

Plan Your Project: Sustainable Mission

Activity code: ncC4G03



 DURATION	45 minutes
 AGE GROUP	17-18 years old
 TOPICS	SUSTAINABILITY PROJECT MANAGEMENT DIGITAL TECHNOLOGIES LEADERSHIP



Description of the project

In *Plan Your Project: Sustainable Mission*, students are invited to take on the role of young changemakers. In this extracurricular STEAM activity, they will imagine and collaboratively plan a microproject aimed at generating a real, positive impact on the environment or their local community. Working in small teams, participants explore the foundations of sustainable development and learn to organize their ideas using digital tools like Canva, Trello, or Google Docs.

Throughout the session, students dive into essential project management concepts—such as defining clear objectives, assigning tasks, managing time and resources, and anticipating potential risks. Along the way, they are encouraged to think critically, communicate empathetically, and design their proposals with inclusion and diversity in mind. By reflecting on local challenges and linking them to global issues, students develop a deeper understanding of how collaborative planning can lead to meaningful solutions.

The activity culminates in the creation of a visual, structured project plan that each group presents to their peers. More than just a plan, this final product represents their ability to turn ideas into action—blending creativity, technology, and social awareness. Through this hands-on experience, students build key competencies in leadership, sustainability, and STEAM integration, while learning how small initiatives can spark big change.



Objectives: What will I learn?

- Apply the fundamental principles of project planning by collaboratively designing a sustainability-focused microproject, equipping them with essential skills to transform ideas into structured, actionable plans.
- Use digital collaboration tools such as Canva, Trello, and Google Docs by applying them in the

planning of their group project, allowing them to effectively organize tasks, manage resources, and build structured timelines with the goal of simulating real-world teamwork and project execution.

- Develop sustainable and context-sensitive solutions by identifying real local problems and using structured planning to build the ability to respond creatively and responsibly to their community's needs.
- Develop their communication skills by designing visually structured project plans using tools like Canva to convey their ideas clearly and empathetically, with the goal of informing and engaging diverse audiences in meaningful and inclusive ways.
- Explore the dynamics of equitable participation by reflecting on gender roles within their teams and by rotating leadership and technical tasks to understand the importance of inclusion and shared responsibility in collaborative project work.
- Assess the broader impact of their projects by analyzing both environmental and social factors related to their chosen problem to develop the ability to think holistically about sustainability and responsible innovation.
- Use visual and creative techniques to express the core message of their project by designing digital plans and presentations, they will learn how to use artistic elements as tools for inclusive communication and engagement with diverse audiences.
- Investigate sustainability practices rooted in cultural or traditional knowledge by integrating these into their visual plans to develop respect for diverse knowledge systems and learn to apply them meaningfully within a STEAM-based problem-solving process.



Materials: What do I need?

1. Provided by the teacher/institution:

- Projector and computer with stable internet access
- Support materials (worksheets) including: Project plan template

2. Provided by students:

- Laptop or tablet with internet access
- Active Google Account
- Access to Canva or Trello (free version)
- Optional: notebook, pens and notepad.

3. Downloadable resources:

- [Project plan template](#)
- [Canva quick start guide](#)



Previous preparation

- Organize students into mixed-gender groups of 3 to 4 participants, promoting inclusive collaboration. Assign rotating roles such as facilitator, digital coordinator, presenter, and note-taker to ensure balanced participation.
- Confirm that all students have access to digital tools required for the activity (Canva, Trello, and Google Docs) and that their devices are properly connected to the internet. Support account creation ahead of time if necessary.
- Print or share digitally the materials needed for the session, including:
 - The project plan template
- Present one or two real examples of youth-led sustainability projects—include female and gender-diverse role models to highlight inclusive leadership.
- Show short videos introducing environmental challenges and examples of impactful youth action, helping to activate students’ prior knowledge and spark engagement ([an example](#)).
- Prepare to act as a facilitator throughout the session: support group dynamics, help troubleshoot digital tools and promote equitable participation and critical reflection.



