology and sciences subjects		




## Activity 7: Action Plan

[Download template here](#)

When:	Who:	What:	Expected results:	Resources:
01.09.2023	Sara	Meeting with teachers and director	Share the project and organize the team.	PPT presentation and action plan.

## Activity 8: Prototype Testing Summary

[Download template here](#)

**Prototype testing summary:** 

<b>Idea</b> Urban garden.	<b>Testing Team</b> Sara, Mike, Noa, James (Science teacher) and Lara (Technology teacher).	
<b>Feedback</b>		
<b>Keep</b> Recycling materials from the communities around the school.	<b>Increase</b> Time dedicated to the project.	<b>Delete</b> The weekly meetings in the room and start meeting in the garden.
<b>Conclusion</b> Dedicate more time to the space and clean it more regularly.		

## **Some instructions:**

### **Activity 4 - Brainstorming:**

Launch ideas without judgement and without thinking about the feasibility of implementation. This is the most creative step in the process, so all ideas are valid in this activity.

### **Activity 5 - Filtering ideas:**

Once you have at least 8 ideas, start filtering and placing those ideas based on the criteria shown in the table.

### **Activity 6 - Project definition:**

When they have placed all the ideas, discuss which is the option that best seems to the group to develop. Ideas can be merged or groups divided if there is capacity for it.

