VIRAL

NURTURING FUTURES

Roadmap and practical strategies for monitoring and evaluating sustainable education projects

Welcome to this practical guide!

Here you will find a manual that will help you analyse the most important challenges in your educational centre. Not only that, but We will also provide you with tools and exercises that will enable you to develop efficient solutions and to face these challenges. In addition, you will learn to follow up and evaluate the effectiveness and sustainability of the actions you carry out. Get ready to become a change agent in your school!

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Contents

Unit 1

THE REASONS FOR THE MANUAL

1 THE REASONS FOR THE MANUAL

We are pleased to present you with this guide specially designed for highschool teachers and students, with the aim of empowering you as an agent of change in promoting sustainability in your school. Through this document, we seek to provide practical tools and digital advice that enable your school to develop the necessary skills to identify and address the environmental problems present in your surroundings.

In this guide, you will find resources that will make it easier to identify the specific environmental challenges that affect your school. You will learn how to analyse and understand the nature and extent of these problems, in a way that you can then effectively address them.

In addition, we provide you with guidance on how to build clear goals and specific action plans to reverse harmful situations. The action plans will focus on the implementation of sustainable solutions and the adoption of practices that promote environmental preservation through amusing and practical dynamics.

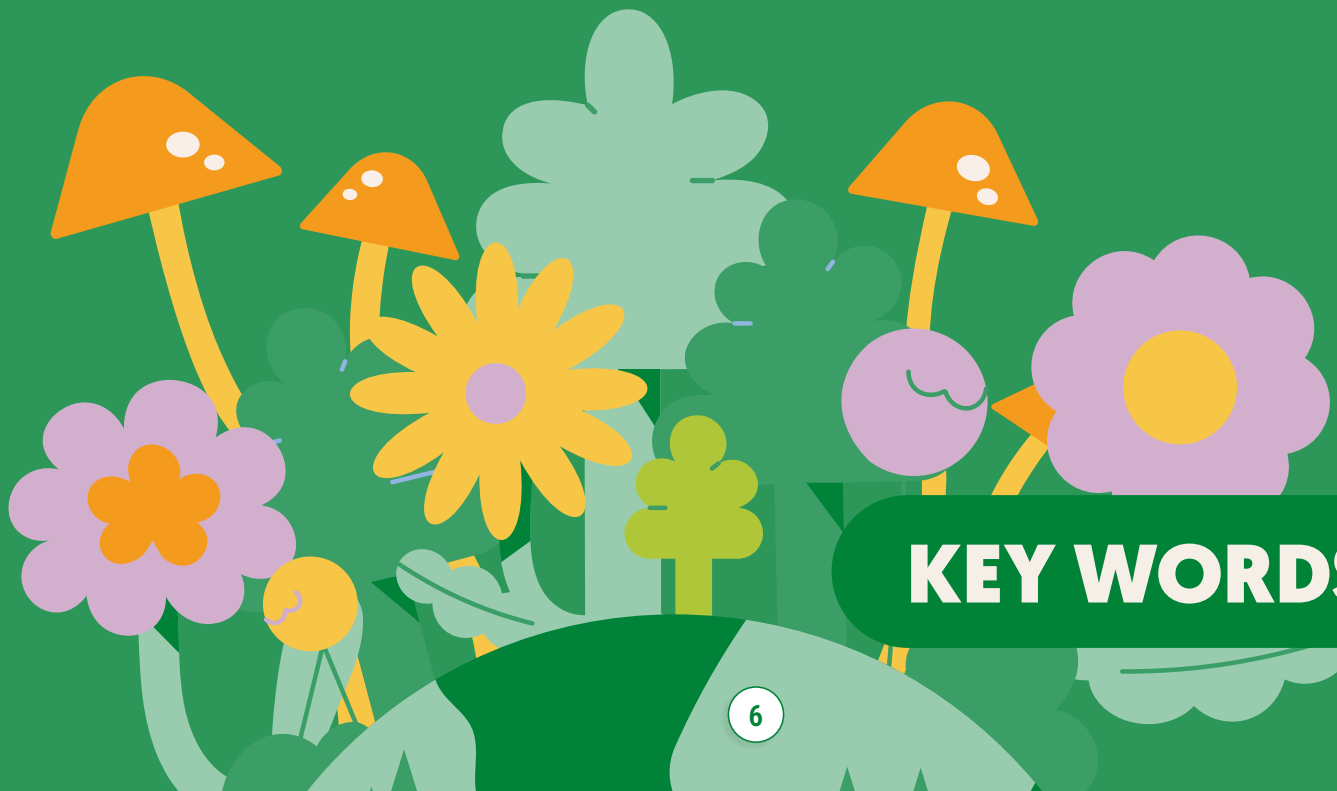
The guide also promotes the use of digital tools that facilitate the process of raising awareness and participation of the entire educational community. You will find digital resources and tips on how to leverage information and communication technologies to promote sustainability in innovative and effective ways.

Our ultimate goal is for schools to become true models for sustainability, promoting the development of responsible environmental awareness among teachers and students. We firmly believe in the transformative power of education and in the crucial role that new generations play in building a sustainable future.

This guide provides you with the necessary tools to become a leader of change and actively contribute to building a healthier and more sustainable school environment. It provides you with a comprehensive methodology for use in school projects, elucidating the entire process, including the components and actions to consider when planning and executing a project within the school. This methodology empowers you to define objectives, outcomes, activities, indicators, and sources of verification.

WE ARE EXCITED TO JOIN YOU ON THIS JOURNEY TOWARDS SUSTAINABILITY!

Unit 2



KEY WORDS

2 KEY WORDS

To get into this guide, it is essential to make a summary of the key concepts and basic definitions that are usually used when we talk about environment and environmental education.

ENVIRONMENT

The environment refers to everything around us, including air, water, soil, living things, and non-living objects. It is the place where we live and develop. Our environment provides the natural resources we need to survive, such as food, water, and clean air. Caring for and protecting our environment is important to maintain the health of our planet and guarantee a sustainable future for future generations.

ECOSYSTEM

An ecosystem is like an incredibly complex and vibrant natural neighbourhood. Imagine that you are in a neighbourhood where living beings, such as plants, animals and microorganisms, coexist and depend on each other. Each one has its own role: some are the 'builders', like trees that create homes for other living things; others are 'gatherers', like the insects that pollinate flowers; and there are also 'recyclers', such as microorganisms that break down dead matter and convert it into plant nutrients. All together they form a perfect balance.

Furthermore, in this natural neighbourhood, non-living factors such as water, air, soil, and sunlight are also important in keeping life in balance. When all these elements work together, a healthy and diverse ecosystem is created.

Ecosystems can be as small as a pond or as large as a rainforest. Each has its own 'personality' and unique characteristics, with different species and relationships between them. It is fascinating to explore and understand how each ecosystem works, and how our actions can affect its balance.

ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability refers to the ability to maintain and preserve natural resources and the balance of ecosystems over time, allowing the satisfaction of present needs without compromising the ability of future generations to satisfy their own needs. It is based on the idea of living in harmony with nature, seeking a balance between human development and environmental conservation.

Environmental sustainability needs the responsible management of natural resources, such as water, air, soil, forests and biodiversity, with the aim of avoiding their depletion or degradation. This means adopting practices and policies that promote the conservation, efficient use and protection of natural resources, as well as the reduction of pollution and negative impacts on ecosystems.

In addition, environmental sustainability includes social and economic aspects. It seeks to promote equity, social justice and human well-being while protecting the natural environment. This implies fostering the participation and empowerment of communities, promoting equal opportunities between men and women, and ensuring a fair distribution of the benefits and costs associated with the use of natural resources.

ENVIRONMENTAL EDUCATION

Environmental education is a participatory and interdisciplinary learning process that seeks to build environmental knowledge, values, and practices to promote participation in solving problems associated with environmental conservation. It aims to promote awareness, knowledge, understanding and appreciation of the natural environment. It focuses on ethics, values, and active training towards sustainable development.

Through educational activities, it aims to generate a change in people's attitudes and values, promoting the conservation of natural resources, the protection of biodiversity, the sustainable use of resources and the adoption of lifestyles more respectful of the environment.

SUSTAINABLE DEVELOPMENT GOALS

Sustainable Development Goals (SDGs) are a set of global targets established by the United Nations to address the most pressing challenges facing our planet and build a sustainable future. These goals are designed to improve people's quality of life, protect the environment, and promote economic prosperity in an equitable way.

One of the fundamental aspects of the SDGs is their focus on the environment and the need to protect and preserve our natural resources.

Next, I will explain some of the most relevant sustainable development goals in relation to the environment:

Goal 6: Clean water and sanitation: It seeks to guarantee universal access to drinking water and adequate sanitation, as well as promote sustainable water management practices.

Goal 7: Affordable and non-polluting energy: Its objective is to guarantee access to clean, affordable, and sustainable energy for all, promoting the use of renewable sources and more efficient technologies.

Goal 11: Sustainable cities and communities: It promotes the development of inclusive, safe, resilient, and sustainable cities, with special attention to urban planning, access to adequate housing and sustainable transport.

Goal 13: Climate Action: It seeks to take urgent measures to combat climate change and its effects, including mitigation of greenhouse gas emissions and adaptation to the impacts of climate change.

Goal 14: Life underwater: It focuses on the conservation and sustainable use of the oceans, seas, and marine resources, protecting marine biodiversity and avoiding pollution of aquatic ecosystems.