INVESTIGATION



Check out these resources

Today’s world presents young people with urgent and complex environmental and social challenges. From rising pollution levels to unequal access to resources, these issues demand not only awareness, but action. The ability to plan real, feasible solutions, even at a small scale, is an essential skill for responsible and empowered citizenship. In this activity, students will explore how sustainable thinking, and collaborative planning can become tools for community transformation.

By learning to identify local problems and organize solutions, students will take the first steps toward designing actions that matter. They will use digital and creative tools not just to present their ideas, but to give them structure, purpose, and visibility.

Real World examples:

- A group of students in Aveiro developed an interactive exhibition on plastic pollution in the ocean, combining artistic installations with scientific data.
- Teenagers from a neighborhood created a mobile app to track and improve the use of recycling stations in their city.
- In Porto, secondary school students transformed their school garden by applying permaculture principles to create a “Circular Garden” model that reduces waste and encourages biodiversity.

These cases demonstrate that even small actions can have lasting impact when driven by planning,

creativity, and teamwork.

To guide research and promote critical thinking, students are encouraged to reflect on the following questions:

- What environmental or social problems do you see in your community, school, or surroundings?
- What turns a good idea into a successful, real-world project?
- How can you ensure that your project is both inclusive and sustainable?
- Who will benefit from your solution, and how can you represent their needs in your plan?



CREATE



Some things you need before beginning

The world today is shaped by young voices calling for change, and yet, while environmental concern is high, meaningful participation remains low. This activity invites students not just to care, but to act. Planning a sustainability project may seem like a small step, but it cultivates skills that empower youth to transform their communities.

Here are some real and surprising insights that highlight the urgency and potential of this work:

- *Most care, few act:* Around 70% of young people in Portugal report being concerned about the future of the planet, but fewer than 20% are actively engaged in environmental initiatives. This activity helps close that gap by showing students how their ideas can become action.
- *Sustainability starts at school:* Simple initiatives, like waste-reduction projects in school cafeterias, have already cut food waste by up to 30%. With better planning, small steps can lead to measurable environmental impact.
- *Apps with purpose:* Youth-created digital tools, like apps for recycling, water conservation, or green mobility, have been recognized across Europe for their innovation and social value. Many emerged from school-based brainstorming sessions just like this one.
- *Ideas need structure to succeed:* Research shows that when young people use structured planning tools, the likelihood of executing their creative ideas successfully increases by up to 80%. Project planning isn't just an academic skill; it's a life tool for turning vision into action.



Now, follow these steps

Step 1. Identify a local problem

- Groups will use the activity Sheet "[Exploration sheet](#)" to begin with a critical exploration of their community or school to identify an environmental, social or economic problem.
- They will have to analyze:
 - Who is affected and how

- Causes and consequences
- Personal experiences
- A mission question to guide the solution



Step 2. Define objectives and Sustainable Solution

- Groups will use the Activity Sheet “[Solution Planning and SMART Objectives](#)”, and based on the mission question, each group proposes a realistic, sustainable and innovative solution. They must define:
 - SMART goals (specific, measurable...)
 - Success indicators
 - Principles of inclusion and sustainability
 - Visual sketch of the idea



Step 3. Build the Task Plan

- Groups will use the Activity Sheet “[Task, Resource and Risk Plan](#)” and they will organize actions into tasks with responsible parties and deadlines. They must identify:
 - Necessary resources (human, material, digital)
 - Possible risks and mitigation strategies
 - Group operating rules



Step 4. Create the visual plan

- The groups will build a visual product using Canva, Slides, etc., as a way of communicating the plan in a clear, appealing and accessible way. They will use the Activity Sheet “Visual Plan and Artistic Expression” and they will work on:
 - Target audience and message
 - Digital structure and tools
 - Visual expressiveness and gender and cultural inclusion
- If they want to Use Canva, there is a Canva Quick Start Guide.



COMMUNICATE

At the end of the session, each group will present their project plan to the class. This is their opportunity to showcase not only what they created, but also how and why they created it. Presentations should go beyond description, they should tell a story, justify choices, and reflect on impact.