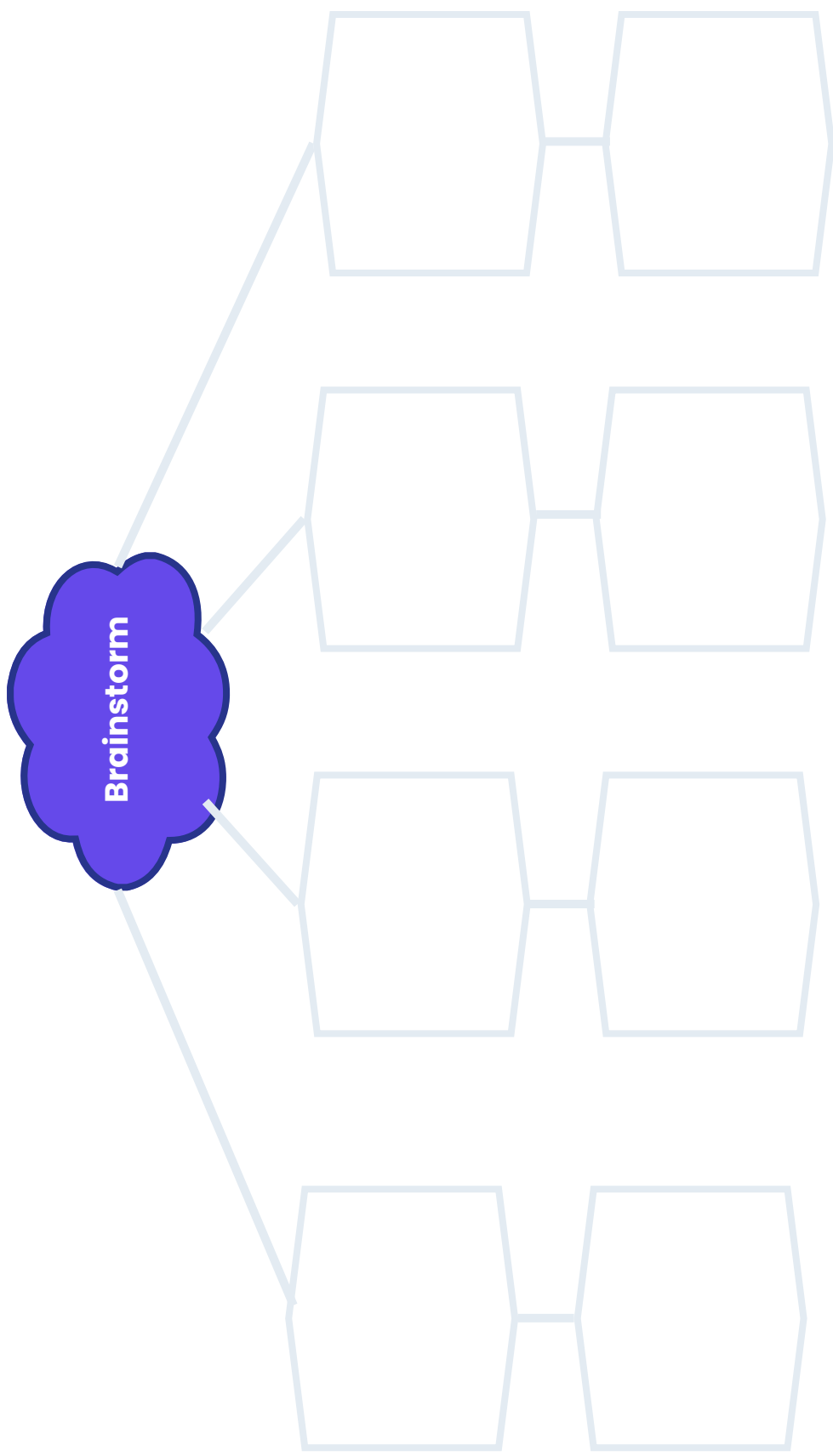
### **Activity 7 - Action Plan:**

Once you have a clear idea to implement, develop the action plan turning that idea or solution into a project by filling the table. Try to project the action plan into actions to be put into