Goal 15: Life of terrestrial ecosystems: It promotes the conservation, restoration and sustainable use of terrestrial ecosystems, sustainable forest management, the fight against desertification and the loss of biodiversity.

These are just a few examples of the environment-related sustainable development goals. Importantly, all the SDGs are interconnected and address different aspects of sustainability, as they recognize the importance of protecting our planet to ensure a prosperous and equitable future.

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE IPCC

It is an international scientific body created more than 35 years ago by the United Nations Environment Program (UNEP) and the World Meteorological Organization (WMO). Its main objective is to compile and present, in a clear and objective way, up-to-date information on climate change.

The IPCC has submitted 6 progress reports that represent major milestones in the communication of scientific knowledge on climate change. Each report addresses different aspects about climate change, including the scientific basis, impacts, mitigation and adaptation. In addition to assessment reports, the IPCC also publishes special reports and recommendations.

Unit 3

INTRODUCTION

3 INTRODUCTION

Imagine for a while that your school is like an ecosystem. Just like in nature, your school is made up of different elements that interact with each other to create a healthy and balanced learning environment.

In this educational ecosystem, students, teachers, support staff and managers are like the inhabitants of that environment. Each of them has an important role to play. Teachers are the 'builders', providing knowledge and skills to build a strong foundation in your education. Students are the 'learners', exploring and soaking up everything that comes their way, like little sponges of knowledge. However, as in any ecosystem, the exchange that occurs is mutual, and in this case, there are always moments and situations in which both teachers and students enrich each other.

Just like in a natural ecosystem, there are also fundamental resources, which are necessary for the educational ecosystem to work properly. These resources can be books, study materials, technology, green spaces, natural light, clean air, and energy. All these elements are like the 'non-living factors' that support life in the educational ecosystem.

Environmental sustainability in your school is about maintaining a harmonious balance among all these elements. It implies making decisions and actions that promote the responsible use of resources, the waste reduction and the conservation of the environment. Just like in a natural ecosystem, when we take care of our school, we are protecting our own learning habitat and ensuring that future generations can also enjoy it.

You can contribute to environmental sustainability at your school in many ways. You can save energy by turning off lights when they are not needed, recycling paper and plastic, using water responsibly, promoting the use of reusable materials, and participating in awareness projects about protecting the environment.

Remember, every little action matters and all of us together can make a difference. By adopting sustainable practices at the school, you are helping to create a healthier, more inspiring, and conscious environment.

RECOMMENDED DIGITAL TOOLS TO CARRY OUT THE ACTIONS

CREATION OF SOLUTIONS, PRIORITIES, AND MAPPING.

AHA SLIDES

Aha Slides is a versatile platform for creating visual presentations and interactive slides, making it useful for prioritizing tasks, setting goals, and visualizing project strategies.

KAHOOT

Kahoot is an engaging platform that allows interactive quizzes and surveys. It can be used to gather opinions, prioritize ideas, and create an interactive learning environment.

REGULAR TEAM MEETINGS

ZOOM

Zoom is a platform for virtual meetings, providing digital check-ins for continuous monitoring of project progress and addressing obstacles.

SURVEYS AND VOTING

GOOGLE FORMS

Google Forms, part of Google Workspace, provides simplicity and accessibility for straightforward data collection needs, facilitating collaboration and data management.

SLIDO

Slido is designed for interactive Q&A sessions and live polls, making it ideal for gathering opinions, feedback, and votes from participants during events and meetings.

MENTIMETER

Mentimeter is a powerful tool for creating and conducting surveys and polls. It enables real-time audience engagement and data collection during presentations and meetings.

PROJECT MONITORING SOFTWARE

REDCAP

REDCap is a secure web application designed for building and managing online surveys and databases, ensuring secure data collection in research projects.

EFFICIENT DATA COLLECTION

SURVEYMONKEY

SurveyMonkey is a versatile survey platform designed for quantitative data collection, allowing for dynamic survey creation and meaningful data analysis.

COMPREHENSIVE DATA COLLECTION

QUALTRICS

Qualtrics is a robust platform suitable for both quantitative and qualitative data collection, offering advanced analytics for in-depth data evaluation.

DIGITAL WHITEBOARDS AND BRAINSTORMING

LUCID

Lucidspark is a collaborative whiteboard tool that allows teams to brainstorm, visualize ideas, and work together in a virtual space. It is suitable for brainstorming and idea generation sessions.

JAMBOARD

Google's Jamboard offers a digital canvas for brainstorming and visual collaboration. It includes features like sticky notes, drawings, and image sharing.

MINDMEISTER

MindMeister is a mind mapping tool that facilitates brainstorming and idea organization. It's effective for visualizing project concepts and structures.

STORMBOARD

Stormboard is a versatile digital workspace for brainstorming, organizing ideas, and managing projects visually, with a focus on collaboration and innovation.

MIRO

Miro is a comprehensive online whiteboard platform for visual collaboration. It offers various templates and features for brainstorming and mapping out ideas.

PRESENTATION SOFTWARE

MICROSOFT POWERPOINT

Microsoft PowerPoint allows for the creation of visually engaging presentations, ensuring clear communication of project findings and results to stakeholders.

PROJECT MANAGEMENT SOFTWARE

ASANA

Asana is a project and task management tool that facilitates team coordination and project planning. It includes features like Gantt charts and timesheets.

MICROSOFT PROJECT

Microsoft Project is a comprehensive project management solution offering features like Gantt charts, timesheets, and task tracking, making it an ideal digital command center for project management.

TRELLO

Trello is a project management platform that uses boards and cards to organize tasks, track progress, and collaborate within teams. It's especially useful for task tracking and project planning.

COMMUNICATION PLATFORMS

SLACK

Slack is a real-time messaging platform that enhances communication and collaboration among team members. It offers channels, direct messaging, and file sharing for efficient communication.

MICROSOFT TEAMS

Microsoft Teams provides a collaboration hub for chat, video conferencing, and file sharing, ensuring effective communication and coordination within project teams.

COLLABORATIVE DATA MANAGEMENT

AIRTABLE

Airtable combines spreadsheet simplicity with relational database complexity, allowing teams to work together on data organization and analysis in real time.

COLLABORATIVE DOCUMENTATION PLATFORMS

GOOGLE WORKSPACE

Google Workspace offers a suite of collaborative tools for document creation, editing, and sharing, making it suitable for recording project details efficiently.

MICROSOFT 365

Microsoft 365 provides tools for collaborative document creation, editing, and sharing, promoting effective documentation and collaboration among team members.

PLANNING, COLLECTING, AND ANALYZING

MIXED METHODS

The Mixed Methods App is designed for researchers employing mixed methods, assisting in planning, collecting, and analyzing both qualitative and quantitative data.

PROJECT MANAGEMENT SOFTWARE

JIRA

Jira is a project management tool with adaptive features, enabling agile management and the ability to adjust strategies based on evolving project challenges.

CLICKUP

ClickUp is a comprehensive project management platform that offers customizable features to suit various project management needs, facilitating adaptive management.

DATA ENTRY AND ORGANIZATION

MICROSOFT EXCEL

Microsoft Excel remains indispensable for data entry and organization, making it effective for managing datasets with diverse variables.

TIPS FOR DIGITAL TOOL SELECTION AND IMPLEMENTATION

COMPATIBILITY

It is crucial to ensure that the selected digital tools align effectively with your project's goals and specific requirements.

TRAINING

Providing comprehensive training for team members responsible for data collection and analysis is essential to harness the full potential of these tools.

INTEGRATION

Seek digital tools that can seamlessly integrate with one another, fostering a cohesive digital ecosystem for your project.

SEGURITY

Prioritize digital tools with robust security features, particularly when handling sensitive data.

USER-FRIENDLY INTERFACE

Choose tools that offer an intuitive and user-friendly interface to minimize the learning curve for your team members.

DATA VALIDATION

Implement data validation features to maintain data accuracy and consistency throughout the project's lifecycle.

CUSTOMIZATION

Look for tools that can be tailored to your project's specific needs, allowing for the adaptation of data collection and reporting features.

DATA BACKUP AND RECOVERY

Prioritize tools with robust backup and recovery options to safeguard against data loss or system failures.

TECHNICAL SUPPORT

Consider tools that offer reliable technical support and assistance to address any issues that may arise during implementation.

COST-EFFICIENCY

Assess the overall cost of acquiring and implementing the tools, including licensing, maintenance, and training expenses, to ensure they fit within your project's budget.

By embracing these digital tool selection and implementation strategies, you empower your project monitoring initiatives with heightened efficiency and precision. It's important to remember that the right tools not only enhance data collection but also significantly contribute to the overall success and long-term sustainability of your projects.

Unit 4

4 IS OUR SCHOOL SUSTAINABLE?

4 IS OUR SCHOOL SUSTAINABLE?

The first step we must take is to observe and analyse our school to identify the main concerns or problems associated with environmental aspects.

This initial task is essential to become aware of and understand the environmental problems that surround us. It allows us to recognize how our individual and collective actions can have an impact on the environment.

By actively engaging in observing and analysing our surroundings, we become active participants in protecting the environment.

This empowers us and allows us to take a leadership role in the implewmentation of sustainable actions in our educational centre. In addition, it gives us the opportunity to influence and make aware of other peers, educators, and the community in general, building a long-term positive impact.

