

*Creating an ECO online Natural Fit Virtual Programs to Prepare Students for  
boosting 21<sup>st</sup> century Skills 4 the Future (UNITY)*

*2021-1-SE01-KA220-SCH-000032448*

*STE(A)M-focused PBL for transferring 2021<sup>st</sup> skills for fighting against  
climate change*

**LESSON PLAN 9: Recycling Paper in the classroom**

*Presented by IC TONIOLO*

### Lesson procedure:

<b>Date:</b>	__15/06/2022__
<b>Teaching staff:</b>	Science and Technology teacher
<b>Term:</b>	2022-2023
<b>Week:</b>	1
<b>Year Level:</b>	Primary school, age 9-10
<b>Time/length</b>	6 hours
<b>Key Learning Area:</b>	Life skills and values Science and technology education Personal, social and Humanities Education
<b>Topic/focus:</b>	Recycling paper to reduce environmental impact
<b>Lesson Name:</b> Recycling Paper in the classroom	
<b>Foreseen Outcomes:</b>	
At the end of this lesson, students will be able to:	
<ul style="list-style-type: none"> <li>✓ identify causes and consequences of climate change</li> <li>✓ reflect on climate change damages and the personal behavior</li> <li>✓ understand the roles and importance of reducing the use of paper</li> <li>✓ know the principles of recycling process</li> </ul>	
<b>Lesson Description:</b>	
A brief introduction will be focused on the topic: “climate change”.	
The lesson will begin watching a video that will stimulate consideration on the consequences of climate change, its causes and what each of us can do to help slow down this process.	
Then the teacher will guide the discussion asking the pupils the following questions:	
<ul style="list-style-type: none"> <li>● Which are the consequences of climate change?</li> <li>● Which are the causes of climate change?</li> <li>● What can we do to reduce global warming?</li> </ul>	

Pre-requisites to this lesson plan (not applicable).

**Length (Lesson procedure):**

This lesson will take 2 -3 hours

To answer this question, class will be divided into 4 or 5 groups.

Each group will discuss and suggest proposals

**Step 1. Lead in:**

The teacher will listen and write down the answers on a blackboard and, if necessary, guide them to meditate on the importance of recycling **used paper**.

Each work group will produce a cardboard starting from the paper present in the classroom that is no longer needed.

**Lesson standard:**

- ✓ The lesson is standardized around STEAM-focused PBL for transferring 21st skills for fighting against climate change. Here, we focus on the recycling of used paper to build a greeting card (instead of buying it).
- ✓ Through creating and performing, students will reduce the environmental impact of commonly used products by recycling materials.

**Common Core State Standards:**

The teacher shall correlate the lesson with the “*Indicazioni nazionali per il curricolo*” (the fundamental document in force in Italy since 2012 for the planning and implementation of the didactic activity)

**Enduring Understandings:**

The students will understand the core ideas and philosophy behind the importance of recycling and of reusing materials, waste and used paper to build objects in the classroom. They will learn to recycle used paper and use it in a useful way.

**Essential Questions:**

- ✓ Can our behaviors change?
- ✓ What are the connections between paper, recycling and deforestation?

**Case section:**

How can you recycle the “used/wrinkled paper of the classroom”?

Ideas will be collected inspired by the video as well.

Then, they will all create a greeting card using “Handmade paper” (see the video). Each group will build a flowchart with instructions to create the paper machine and show their works to the other groups.

Finally, they will build a small ecological oasis, common to all classes, where they can throw away the paper for recycling and they will explain to younger classmates how they can recycle paper and avoid always using new paper.

**Skill focus:**

During the lesson, Cognitive Skills, Decision Making, Problem solving, Creative Thinking and Interpersonal Skills will be the focus.

**Content:**

The content of the unit is based on the disciplinary or topic-area concepts.

Building Knowledge through learning by doing.

**Assessments:**

Formative assessment: interviews and open-ended questions

Summative assessment: the results of the team work (the greeting card and the flowchart), the involvement of each pupil in organize the recycling activity and explain to the younger pupils how it works.

**Evidence of Student Learning:**

Provide a list of the process documentation that you plan to acquire during the course of the lesson. These may include photographs of students engaged in learning, students’ work, interviews of students, videos, etc.

**Texts/Resources:**

<https://www.youtube.com/watch?v=WkvPdUtYhX8>

<https://www.youtube.com/watch?v=sHbk9UAAXGE>

**Learning Activities:**

During the activities undertaken in the framework of the lesson, the following Learning activities will be used:

- 1) Brainstorming

- 2) Learning in group
- 3) Manual activity
- 4) Work design
- 5) Exposure of work to others
- 6) Active listening and consideration

**Practice:**

Teacher will explain the importance of environmental impact of recycling and the resulting damage of massive consumption of goods.

The teachers shall create a flexible learning environment for the students. Here, the teacher uses:

Circle time: ask about the questions and make the students ready for learning for the topic-specific subject.

Practice: The teacher sets-up demonstration/modeling

Cooperative learning: each group meditates, plans and carries out the work

Presentation of Works

**Suggested Extensions:**

Pupils could create a poster with their greeting cards.