practice in the short term, for example, one month. The more concrete the actions are, the less it will cost them to carry them out and the more results they will be able to see.

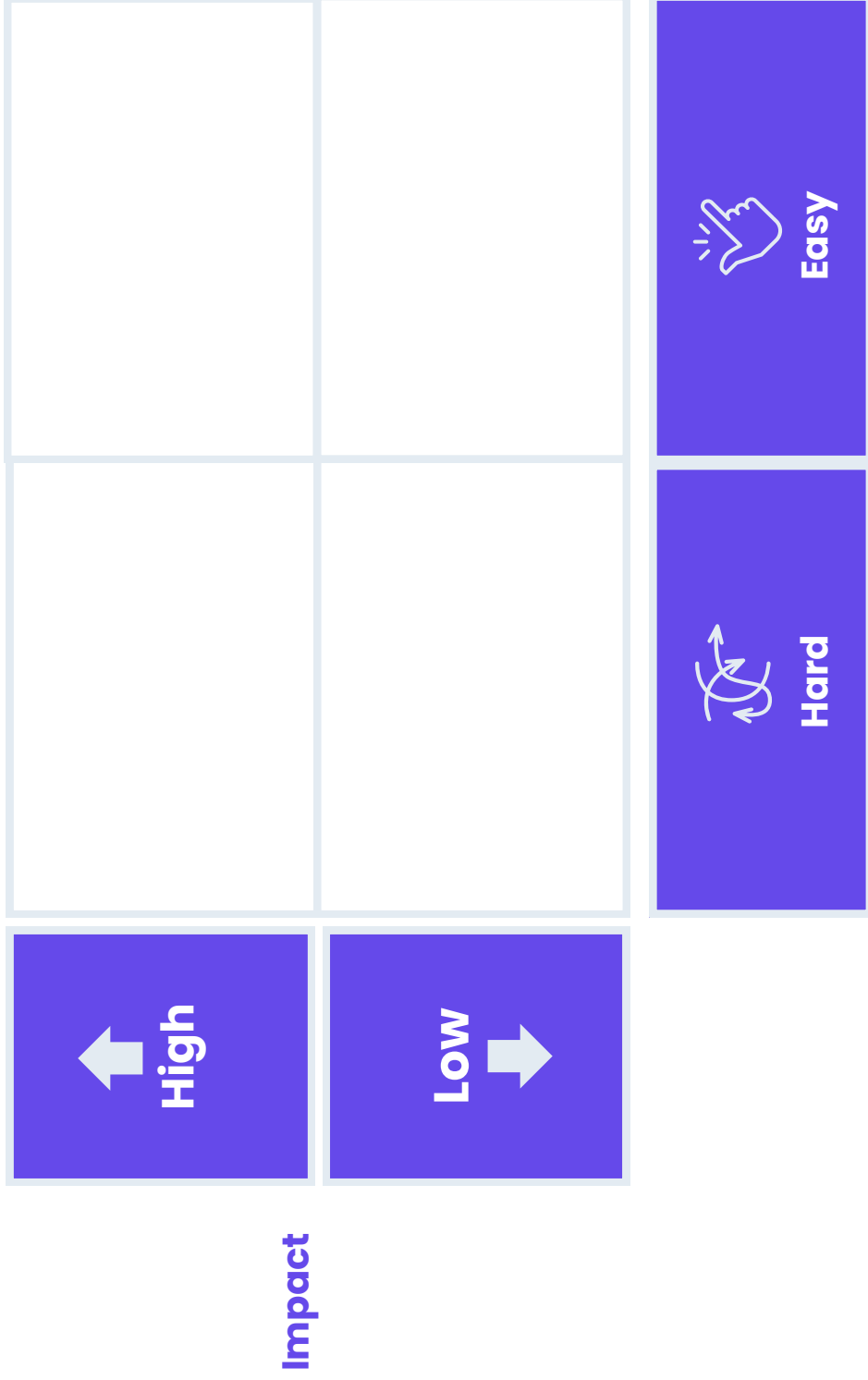
### **Activity 8 - Prototype Testing Summary:**