4.1 OBSERVATION AND ANALYSIS OF THE ENVIRONMENT. WHAT ENVIRONMENTAL ASPECTS WE ARE CONCERNED ABOUT, AT OUR EDUCATIONAL CENTRE?

To do a complete observation and carefully analyse our environment, we can carry out virtual questionnaires to find out the opinions of as many people connected to our institution as possible. Once we have a preliminary understanding of the environmental reality of our school, we can form working groups and hold brainstorming sessions, that is, collaborative ideas generation activities.

Remember that the key in a brainstorming session is to create an open and respectful environment, where all ideas are valued, and active participation of all team members is encouraged. The combination of different techniques can help obtain more innovative and creative results. In brainstorming, any idea is welcome, no matter how wild or unconventional it may seem to you. There are also no wrong answers or bad ideas.

Remember to send the questionnaire to as many people as possible. the answers must represent the reality and diversity of all people related to school. limiting the group to interviewing only people who may be the most interested or motivated may lead to wrong results.

HOW TO PERFORM THE PROCESS?

INITIAL QUESTIONNAIRE SAMPLE

Thank you for participating in this questionnaire. The objective is to identify the environmental problems in our school and determine which ones you consider to be a priority and can be addressed at zero cost or more easily. Answer the following questions by selecting the option that best suits your opinion.

How important do you think is environmental protection in our educational centre?

a) Excessive energy consumption
b) Innadequate use of water resources
c) Generation of non-recycled waste
d) Noise pollution
e) Lack of green areas
f) Unhealthy food in our cafeteria
g) Low digitalization
h) Others (specify) _____

What do you consider to be the highest priority environmental problem in our school?

a) Excessive energy consumption
b) Inadequate use of water resources
c) Generation of non-recycled waste
d) Noise pollution
e) Lack of green areas
f) Unhealthy food in our cafeteria
g) Low digitalization
h) Others (specify) _____

What actions do you think we could do to address the environmental problem identified in the previous question?

a) Promote the efficient use of energy
b) Promote the responsible use of water
c) Implement recycling and waste separation programs
d) Reduce air pollution through measures such as the use of sustainable transport
e) Create green spaces in the educational centre
f) Improve the quality of the cafeteria food
g) Improve the digitization capabilities of the centre
h) Other actions (specify) _____

What do you think would be the most feasible action to implement at zero cost or in an easier way in our educational centre?

a) Turn off lights and equipment when not in use
b) Use low energy consumption devices
c) Close taps correctly to avoid water leaks
d) Promote the use of reusable bottles instead of disposable plastic bottles
e) Raise awareness about the importance of recycling and provide adequate containers
f) Other action (specify) _____

Do you think it is important to involve the entire educational community in solving environmental problems?

a) Yes, it is essential
b) Yes, but it is not that relevant
c) No, it is not necessary
d) I don't know

Do you think we could form an environmental group or committee at our school to address these issues?

a) Yes, that is an excellent idea
b) Yes, but I am not sure of its effectiveness
c) No, I don't think it's necessary
d) I don't know

Would you be willing to actively participate in environmental actions within our educational centre?

a) Yes, I would like to get involved
b) Yes, but to a lesser extent
c) No, I'm not interested
d) I don't know

Do you think that environmental education is important to promote positive changes in our educational centre?

a) Yes, it is crucial
b) Yes, but I don't know to what extent it influences
c) No, I do not think it is relevant
d) I don't know

Do you have any other suggestions or comments related to environmental problems in our educational centre?

Open space to write.

Thanks for your participation!

Your responses will help us identify priority environmental issues and actions we can take to improve our educational environment.

Downloadable file at the link

https://viralproject.org/documents/file1.pdf

DIGITAL BRAINSTORMING OPTIONS

1

BRAINWRITING 635

Instead of sharing ideas verbally, each participant writes three ideas on a digital whiteboard in a set amount of time (for example, 5 minutes). The board is then passed to the next participant, who adds another three ideas based on the previous ones. This process continues until the board has passed through each participant. At the end, all the ideas generated are collected for discussion.

2

MIND MAPS

Use a digital whiteboard to create a mind map. Start with a central idea and then add branches with related ideas. You can use colours, images, and keywords to represent ideas visually. This technique helps to make connections between different concepts and to explore new perspectives.

3

SCAMPER TECHNIQUE

This technique uses different questions to stimulate creativity and generate innovative ideas. Each letter of SCAMPER represents a specific question: Substitute, Combine, Adapt, Modify, Put to another use, Eliminate and Rearrange. Participants can use these questions as a guide to explore different possibilities and generate unique ideas.

4

REVERSE BRAINSTORMING

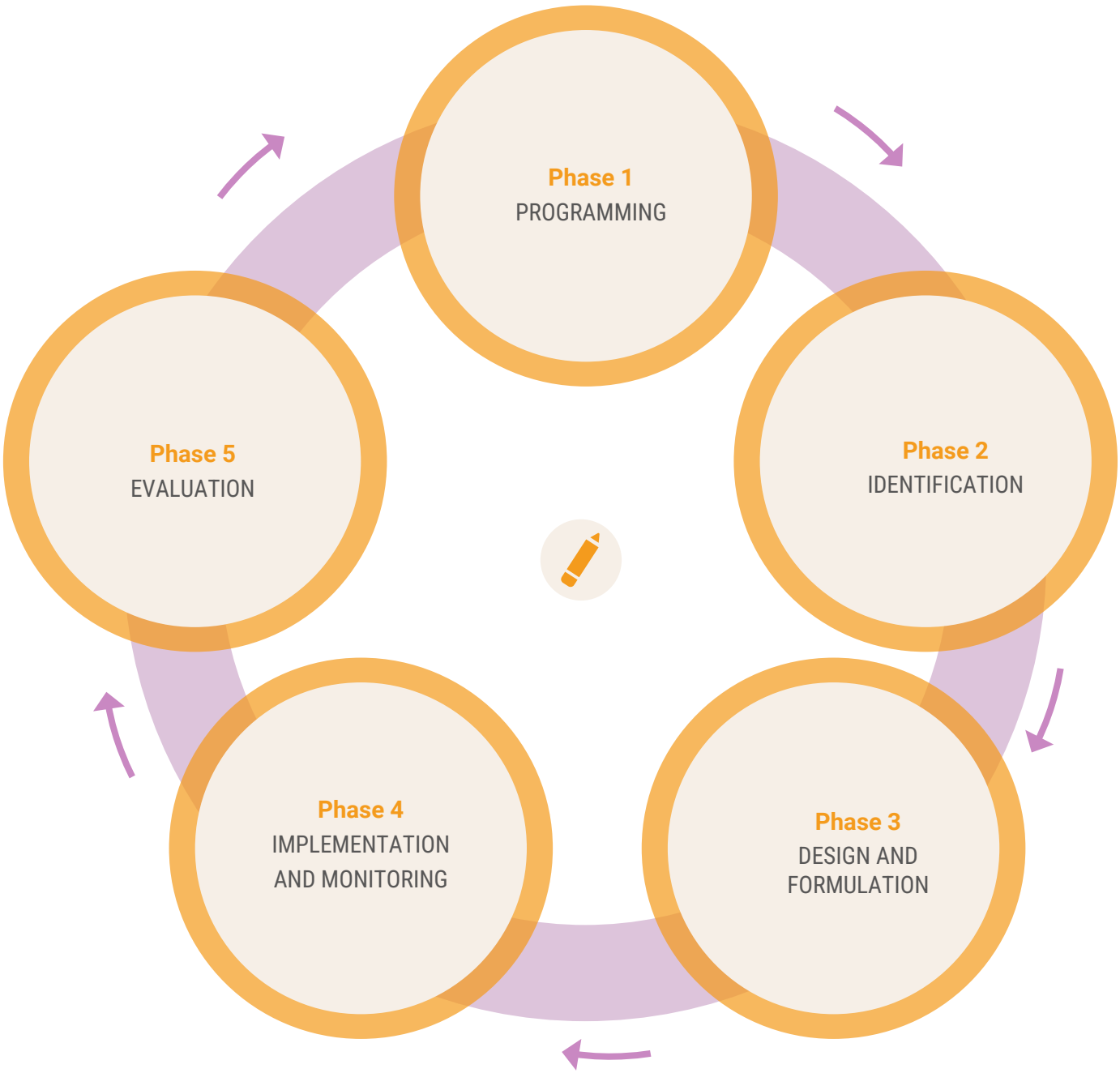
Instead of looking for solutions, you focus on finding all the possible causes or problems related to a particular issue. This makes it possible to identify obstacles and challenges that need to be addressed.

5

GROUP BRAINWRITING

Instead of brainstorming individually, small groups (3-4 people) are formed, and each generates written ideas for a set period of time. The groups then rotate and continue to build on each other's ideas. This encourages collaboration and the exchange of ideas among the participants.

