Green Squad Skills: The Future of Recycling

Description: Facing the challenges of society, secondary students will go through hackathons, presenting products to transform the way of recycling, while developing several Steam Skills.

Driving question: How can we improve recycling manners in society?

Age range: 17 – 18 years old

Number of participants:

Class	24 students
School	120
City	120
Hackaton	35

Describing the activity's

Program Outline	
Phase 1	
Introduction – Presentation	Presentation and Sensibilization – 6 hours
Activity 1 – Mini Hackathon: Class Edition	Create projects and select the best aspects of each project to work on as a whole group; Developing communication skills and decision making to select 5 kids to represent the class. – 9 hours
Activity 2- Mini Hackathon School Edition	Present each class Project to select the best idea of school. The winning group will work to prepare their skills in time management and communication. – 9 hours
Phase 2	

Activity 3 – Visual Sensibilization for the community	Creation of a video to use to sensibilize the community to inform the about recycling and explain the campaign process – 4 hours
Activity 4 – Raising Awareness and Professional Tips	Seminar from a professional and 1 hour tip from professional from STEAM fields with each group – 4 hours
Activity 5 – Perfecting the tools	After feedback from the expertees, the groups will have time to perfect their products and presentations – 8 hours
Activity 6 – The 7R's – Get Creative!	Activities to implement the 7R's in a creative way, letting the students decompress while creating something from recycling. – 4 hours
Conclusion: Regional Hackaton –The Finals	Final and Regional Hackathon – 4 hours
Total Time	48 hours (24 hour per phase)

Phase 1

Activity:	Project Introduction: Sensibilization to Recycling
Goal:	Present the aim of the campaign and sensibilize students about the importance of recycling
Teaching Methods:	Discussion, learning by practice
Resources needed:	Technicians/Field Experts, Cleaning Supplies, Flyers, transport
Learning objectives:	Cooperation between peers, recycling
Material Budget:	5.000€

Activity:	Mini Hackathon: Class Edition
Goal:	Collaboration to create a product/solution to bring awareness to the class and community to recycling and its benefits
Teaching Methods:	PBL, Brainstorming, Experiential Learning
Resources needed:	Technicians/Field Experts, Software, Building materials
Learning objectives:	Decision Making, Communication, STEAM
Material Budget:	3.000€

Activity:	Mini Hackathon School Edition
Goal:	Collaboration to create a product/solution to bring awareness to the school and community to recycling and its benefits
Teaching Methods:	PBL, Brainstorming, Experiential Learning
Resources needed:	Technicians/Field Experts, Software, Building materials
Learning objectives:	Decision Making, Communication, STEAM, Time Management, Build a positive culture about recycling
Material Budget:	7.000€

Phase 2

Activity:	Visual Sensibilization for the community
Goal:	Create a video aimed at the community to inform about recycling and explain the campaign process
Teaching Methods:	Collaborative Learning; Experiential Learning
Resources needed:	Technicians/Field Experts, Editing Software
Learning objectives:	Learn about video editing, reflect on how to present their thought process to other people
Material Budget:	20.000€

Activity:	Raising Awareness and Professional Tips
Goal:	Extend their knowledge about recycling; Get a review from a professional so they can make their projects the best
Teaching Methods:	Direct Instruction, Collaborative learning
Resources needed:	Technicians/Field Experts
Learning objectives:	Cooperation, STEAM, Communication
Material Budget:	30.000€

Activity:	Perfecting the tools
Goal:	Take a professional advise into consideration and perfect their project
Teaching Methods:	PBL, Collaborative Learning
Resources needed:	Technicians/Field Experts

Learning objectives:	Flexibility, Proactivity, Problem Solving, Reflection
Material Budget:	10.000€

Activity:	The 7R's – Get Creative!
Goal:	Explore the 7R's while being creative
Teaching Methods:	Direct Instruction, Experiential Learning
Resources needed:	Recycling Materials, Craft Materials
Learning objectives:	Learn about the 7R's and how to use them/applicate them, explore their creativeness
Material Budget:	5.000€

Activity:	Regional Hackaton –The Finals
Goal:	Present their final projects to a board of Jury specialized in the STEAM areas
Teaching Methods:	PBL
Resources needed:	Technicians/Field Experts, Prizes
Learning objectives:	Communication, Build a positive culture about recycling, STEAM
Material Budget:	35.000€

Budget Total	
Phase 1	15.000€ per school (105.000€)
Phase 2	100.000€
Total	205.000€

Expected difficulties:

- Lack of interest from the students and community;
- Not enough time to develop good projects;

Prizes for the Mini Hackathons and Regional Hackathon	
Class Hackathon	Certificate of Participation
School Hackathon	Certificate of Participation, Merch from the company
Regional Hackathon	Best Video: Internship in the marketing department of the company, a new camera, Certificate Winners of the Hackathon: Internship in the company, home compost machine

S	Learning about recycling and its impact
T	Use of technology and software for product development
E	Construction of the product
A	Communication, teamwork, creativity
M	Analysis of the product

Soft Skills Integration

Comunication	Through teamwork, expressing their needs/difficulties, public speaking
Decision Making	To select the colleagues that represent the class; Through the process of the project.
Proactivity	To solve the problems, they will encounter through the Project.
Time Management	To make sure they create a product in time; To follow the presenting guidelines.
Flexibility	To make sure every feedback is heard and taken into consideration.