Each group’s presentation should include the following elements:

- *Storytelling or dramatization* to introduce the problem and the community it affects—this can be a brief scene, narrative, or real-life testimony that brings the issue to life.
- *Explanation of the problem and the proposed solution*, including the group’s mission question, main goals, and how they arrived at their idea.
- *Justification of the planning choices*, describing how the team organized tasks, chose tools, and adapted their strategy to be realistic, inclusive, and sustainable.
- *Presentation of the visual plan* (poster, infographic, or slideshow), clearly highlighting how it communicates the project’s objectives, tasks, and impact. Teams should also explain their design choices—why certain formats, colors, or visual styles were used, and how these relate to the message and target audience.
- *Reflection on the project’s expected impact*, the difficulties faced during planning, and key lessons learned about teamwork, sustainability, and leadership.
- *Equity and inclusion analysis*, where students describe how gender representation, inclusive language, and accessibility were addressed in both group dynamics and visual communication.

Encourage groups to compare their solution to existing real-world initiatives or explain how their project could have an impact if implemented in their community. This step helps students connect their work to broader realities and promotes critical evaluation of their ideas.



It's time to share!

Share your results using the hashtag:

#SustainableSTEAMMission

- LinkedIn: <https://www.linkedin.com/company/steambrace-project/posts/?feedView=all>
- Instagram: https://www.instagram.com/steambrace_eu/
- X: https://www.instagram.com/steambrace_eu/



KEEP ON LEARNING



How can I make a similar project on my own?

This activity may be over, but your learning and your power to make an impact, is just beginning. Use these reflection questions to think critically about what you've experienced and how you can apply it to future challenges in your life, school, or community.

Reflection on the Activity

- What surprised you most during the project planning process?
- What skills did you develop, and which ones do you want to strengthen further?
- How did your group ensure inclusion and shared responsibility in the decision-making process?
- In what ways did art and visual design help communicate your project's message?
- What was the biggest challenge your group faced—and how did you overcome it?

Connecting to Real Life

- Can you imagine doing a similar project independently or with friends outside of school?
- If you had more time or resources, what would you improve or expand in your project? Why?
- Have you ever seen a problem like the one you worked on in another context? How could your plan apply there?
- Why do you think your project matters to your school, neighborhood, or the planet?

Beyond This Activity

- Could you use the same planning method to address another issue (e.g., mental health, social inequality, water use)? Which one and how?
- How could creative and inclusive design improve the impact of everyday things—like signs, apps, or campaigns—in your community?
- How might you combine traditional knowledge and modern tools again in a new project?



Which are other connected projects?

If this activity inspires you, there are many ways to take your ideas further and bring your plan to life—or explore new topics connected to sustainability, inclusion, and creative project planning. Here are some ideas you can pursue on your own or with your group:

- Turn your project into a real prototype: Build a small-scale model, digital mock-up, or pilot version of your idea.
- Present your idea to your school administration, a local organization, or community group to seek support or feedback.
- Research similar sustainability challenges in another part of the world and compare how different communities are solving them. Create a cross-cultural infographic or short article.
- Organize a video call or email exchange with a student group, activist, or NGO working on the same issue in a different region.
- Invite a mentor, community leader, or local NGO to guide or co-develop your idea.
- Start a social campaign to raise awareness about your project using visuals, video reels, or storytelling on platforms like Instagram or TikTok.
- Redesign your project’s visual identity (logo, slogan, poster) to target a different audience—children, elders, or multilingual communities.
- Create a public mural, zine, or interactive display that showcases your idea in an artistic and inclusive format.
- Investigate how traditional sustainability practices (e.g., seed saving, natural construction, collective care) can inform modern solutions.
- Develop a new project that tackles related issues, such as eco-anxiety, climate justice, or access to green spaces.



LINKS FOR MORE INFORMATION

- **BCSD** **Portugal**
<https://bcsdportugal.org/en/>
- **Portuguese** **Environment** **Agency**
<https://apambiente.pt/>
- **Ambiente** **Portugal** – **Project** **Gallery**
<https://www.ambienteportugal.pt/projects>

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