PROJECT PLANNING CYCLE



4.2 IDENTIFICATION OF SPECIFIC ISSUES RELATED TO THE MAIN CONCERNS WE HAVE FOUND OUT

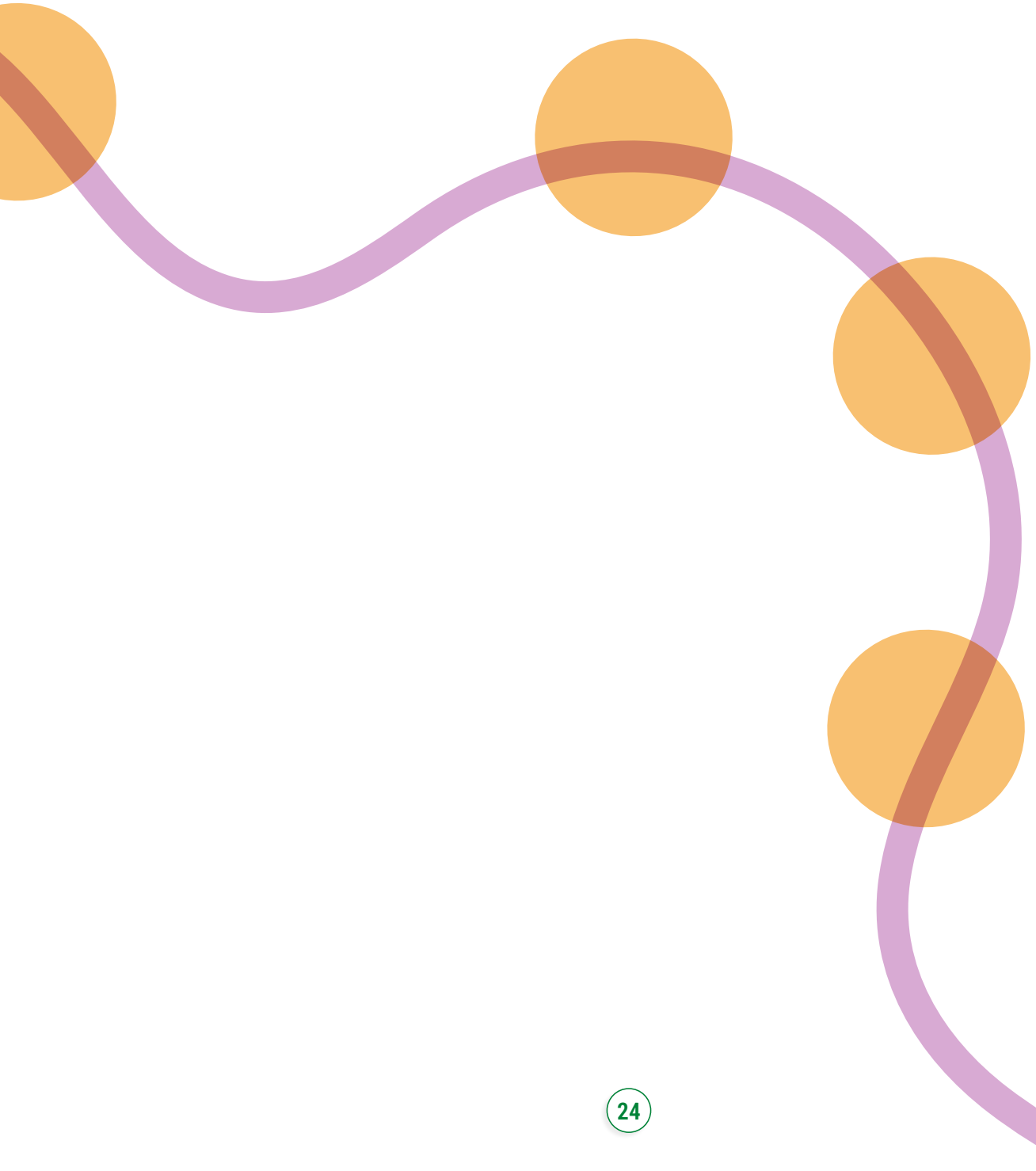
Once we have identified the specific environmental aspects that require attention in school, we will focus on naming the main problems made visible. This helps us direct our efforts towards areas where improvement is needed, such as energy consumption, waste management, air or water pollution, among others.

To carry out this task, we will use a digital whiteboard and we will work in groups to give a clear definition to the identified issues.

DETECTED PROBLEMS	DEFINED PROBLEMS
 INDUSTRIAL-FAST FOOD IN CAFETERIA	OFFER OF PROCESSED AND UNHEALTHY FOOD IN THE SCHOOL CAFETERIA
 CEMENT COURTYARD	EXCESS OF PAVED AREAS IN THE COURTYARDS, WHICH LIMIT THE PRESENCE OF GREEN SPACES
 LACK OF SUSTAINABILITY ACTIONS	LACK OF CONCRETE MEASURES AND PROJECTS FOCUSED ON SUSTAINABILITY IN THE SCHOOL
 COMPULSIVE PURCHASES AND FASHIONS	PROMOTION OF CONSUMERISM EXCESSIVE AND ACQUISITION OF PRODUCTS UNNECESSARY

MORE SAMPLES...

Use and misuse of paper	Excessive use of paper and lack of awareness about its correct management
Lack of biodiversity in the courtyards	Absence of plants diversity in outdoor spaces
Low efficient energy	Inefficient energy consumption in the educational centre
Bad living habits	Unhealthy lifestyles, such as lack of exercise and an unbalanced diet
Lack of creative recycling projects	Low participation in recycling projects and lack of creativity in the reuse of materials
Water consumption	Inefficient use of water and lack of awareness of its importance as a limited resource
Carbon footprint to go to the centre	Greenhouse gas emissions associated with the transportation used to get to the school
Lack of exchange spaces	Little promotion of spaces where students can exchange school materials and clothing



4.3 RECORDING PROBLEMS DETECTED AND PRIORITISATION

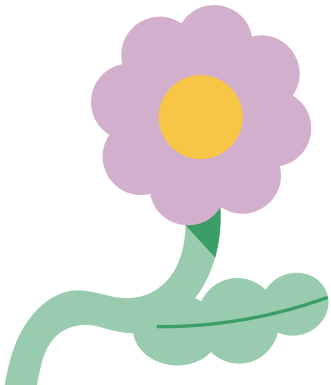
Problem recording allows us to gather detailed information about each of them, including its nature, scope, and possible causes. This registration process can be carried out through different methods, such as surveys, interviews, direct observations or analysis of existing data. The main objective is to obtain a complete and accurate picture of the environmental challenges we face.

Once we have recorded the problems, it is important to define their prioritisation and feasibility. This implies evaluating the urgency of each problem and its feasibility to be addressed with the available resources. Prioritisation allows us to identify those problems that require immediate attention and that have a significant impact on the school environment. These can be problems such as the lack of green spaces, the non-existence of a recycling program or energy inefficiency, which have direct consequences on the health and well-being of the educational community.

At the same time, it is essential to consider the feasibility of addressing each problem. This involves analysing the resources available, both financial and human, as well as the skills and competencies needed to implement effective solutions. Some problems may require significant investment or structural changes, while others can be addressed with simpler, low-cost approaches. It is important to assess which actions are more achievable in the short term and can have a positive impact with limited or no resources available.

The prioritisation of actions helps us to establish an order of importance in the implementation of solutions. By identifying the environmental aspects that concern us, we can establish priorities regarding the actions that we must take. This means that some issues may require immediate attention, while others may be addressed in later stages. The analysis allows us to determine which challenges are more urgent and need to be treated with higher priority, helping us to optimise the use of our limited resources and focus our efforts on the areas that generate the greatest impact.

In summary, the registration and definition of priorities and feasibility are essential steps in the process of addressing environmental problems in our educational centre. These actions allow us to have a clear vision of the challenges we face, establish priorities in the implementation of solutions, and optimise the use of our limited resources. By identifying the environmental aspects that concern us, we can establish an order of importance in solving problems, addressing the most urgent and achievable in the short term.



Ideas to carry it out

- By vote: submit the main issues to online votes
- Brainstorming
- By WheelSpin (wheel of options) (if there are different ones that seem valid to us)
- By budget: according to the financial resources of the centre
- By availability of activism: according to the number of participating and involved people

There is no unique way to prioritise the problems we face and this selection does not imply forgetting those that did not arise immediately.

Unit 5

5 WHO CAN ACT

5 WHO CAN ACT

5.1 IDENTIFICATION OF THE ACTORS INVOLVED IN THE SCHOOL ENVIRONMENT: STUDENTS, TEACHERS, ADMINISTRATIVE STAFF, FAMILIES, LOCAL COMMUNITY, ETC

It is essential to identify key actors (stakeholders) involved in the school environment to effectively address the identified problems. These stakeholders are individuals and groups who play an important role in the educational community, and their participation is essential to achieve effective and sustainable solutions.

In a school, interest groups can include teachers, students, families, administrative staff, janitorial staff, external services, the local community, and administrations.

Teachers play a crucial role in environmental education, since they are the ones who directly interact with students. They can foster environmental awareness, provide relevant information, and guide students in adopting sustainable practices. Their active participation and commitment are critical to achieve meaningful change.

students are also pivotal to execute the actions, since they are the main beneficiaries of a sustainable school environment. Their active participation and empowerment are crucial for generating positive change. Students can bring fresh and innovative ideas, take on responsibilities and lead sustainable initiatives in their school environment.

Families also play an important role, as their support and participation go a long way in promoting sustainable practices at home and at school. Collaboration between families and the school can strengthen messages and actions related to environmental sustainability, creating a synergy that benefits everyone involved.

administrative and janitorial staff play a key role in the implementation of sustainable practices in the educational centre. Their participation in identifying problems and finding solutions contributes to creating a healthier and more sustainable environment for all.