Even if the given example would take more than a month to be implemented, we recommend to choose an idea that is easy to test. Therefore, it would be good to give a space of two or three weeks to activate the action plan, test the idea and validate if it is going in the right direction. This activity will help them to evaluate the testing and redirect the project in the future.

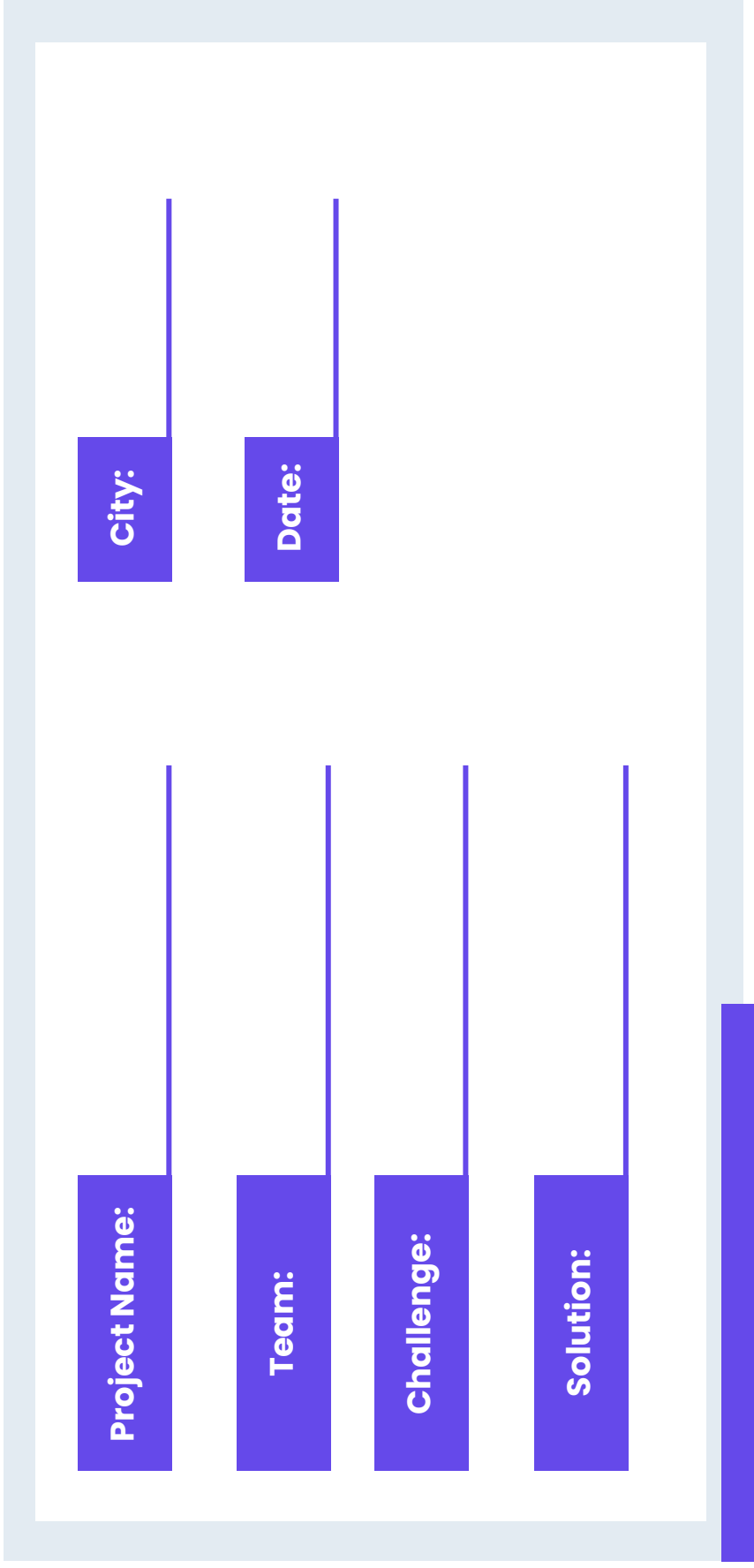
# Activity Template: Brainstorming



# Activity Template: Filtering ideas



# Activity Template: Project Definition



A project definition form template with a light blue border. It contains six input fields, each with a blue label box and a vertical line for text entry. The labels are: Project Name, Team, Challenge, Solution, City, and Date. A thick blue horizontal bar is located at the bottom of the form area.

Project Name:	_____	City:	_____
Team:	_____	Date:	_____
Challenge:	_____		
Solution:	_____		

\_\_\_\_\_

# Activity Template: Action Plan

When:	Who:	What:	Expected results:	Resources:



# 3.4 Activating your community

## 1 What is this process about?

Community Activation is a type of community engagement, building, and management that is based on a community-centered approach. The goal is to empower the community, so it can self-mobilize, self-organize, and determine the best way to reach its own goals.

## 2 Steps for the team to start activating their community:

- 1 Be clear about your purpose:** Tailor your communication to suit the needs and characteristics of your community.
- 2 Learn about your network:** Discover the following questions about your community: What are they interested in? Where do they come from? What do they want to do? How do they feel about your idea? What are their challenges to get involved?
- 3 Explain the benefits:** Use simple language to explain the benefits to existing and potential new members of your project/cause.
- 4 Be supportive:** Welcome new members and facilitate connections. Ask them what they would like to do and what they are interested in.
- 5 Create low barriers to entry:** Make it easy and appealing for new members to join and feel part of the community. Engage them with useful content and encourage them to get involved by doing something small to start.
- 6 Offer incentives to motivate participation.**





# 3 Activities

[Download template here](#)

## Activity 9: Community CANVAS





<p><b>Selection:</b></p> <p>How do people join the community?</p> <p>There is an Instagram account and a box at the school to access the team</p> <p>They join the first meeting and share their ideas</p>	<p><b>Shared Experiences:</b></p> <p>They feel good in nature</p>	<p><b>Rituals:</b></p> <p>Leave it better than you found it.</p>	<p><b>Content:</b></p> <p>What content creates value for members?</p>	<p><b>Rules:</b></p> <p>Rotatory cleaning weekly task for all school classes.</p>	<p><b>Roles:</b></p> <ol style="list-style-type: none"> <li>Project Manager</li> <li>Community Manager</li> <li>Well-being</li> </ol>	<p><b>Transition:</b></p> <p>How do members leave the community</p> <p>They give some feedback to the project and share their learnings with the team.</p>
	<p><b>Purpose:</b></p> <p>Why does the community exist?</p>	<p><b>Member Identity</b></p> <p>Who is the community for?</p> <p>School students</p>	<p><b>Values:</b></p> <p>What is important to us as community?</p> <p>Nature Respect Caring</p>	<p><b>Success Definition</b></p> <p>How does the community define success?</p>	<p><b>Brand</b></p> <p>How does the community express itself?</p>	
	<p><b>Organization:</b></p> <p>Who runs the community?</p> <p>The green club</p>	<p><b>Working structure:</b></p> <p>How does the team work together?</p> <p>Weekly Meetings (Tuesdays at 17:00)</p>	<p><b>Financing:</b></p> <p>What is the community's plan to be financially sustainable?</p>	<p><b>Channels &amp; Platforms</b></p> <p>What channels does the community use to communicate and gather?</p> <p>Instagram, Telegram and school newsletter</p>	<p><b>Data Management</b></p> <p>How does the community manage the data of its members?</p>	

### Some instructions:

#### Activity 9:

This exercise is a guideline table for the team to guide them in building a community. It is not necessary to fill in all the tables. It is a simple invitation to collective reflection to mobilise change and share ideas.

