## SUSTAINABILITY IN THE CLASSROOM AND BEYOND – ENGAGE THE WHOLE SCHOOL!

Using the knowledge and ideas that you've gathered from the course, you will create an **action plan** in three chapters:

- **background**, where you provide some basic information about yourself and your school
- **preparation**, where you brainstorm about the role of sustainability in your class
- **action**, where you come up with a project and map out the steps needed to complete it

Don't forget to check the evaluation criteria by which your plan will be assessed.

## **CHAPTER 1: BACKGROUND**

Introduce yourself. Simple as that!

My name:	Daniela Gagliardini
My country:	Italy
My role:	Maths and science teacher
My school:	Lower secondary school in Offagna, a small town near Ancona, central Italy. Offagna is located in a countryside area, pupils have the opportunity to live outdoors. Pupils are 11-13 years old. There are about 20 pupils in a class. Outside the school there is a small garden, but municipality of Offagna allowed us to use a small piece of land near the school to set up a green classroom for outdoor teaching. In my school there are two maths and science teachers, we work together on projects, sometimes we ask other teachers to join our projects, trying to adopt the Whole school approach. Our Institute cares about environmental sustainability, we set up some educational projects about this topic. Teachers try to refer to the objectives of the 2030 Agenda.

## **CHAPTER 2: PREPARATION**

Think about a class that you currently teach, or a single lesson if you prefer. How can you add more sustainability elements to it?

You don't need to fill in all the blanks! Only fill in what is relevant to your subject, needs and goals. The point of this exercise is just to help you brainstorm and set priorities. You can simply write 'N/A' if some cells are not relevant to your objectives.

My class/lesson:	Ecosystem services provided by a forest		
	First year class (11 years old pupils)		
Environment			
Some related Sustainable Development Goals: climate action; responsible consumption and production			
Knowledge alread class:	y in my	photosynthesis, water cycle, greenhouse effect, air pollution (primary school knowledge)	
Knowledge I would like to add:		Bring out misconceptions, add scientific informations (secondary school level).	
		Think about trees as ecosystem services providers: regulation of atmospheric gases, climate, water, erosion, pollination, biodiversity, food supply, raw materials. Forests have are also cultural values such as aesthetic/educational/spiritual/identity values.	
Local issues alread class:	dy in my	There is a piece of land near the school we are allowed to set up as an outdoor green classroom.	
Local issues I wou add:	ıld like to	We will analyze a little urban forest near school and think about its services. 15th September a major flood in our region killed 12 people and caused extensive damage. I will talk about this extraordinary climate change related event.	
Competences already in my		They are interested on environment issues since primary school, they live outdoor with pleasure.	
CIASS:		They love hands-on activities, make drawings and reportages.	
		They have some scientific knowledge but is difficult for them making sense of this information.	



Competences I would like to add: <i>Some related Sustainable D</i>	<ul> <li>Connect formal knowledge with the knowledge emerging from the analysis in real contexts</li> <li>recognize the ecosystem services provided by forests in real contexts</li> <li>develop responsible behaviors to reduce CO2 emissions</li> <li>promote respect for forests and nature among their family</li> <li>Society</li> </ul>	
	institutions	
Knowledge already in my class:	Local political institutions.	
Knowledge I would like to add:		
Local issues already in my class:	Are enough public woods in Offagna? Who manages public parks?	
Local issues I would like to add:	Who makes decisions on deforestation or reforestation of public areas? Rules in national parks (Parco del monte Conero near here)	
Competences already in my class:		
Competences I would like to add:	Understand how citizens can influence political decisions.	
	Economy	
Some related Sustainable Development Goals: no poverty; affordable and clean energy; industry, innovation, and infrastructure		
Knowledge already in my class:	Trees provides food and raw materials.	
Knowledge I would like to add:	Local trees and their economic value. A local food forest.	
Local issues already in my class:	Wine and olive oil are typical local products, high economic value	
Local issues I would like to add:	Other typical local products with low economic value but high nutritional and gastronomic value	



Competences already in my class:	N/A
Competences I would like to add:	Increase consumption of local products and reduce imports

## CHAPTER 3: READY, SET... ACTION PLAN!

Think about a class that you currently teach, or a single lesson if you prefer. How can you add more sustainability elements to it?

Now that you've identified some gaps and needs in your curriculum, try to think of a **whole-school sustainability project** that you can carry out to further them.

The project can be anything from a **pedagogical innovation** (*e.g., using issue analysis in your lessons, building a school garden*) to an **organisational change** (*e.g., setting up an eco-committee, collaborating with colleagues on a series of lessons*) to a **community effort** (*e.g., painting a 'Cut X%' mural, contacting a local NGO for workshops*). There are many paths to the same destination!

If you're not sure what project you want to carry out, you can write down a few possibilities on a sheet and give them a score between 1 and 5 based on 'importance' and 'availability of resources'. The project with the highest combined score should be a good candidate. Then...

- 1. Write the **title and/or summary** of your project in the first row
- 2. Outline the **steps you need to follow** to carry out the project
- 3. Note down who will be involved in each step and how long you think it will take

You can add or remove rows if you wish.

Urban public areas: not only recreative parks			
What?	Who?	How long?	
1. Drafting learning objectives			

		r
<ol> <li><u>1) understand that trees are</u> <u>ecosystem services providers.</u></li> <li>walk around the town to recognize public areas providing services to environment.</li> <li>Bring out misconceptions, add scientific knowledge about photosynthesis, water cycle, atmosphere, air pollution.</li> <li>Brainstorming: forests as ecosystem services providers: environment / erosion / climate / food and raw materials/ cultural values.</li> </ol>	Science and maths teachers	At least three lessons
<ul> <li><u>2) Analyze ecosystem services in a</u> <u>urban forest</u></li> <li>- choose an area, make a map, point the trees on the map, recognize the</li> </ul>		One month
specie, collect measurements (high, diameter, distances).		
researcher to calculate environmental services.	Collaboration with Agricoltural Faculty or Environmental	
<ul> <li>make sense of those calculations with daily life examples (how many trees to lower CO2 emissions of a car)</li> </ul>	Engineering, Università Politecnica delle Marche, or Environmental Technical High	
<ul> <li>make informative signs and hang them in the urban area.</li> </ul>	School in Ancona	
<ul> <li>ask the municipality if there are public areas good for reforestation</li> </ul>	Technology and art teachers Municipality	Two weeks
3) <u>Analyze wild and cultivated trees</u> <u>in our area</u>		
<ul> <li>visit an olive plantation</li> <li>interview farmers</li> </ul>	Technology teacher	One month
- explore commercial issues	Geography teacher	
<ul> <li>4) <u>plan the reforestation of our</u> <u>green outdoor classroom</u></li> <li>Regional plant nursery ASSAM give plants at a very low cost</li> <li>ask families to help us with to plant the little trees</li> </ul>	Municipality Regional plant nursery: ASSAM	Two weeks



e.g., 2. Basic time & cost calculations - Ask Assam the cost estimation - University collaborate for free	<i>Science teachers Administration</i>	e.g., 2 weeks max
e.g., 3. Meeting with school head	Me & school head	1 day

This worksheet is adapted from UNESCO's <u>Education for sustainable development toolkit</u>. We hope you will find good use for this action plan in your school.

European School Education Platform and eTwinning are initiatives of the European Union and funded by Erasmus+, the EU's programme to support education, training, youth and sport in Europe. This document has been prepared for the European Commission by European Schoolnet under a contract with the Union, however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