External services, such as food and resources providers, are also important players. Their collaboration can be crucial to guarantee the acquisition of sustainable products and services, reduce environmental impact and promote responsible practices in resource management.

The local community and public administrations are also relevant; they can provide support, resources and guidance in implementing sustainable initiatives. Collaboration with the local community can enrich educational experiences and promote connection with the broader environment.

Identifying stakeholders can be carried out with interviews with school leaders, carrying out questionnaires or conducting a study to find out who and in what way they influence and/or has the power to implement changes in our educational centres.

5.2 ANALYSING THE INTERESTS, EXPECTATIONS AND NEEDS OF EACH STAKEHOLDER GROUP

By identifying these key stakeholders, it is possible to define who will act to solve the identified problems and how. Each actor can assume specific roles and responsibilities, providing their skills, knowledge and resources to achieve positive outcomes. Collaboration and coordination among these stakeholders are essential to address problems comprehensively and ensure the sustainability of implemented solutions.

We will have to interview them, to know the ideas, understand the needs, expectations, concerns and priorities of each group or person identified.

In short, identifying these individuals or groups in the school environment is very important to effectively address environmental issues. The active participation of teachers, students, families, administrative staff, janitorial staff, external services, the local community and administrations is essential to achieve a sustainable school environment.

By Working together, you can promote environmental awareness, generate effective solutions, and create an environment favourable to learning and well-being for all involved.

5.3 DESIGNING EFFECTIVE COMMUNICATION STRATEGIES TO INVOLVE STAKEHOLDERS IN THE PROJECT

Once we know who will share with us this path, we have to take care of the messages and the communication approach that we will use to respond to the specific concerns and motivations of each group, in relation to the actions that we will carry out to solve the problems and consequently, guarantee their active participation.

Firstly, we will need to define specific, measurable, achievable, relevant and time-bound objectives. For example, you can establish the objective of increasing knowledge about the project among the stakeholders or promoting their active participation in the specific decisions and actions related to one or more problems to be covered.

Secondly, it will be essential to develop clear and persuasive messages that communicate the importance and benefits of the project for the stakeholders. Use clear and accessible language, avoiding jargon that may make it difficult to understand. Be sure to highlight the relevant aspects and the positive impacts that the project can have on their lives, communities or environments. It will also be important to select the appropriate and effective communication channels. These channels may include face-to-face meetings, newsletters, emails, social media, the centre's website, local media, or other specific media relevant to the target group.

Finally, it is important to encourage the active stakeholder participation in the project by creating opportunities for their involvement. This may include meetings, workshops, surveys, focus groups, online forums, or other activities that allow them to express their opinions, ideas, and concerns. It is also important to provide active listening and feedback mechanisms so that stakeholders can provide comments and suggestions at any stage of the project.

Communication must be two-way, open and transparent, fostering trust and the active participation of stakeholders in all stages of the project. By effectively engaging stakeholders, you will be able to build strong relationships, gain their support, and achieve better results.

Ideas to carry it out / ideas of execution:

- **Interviews with the most relevant people of the educational centre: in this way they will provide us with a complete vision and useful information to know who are the people who can participate the most and in what way.**
- **Brainstorming and participatory whiteboard to work in groups to identify the key people within the priority groups.**
- **By availability of activism: according to the availability and participation of the key people identified.**

To achieve effective changes towards sustainability, participation and collaboration among all stakeholders must be taken into consideration.

Unit 6

6 SOLUTION DESIGN?

6 SOLUTION DESIGN?

Now that we have defined and prioritised the problems and it is clear to us that we must select the key people in the actions, we must define what objectives we propose or rather, what solutions we foresee to improve the environmental situation of our centre.

The first step is to turn the chosen problems into objectives: to carry out this activity we can work in groups and then share the proposals.

SOLUTIONS

Using the macro problems proposed as examples in the previous chapters, we can present the reversal in the following way:

PROBLEM DETECTED	PROBLEM DEFINED
INDUSTRIAL-FAST FOOD IN CAFETERIA	OFFER OF PROCESSED AND UNHEALTHY FOOD IN THE SCHOOL CAFETERIA

PROPOSED SOLUTION

Introduce healthier menu options, such as fresh, organic and seasonal foods, and promote awareness of the importance of a balanced diet.

CEMENT COURTYARD	EXCESS OF PAVED AREAS IN THE COURTYARDS, WHICH LIMIT THE PRESENCE OF GREEN SPACES

Transform cement courtyards into green spaces, with areas for gardens, orchards, and plants.

LACK OF SUSTAINABILITY ACTIONS	LACK OF CONCRETE MEASURES AND PROJECTS FOCUSED ON SUSTAINABILITY IN THE SCHOOL

Implement sustainability actions, such as proper waste management, the promotion of renewable energy, raising awareness about climate change and the adoption of sustainable practices in our day to day.

COMPULSIVE PURCHASES AND FASHIONS	PROMOTION OF CONSUMERISM EXCESSIVE AND ACQUISITION OF PRODUCTS UNNECESSARY

Promote responsible and conscious consumption, education about the environmental and social impacts of purchasing decisions , promoting the reuse, exchange and purchase of durable and sustainable products.

MORE EXAMPLES OF PROPOSED SOLUTIONS

Use and misuse of paper	Excessive use of paper and lack of awareness about its correct management
Promote the responsible use of paper, encourage the digitalisation of documents and the use of electronic formats when possible.	
Lack of biodiversity in the courtyards	Absence of plants diversity in outdoor spaces
Design green areas with native plants and promote the conservation of biodiversity.	
Low efficient energy	Inefficient energy consumption in the educational centre
Implement energy efficiency measures, such as the use of led lighting, opening windows to take advantage of natural light and shutdown of unused equipment.	
Bad living habits	Unhealthy lifestyles, such as lack of exercise and an unbalanced diet
Promote the adoption of healthy habits, such as regular physical exercise and a balanced diet.	
Lack of creative recycling projects	Low participation in recycling projects and lack of creativity in the reuse of materials
Stimulate creativity and commitment in recycling projects.	
Water consumption	Inefficient use of water and lack of awareness of its importance as a limited resource
Promote responsible water consumption, education about saving techniques.	
Carbon footprint to go to the centre	Greenhouse gas emissions associated with the transportation used to get to the school
Encourage the use of sustainable means of transportation, such as walking, cycling or use public transportation, thus reducing the individual and collective carbon footprint.	
Lack of exchange spaces	Little promotion of spaces where students can exchange school materials and clothing
Creating meeting spaces where students can buy, exchange and leave materials and clothing.	

THERE MAY BE SIMILAR SOLUTIONS FOR DIFFERENT PROBLEMS (EFFICIENCY IMPROVEMENT), EXPENSIVE SOLUTIONS, AS WELL AS SOLUTIONS THAT ARE NOT VERY FEASIBLE OR SUSTAINABLE. THE IMPORTANT THING IS TO CREATE A "POSITIVE VERSION" OF OUR PROBLEM.

6.1 RESEARCH AND COLLECTION OF INFORMATION ON SUSTAINABLE PRACTICES IN OTHER SCHOOLS

When we have decided on which problem to act on and which solution to apply, we can find out if other schools have faced the same challenges and what actions they have taken.

What does this job give us?

LEARNING FROM GOOD PRACTICES

Through the study and analysis of successful experiences in other schools, we can identify the best practices and the most effective strategies to address similar problems. This allows us to learn from the lessons learned and apply in our own context those solutions that have proven to be successful.

AVOID REINVENTING THE WHEEL

Use a digital whiteboard to create a mind map. Start with a central idea and then add branches with related ideas. You can use colours, images, and keywords to represent ideas visually. This technique helps to make connections between different concepts and to explore new perspectives.

ADAPTATION TO OUR CONTEXT

Each school is unique, with its own characteristics and specific challenges. However, by researching and collecting information about similar practices in other centres, we can gain insights and approaches that can be adapted and customised to our specific context. This helps us to design more effective and relevant solutions for our educational community.

INSPIRATION AND INNOVATION

Knowledge of successful practices in other educational centres can be useful as a source of inspiration and incentive for innovation in our own centre. By exploring different approaches and solutions implemented elsewhere, we can find creative ideas and new ways to address problems, fostering continuous improvement and the search for more effective solutions.