# Activity Template: Community CANVAS



## Selection:

How do people join the community?

### Shared Experiences:

### Rituals:

**Content:**  
What content creates value for members?

### Rules:

### Roles:



## Transition:

How do members leave the community?

**Purpose:**  
Why does the community exist?

**Member Identity**  
Who is the community for?

**Values:**  
What is important to us as community?

**Success Definition**  
How does the community define success?

**Brand**  
How does the community express itself?

**Organization:**  
Who runs the community?

**Working structure:**  
How does the team work together?

**Financing:**  
What is the community's plan to be financially sustainable?

**Channels & Platforms**  
What channels does the community use to communicate and gather?

**Data Management**  
How does the community manage the data of its members?

# 4. Digital tools and platforms for CLIMATE ACTION

Scan the QR with your phone or **click in the QR** to go to the website!

## GO-GOALS (SDG Board Game)



A Board Game for children to learn about SDG's (Sustainable Development Goals).

## FREE SDG RESOURCES FOR EDUCATORS



Website with media content and graphical assets for communicating the Goals

## TAKE ACTION TODAY (SDG Board Game)



Ideas to take action towards the SDG's.

## THE LAZY PERSON'S GUIDE TO SAVING THE WORLD



A guide of easy things we can adopt into our routines that, if we all do it, will make a big difference.

# Digital tools for CLIMATE ACTION

**Scan the QR** with your phone or **click in the QR** to go to the website!

## 170 ACTION TO COMBATE CLIMATE ACTION



A guide with 170 action to combat climate change

## THE LITTLE BOOK OF GREEN NUDGES



Is a quick guide to reducing your universities environmental impact through behavioural change.

## CLIMATE CHANGE WWF RESOURCES FOR SCHOOLS



Resources and courses around Climate Action for schools

## Education for Sustainable Development



Inspirational projects and strategies about Education for Sustainable Development

# 5. Digital tools and platforms for

## DESIGN AND INTERACTION

### CANVA

Canva is an online design and publishing tool with a mission to empower everyone in the world to design anything and publish anywhere.

[SIGN UP](#)

[HOW TO VIDEO](#)

### LOOM

Record quick videos of your screen and cam. An essential tool for hybrid workplaces. Useful for team-alignments, design, product management, content production, tutorials, training, team-building, feedback loops....

[SIGN UP](#)

[HOW TO VIDEO](#)

### MENTIMETER

Mentimeter is a platform to use live polls, quizzes, word clouds, Q&As and more to get real-time input - regardless if you're remote, hybrid or face-to-face.

[SIGN UP](#)

[HOW TO VIDEO](#)

### MIRO

Miro is a platform for modern work, enabling collocated, distributed, and remote teams to communicate and collaborate across formats, tools, channels, and time zones - without the constraints of physical location, meeting space, and whiteboard.

[SIGN UP](#)

[HOW TO VIDEO](#)

# 6. Tips for

## DIGITAL SAFEGUARDING

### 1 What is Safeguarding?

A good definition of safeguarding is taking proactive steps to prevent harm and abuse from occurring. At the same time, good safeguarding practice means you'll know what to do if harm or abuse ever takes place: who to contact, what to tell them, and how to help the person who's experienced abuse. Digital safeguarding simply means taking steps to stay safe online.

### 2 Common forms of online harm:

- 1 **Cyberstalking** – Repeatedly using electronic communications to harass or frighten someone. For example, by sending threatening messages.
- 2 **Hacking** – Accessing or using computer systems or networks without authorisation, often by exploiting weaknesses in security.
- 3 **Online bullying** – Offensive, intimidating, malicious, insulting behaviour and abuse of power online. This can humiliate or denigrate people.

### 3 Useful Resources

#### Safer Internet Centre

On this page, they have lesson plans, resources, guidance, all the information you need to teach online safety in the classroom.

[LINK TO SITE](#)

#### Digital Culture Network

10 step plan to ensure your policies and procedures are fit for online educational delivery.

[LINK TO SITE](#)

**TEDDY**

*Project funded by Erasmus+*

2023



# TOOLKIT

for digital and  
green skills in the  
classroom

**THANK YOU**

2811 (Germany)

Solutions for the Planet (UK)

Technotrend Foundation (Netherlands)

Agenzia per l'energia e lo sviluppo  
sostenibile (Italy)