NETWORKING AND COLLABORATION

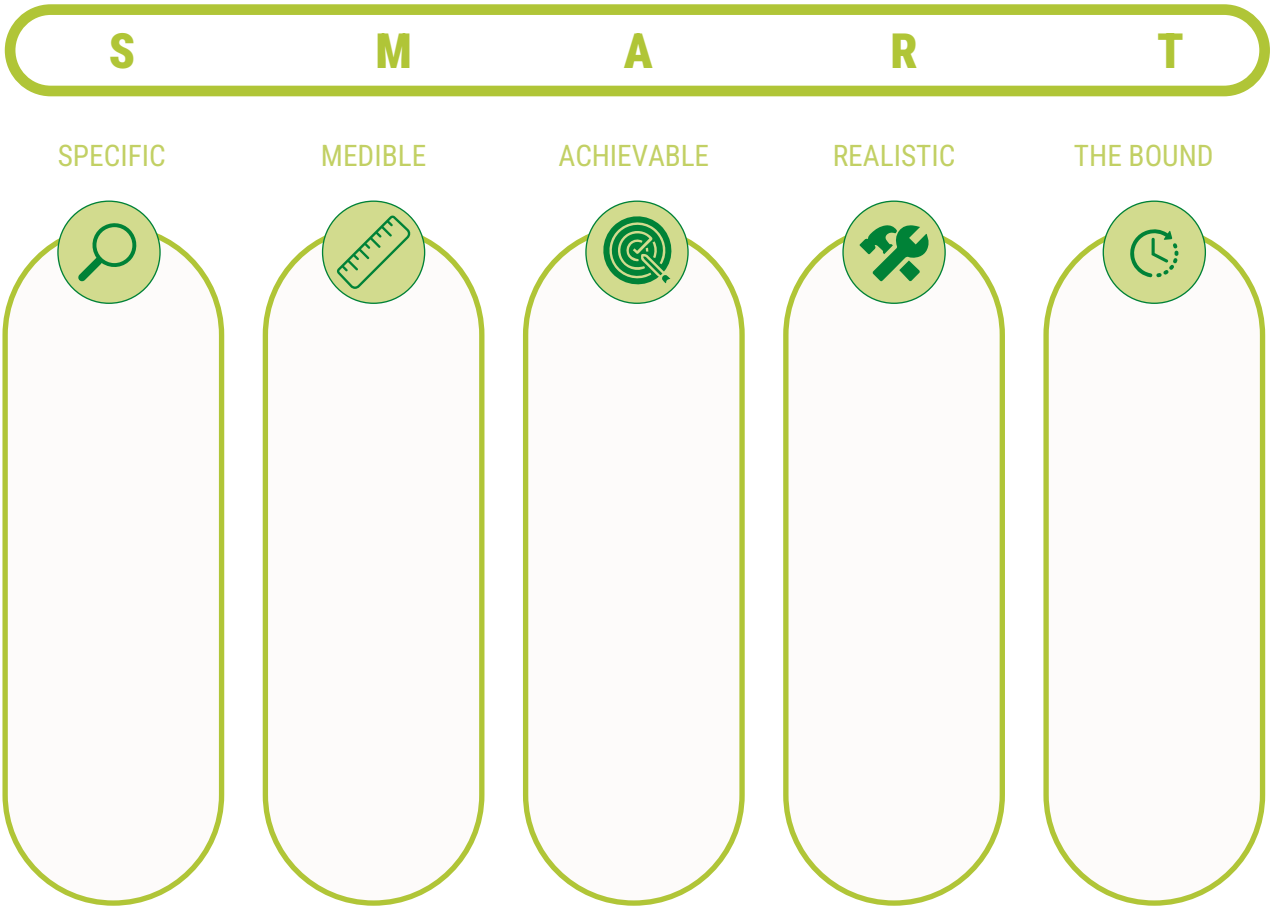
Researching and gathering information on similar practices gives us the opportunity to network and build relationships with other schools and professionals in the industry. This facilitates the exchange of knowledge, collaboration, and the possibility of working together in the implementation of improvements and the search for shared solutions.

6.2 BUILDING CREATIVE AND VIABLE IDEAS TO ADDRESS THE IDENTIFIED PROBLEMS

In this section, we will focus on the design stage of sustainable solutions for the environmental problems identified in our school.

We'll explore different approaches and strategies to create ideas and we'll discuss the importance of collaboration and teamwork to implement these solutions effectively.

Now that we clearly see our general objective, we can start thinking about the specific objective on which we will focus our work and the results to achieve. We need to ensure that the specific objective is measurable, achievable, relevant and with a certain time of fulfilment (SMART).



Ex. According to solutions provided:

GENERAL OBJECTIVE:
Increased the commitment of the educational community to recycling and reuse.

SPECIFIC OBJECTIVE:
Stimulated creativity and commitment in recycling projects

RESULTS (CREATIVE AND VIABLE IDEAS):

- Organised workshops to promote the reuse of materials.
- Organised creative and artistic contests with the aim of transforming and recycling.
- An exhibition and market with the re-invented products.

Downloadable file at the link

https://viralproject.org/documents/file1.pdf

To define the strategy and ideas to create effective and efficient actions and activities, we can brainstorm and encourage participation and creativity to give rise to innovative proposals. Thinking 'outside the box', questioning assumptions, and exploring new possibilities are wonderful ways to innovate and work out complex problems.

As we have mentioned before, it is also very useful to look for inspiration in good practices from other centres or actions that have been carried out to face similar problems or in similar contexts.

Once we have a few ideas on the table, we will analyse their viability and feasibility. We will consider the necessary resources, the time required, the limitations and the possible obstacles. Prioritise ideas that are practical and realistic within available resources and capabilities.

Do not stand with the first idea coming up. Review and improve existing ideas. Combine them, modify them, and adjust them as needed. Sometimes the best solutions come from combining several ideas.

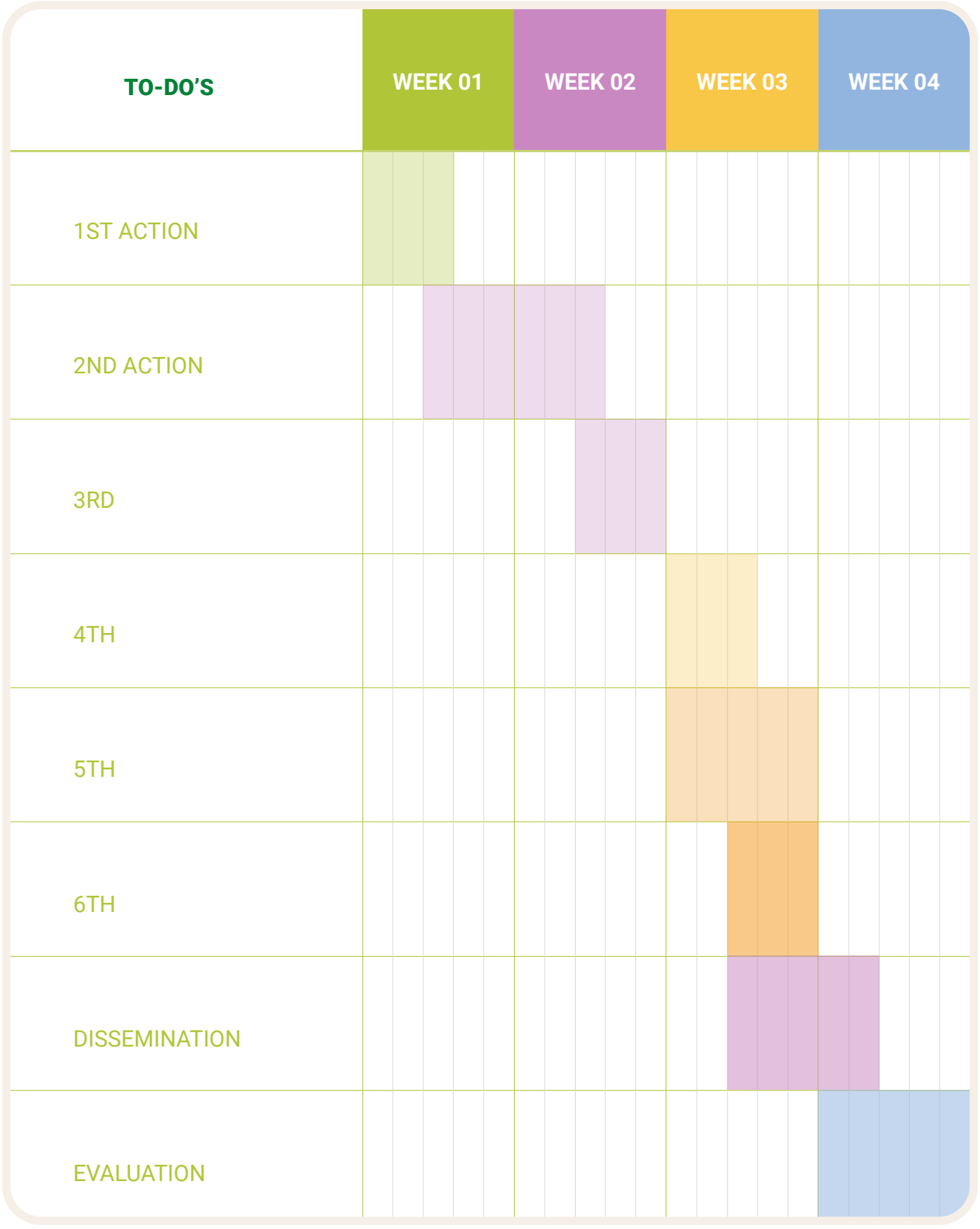
6.3 DEVELOPING AN ACTION PLAN WITH CLEAR GOALS AND ACHIEVABLE OBJECTIVES

When we will identify our specific objective and the expected results created to achieve it, we must start defining the specific activities to be carried out to achieve our results.

The action plan must take many aspects into account, here we provide you with a list of the most important ones:

- Clear and realistic actions
- Assign a person responsible for each action, that is, the person or persons in charge of carrying out that action. This will ensure that there is clarity on who is responsible for what task.
- Define realistic deadlines for each action and goal. Setting deadlines will help you keep a steady pace and assess progress. It is essential to have a schedule.
- Establish mechanisms to monitor the progress of your action plan. Carry out regular follow-ups and evaluate if you are reaching your goals and if the actions are being effective. If necessary, adjust or modify your plan.
- Recognize and celebrate the milestones reached throughout the process. This will not only motivate you to keep going, but it will also foster a positive and supportive environment.

EX. SCHEDULE



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6.4 CREATING ACTIVITIES: MEASUREMENT AND FOLLOW-UP

Once we have specified the ideas generated in specific and achievable activities, we will define what must be done, who will be responsible for carrying out each activity and what the execution period will be.

When we talk about the activities having to be achievable and the results measurable, we are referring to the importance of defining some criteria, some measures to be able to see if we are executing correctly and if we are reaching our results and objectives.

But…how can we do it? How do we know if we are achieving what we planned?

This is where indicators and their sources come into play.

WHAT IS AN INDICATOR?

An indicator is a measure of quantity or quality that allows us to see if we are advancing or meeting our results and objectives. An effective indicator must meet certain criteria. It must be relevant, that is, be closely related to the objective or topic being evaluated. It must also be measurable, which means that it can be quantified or qualified in some objective way. In addition, it must be valid and reliable, which implies that the indicator accurately and consistently measures what it is intended to evaluate.

HOW DO I CREATE AN INDICATOR?

Identify the variables (aspects) or factors that are relevant measuring the established objective. These variables must be quantifiable and measurable in some way and to do so you will need to define a measurement metric. For example, a numerical amount, a percentage, a rate, an index, among others.

We can create an indicator based on a percentage of satisfaction or participation over the total, or level/value of consumption (increase or decrease compared to the start of the project).

RACER: UNFOLDING THE INDICATOR CRITERIA

In the realm of project management, indicators are crucial tools that help measure the progress and success of our initiatives. To make sure our indicators are effective, we should follow the RACER

1. Relevant: Indicators should be closely linked to the objectives, making them directly applicable to what we're trying to achieve.

2. Accepted: Everyone involved in the project should agree upon the indicators, facilitating a collective effort towards achieving the objectives.

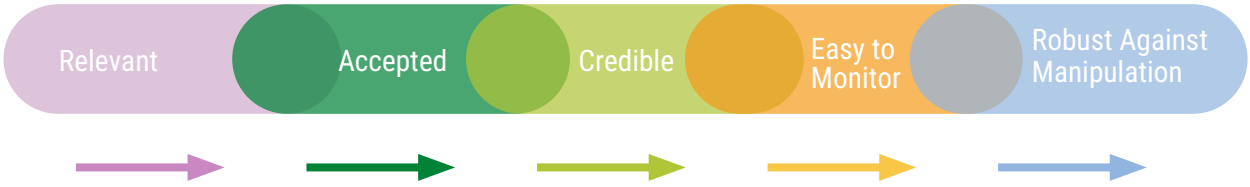
3. Credible: Indicators should be clear, easy to understand, and free from ambiguity - even for non-experts!

4. Easy to Monitor: The easier it is to monitor an indicator, the more useful it will be. We want indicators that can be tracked smoothly and efficiently.

5. Robust Against Manipulation: A good indicator should stand strong against any attempts to skew or manipulate its results.

When it comes to formulating these indicators, we need to be clear and neutral: for quantitative indicators, we use terms like "number of," "percentage of," or ratios, rates, indices, and so on. and for qualitative indicators, we use phrases like "status of," "degree of," "level of," or "extent to which."

Following these guidelines will ensure that our indicators lead us on the right path towards our project's success!



AND WHAT IS A SOURCE?

Source is where we get the information that we will use to collect data for our indicators.

You can request the collection of information through surveys, measurements, records, databases, or other available sources of information such as photographs, videos, signature sheets for participation in workshops and conferences or, the prizes or diplomas of the contests.

Ex.

RESULTS (CREATIVE AND VIABLE IDEAS):

1. Organised workshops to promote the reuse of materials

Indicators: 80% of the students who participate in the workshop have rated it 9 out of 10; 50 people participate in the workshop, of which 35 are women.

SOURCES:

Record of the surveys carried out.

Photographs of the workshop.

Signature sheet of the participants.

Workshop registration.

NOW THAT WE HAVE EVERYTHING PLANNED AND WELL STRUCTURED…WE HAVE TO ANTICIPATE THAT THINGS COULD HAPPEN THAT WE HAVE NOT FORESEEN AND THAT DO NOT DEPEND ON US…

They are the “dreaded” conditioning factors!!!

Conditioning factors or assumptions are possible situations or external conditions that prevent us from achieving our objective and satisfactorily executing the planned activities. Conditioning factors can be of a diverse nature and can have a significant impact on the final result. They must be considered, in order to provide a plan B in case they materialise.

EXAMPLES OF CONDITIONING FACTORS:

- AVAILABILITY: time and commitment on the part of the people involved (illness, change of roles, etc.)
- PRICES: increased prices of materials expected
- CLOSURE: pandemic or other cause that could close the educational centre and prevent the execution of the project

Effective project management hinges on the use of RACER-compliant indicators and the careful sourcing of data from diverse resources such as surveys, databases, visual content, and participatory records to accurately gauge progress and success.

Unit 7

7 WHO CAN ACT

7 MONITORING AND EVALUATION

Defining our project is just the first step. We've identified what we want to achieve and how we're going to do it. Now, it's time to jump in and get our hands dirty. But remember, we won't be flying blind. Every step of the way, we'll monitor and evaluate our progress and impact. Before we kick things off, we'll conduct a baseline assessment.

7.1 BASELINE ASSESSMENT

Our project's journey starts with a baseline - it's the "before" picture that will help us track our progress and impact. A baseline study gauges the current situation, attitudes, and behaviour in our school. This data will be invaluable as our measuring stick throughout our project's lifecycle. It will highlight what needs improvement and guide us in creating suitable projects and establishing progress indicators.

A BASELINE STUDY AIMS TO:

1. Establish a starting point: The 'before' picture against which to measure progress.
2. Identify existing gaps: Discover weaknesses that need addressing.
3. Establish indicators: Define what progress looks like.
4. Develop appropriate projects: Use insights to create projects that meet needs.
5. Measure impact: Identify changes brought about by the project.

CONDUCTING A BASELINE STUDY

Here's how we'll do it:

1. Define the Objectives: Our SMART goals will address the current situation, needs, gaps, and expected outcomes.
2. Define the Scope: We'll detail our target population, geographic scope, study timeframe, and data sources.
3. Develop Data Collection Tools: We'll use various tools to collect data, such as surveys, interviews, and observations.
4. Pilot Test the Tools: We'll test our tools on a small group from our school to identify any issues before the main study.
5. Collect Data: We'll collect data systematically, making sure it's complete, accurate, and unbiased.
6. Analyse Data: We'll use statistical software to analyse our data and answer our research questions.
7. Interpret Findings: We'll relate our findings back to our objectives and identify the strengths and weaknesses in our current situation.
8. Develop a Baselis

The baseline study will provide us with a roadmap to track our progress and measure the impact of our efforts. We'll use its findings to continually refine our projects and make sure they're making a difference.

WE'RE READY TO ROLL UP OUR SLEEVES AND MAKE OUR SCHOOL BETTER!

7.2 DEVELOPING THE MONITORING AND EVALUATION PLAN

Monitoring and evaluation (aka M&E) are like the GPS for your project, helping you keep track of where you are and where you need to go.

Think of monitoring like the ongoing check-ins you do in a video game. It's a never-ending process where you collect info about your project and compare what's actually happening with what you planned to happen. This could involve noting down things like how many people are participating, what changes are happening for them, and how much the project is costing. By looking at these details, you can make comparisons between different parts of your project, sort of like comparing your high scores in different levels of a game.

Next, we have an evaluation. This is akin to sitting down after finishing a game and thinking about everything that happened, from the game design to the final boss battle and the loot you got. The goal here is to give you solid info that can help you decide what to do next to win more often, or in our case, to achieve better results. Together, monitoring and evaluation make sure everything is going well in your project and help you find ways to do even better. Now, you might be wondering, what's an M&E Plan? Well, it's like a game plan or strategy guide for your project. It helps you keep track of what's happening and assess how well you're doing. This guide isn't something you just make once and forget about - you need to keep checking and updating it as you progress. While every project's M&E plan might look different, they all contain some basic stuff. This can include things like a map of where you want to go (or a logic model), your game plan for getting there (or theory of change), and your high score targets (or monitoring indicators). Before you start any monitoring, you need to have your M&E plan ready. This roadmap will help you know what questions to answer about your project, guide you on gathering data to track your progress, and help you understand and share your results. After all, just like in a game, the data you collect is only useful if you use it to improve your strategy and level up!

EXAMPLES OF BASELINE PLAN

STEPS	DETAILS
OBJECTIVE	Stimulate Creativity and Commitment in Recycling Project
GOAL	Involve students in creative recycling projects to promote sustainable living and environmental consciousness
1. ESTABLISH A BASELINE	
EXPECTED OUTCOME	Increase in student participation in recycling projects, Improvement in school-wide recycling habits, and enhanced awareness about the importance of recycling
2. IDENTITY GAPS	
ASSESSMENT	Determine areas where the school's recycling efforts could be improved. Identify what recycling knowledge students currently lack. Find out the resources required to enhance the recycling projects
3. SET INDICATORS	
INDICATORS	Increase in the volume of recyclable materials collected, the number of students participating in the recycling projects, the number of creative recycling initiatives proposed and implemented by students
4. DEVELOP SUITABLE PROJECTS	
PROJECTS	Set up creative recycling workshops where students can learn about recycling and create their own recycling projects. Organise a school-wide recycling campaign where each class competes to collect the most recyclable materials. Set up recycling bins around school and make it a part of the school's policy to recycle |
5. MEASURE IMPACT	
MEASUREMENTS	Conduct periodic assessments to measure the increase in volume of recyclables collected. Monitor the number of students participating in recycling projects and workshops. Evaluate students' knowledge and level of awareness about recycling before and after the implementation of projects.

THIS PLAN WILL HELP TO STIMULATE CREATIVITY AND COMMITMENT IN RECYCLING PROJECTS AMONG HIGH SCHOOL STUDENTS, IN TURN PROMOTING A MORE SUSTAINABLE AND ECO-FRIENDLY ENVIRONMENT.

Downloadable file at the link

https://viralproject.org/documents/file1.pdf

RECOMMENDED DIGITAL TOOLS TO CARRY OUT THE ACTIONS:

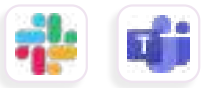
As we dive into the practical implementation of our project, the role of technology becomes pivotal. The recommended digital tools outlined below are instrumental in efficiently carrying out the actions of project monitoring.

PROJECT MONTITORING TOOL

Project Management Software

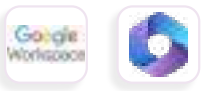
Equipped with features like Gantt charts, timesheets, and task tracking.

Communication Platforms



Will ensure constant and effective communication within our team.

Collaborative Documentation



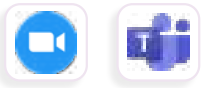
Will facilitate collaborative documentation, ensuring all project details are recorded efficiently.

AFTER-ACTION REVIEWS (AARS)

Collaborative Review Platforms

Are ideal for conducting After-Action Reviews with our team.

Video Conferencing



Conducting AAR meetings via video conferencing tools ensures effective communication and collaboration.

In adopting these digital tools, we acknowledge the need for periodic evaluations of their effectiveness and remain open to exploring new technologies that align with our evolving project requirements. Our commitment is not only to the success of the project but also to the continuous improvement of our processes through the integration of relevant digital tools.

An M&E Plan is your game plan, constantly updated to help you track progress, gather data, and level up your project output. It's all about utilising game statistics to strategize and win!

7.3 MAKING ADJUSTMENTS AND LEARNING

Building an M&E (Monitoring and Evaluation) plan is like planning a big school project. Your aim is to figure out how to make your school more sustainable, like improving recycling and reusing stuff. Here's how to do it in six steps:

STEP 1: DEFINE YOUR GOALS

What's your big idea? What are you trying to achieve? Maybe you want everyone at school to get better at recycling and reusing.

STEP 2: PICK YOUR INDICATORS

How will you measure success? Pick some process indicators (the stuff you're doing, like how many recycling workshops you run), and outcome indicators (the impact, like how many students start recycling more).

STEP3:PLANYOURDATACOLLECTIONANDTIMELINE

Next, decide what data you'll gather and when. You might need different info for different parts of your project. Maybe you'll check in on your recycling workshops every few months, or measure recycling rates once a year.

STEP 4: DECIDE WHO DOES WHAT

Who's collecting data for each indicator? It could be teachers, students, or even the school janitor! Make sure everyone knows what they're responsible for.

STEP 5: ANALYSE AND REPORT

Once you have data, it's time to look at it. What will you do with the info? Do you need any software to help you make sense of it? Plan for how you'll present your findings.

STEP 6: SHARE YOUR FINDINGS

Finally, plan how you'll tell others about your results. How will the info help your school make green improvements? Who needs to know about the data, like teachers, students, or even local authorities? By following these steps, you'll have a full M&E plan to guide your sustainability mission and make your school greener.

7.4 RESULTS FRAMEWORK

Imagine your project is like a big puzzle game, where you're trying to make your school more sustainable. A Results Framework (RF) is like a game map, showing you the different levels you need to pass (like impact, outcome, and outputs) to reach your goal. It shows you the cause-effect relationships, like how collecting more recycling bins (input) can lead to more recycling (output), which can increase awareness about sustainability (outcome), eventually making your school greener (impact). Adaptive management is like playing a game where you have to adjust your strategy based on new challenges or power-ups you encounter. You're still trying to win the game, but you might have to change your tactics. Adaptation is like learning to use new controls or features in the game to get better results. Learning is all about using the info you've gathered to get better at the game.

Through monitoring and evaluation, you figure out what's working, what's not, and how to level up. This helps you make better decisions about your game plan, leading to a better score. Project Monitoring is like keeping track of your game progress to make sure you're hitting your targets. It starts as soon as you press 'Start Game.' It helps you spot any obstacles, like a tricky level or boss, and figure out how to overcome them to make your gameplay more efficient.

Project Monitoring is crucial to make sure your plan is working. It lets you see how far you've come in the game and makes sure you're on track to hit your high score (or in real life, complete your project on time and within budget). Its benefits include ensuring you're using your resources wisely, meeting your targets, holding everyone accountable, reallocating resources if needed, and improving communication among your team, or in this case, your fellow students.

Unit 8

8 TYPES OF PROJECT MONITORING

8 TYPES OF PROJECT MONITORING

Imagine if your school was like a game world, and sustainable projects are quests that you and your classmates embark on to make your world (the school) a better, greener place. These quests are all about protecting the environment, helping society, and doing it in a way that means future players (students) can also enjoy the game world.

To win these quests, we need an effective game strategy, which is where monitoring comes in. Here's how we can use it in our game:

SUSTAINABLE PROGRESS MONITORING

This is like tracking your game progress to see how well you're doing in quests focused on reducing the school's environmental footprint, like saving energy, reducing waste, or creating green spaces. You check how many resources you're using and how much of an impact you're making on the environment.

PLAYER ENGAGEMENT MONITORING

In this game, players (students) are key to winning quests. So, we need to keep track of how involved they are in the game and how satisfied they are with their game experience. This makes sure they have a say in shaping the quests and feel proud when they win.

RULES COMPLIANCE MONITORING

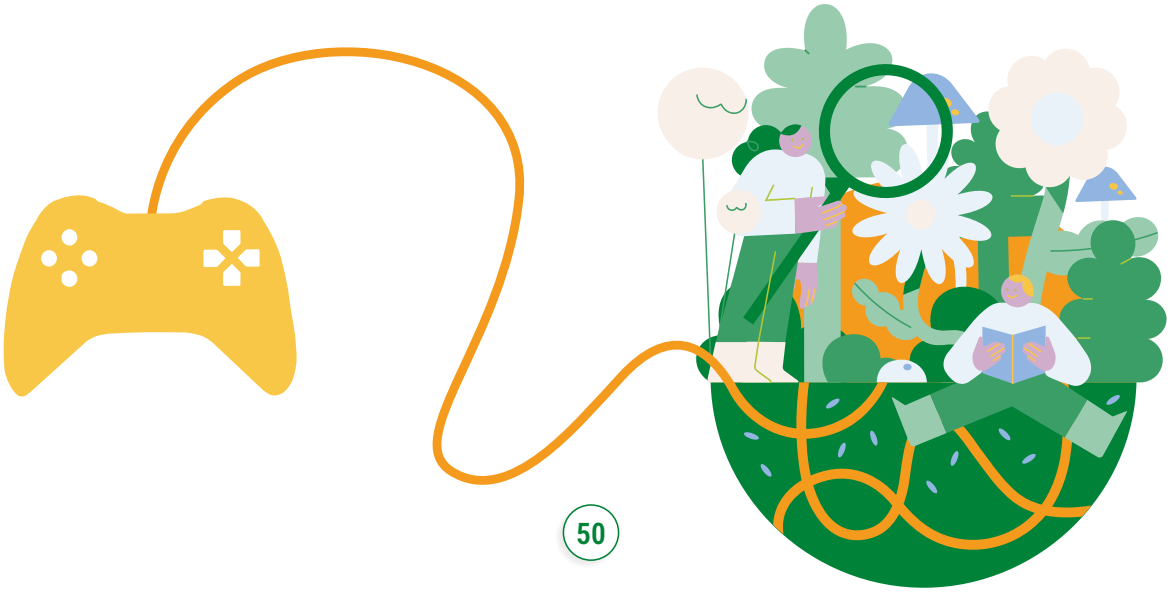
Just like following the game rules, we also need to check that we're complying with sustainability rules, like recycling guidelines, energy-saving practices, and fair play in sustainability quests.

RESOURCE AND BUDGET MONITORING

Every quest has a certain budget and resources. We have to track how we're using our game currency, materials, and resources to make sure they're being used wisely and align with our quest goals.

ENVIRONMENTAL IMPACT MONITORING

This is like measuring the positive effects of your quests on the game environment, such as reducing pollution, adding more green spaces, or improving the air and water quality in your game world.



Now, let's see how we can use this strategy:

QUEST INITIATION: First, define your quest's goals and objectives. Decide what part of sustainability your quest will tackle, like saving energy, encouraging recycling, or protecting local game wildlife.

QUEST PLANNING: Next, work out a detailed quest plan. Set clear checkpoints, allocate resources, and decide what kind of impact you want to make on the environment and society.

QUEST EXECUTION: Start the quest according to your plan, involving all players (students) and the rest of the game community.

QUEST MONITORING AND CONTROL: Keep an eye on your quest progress. Are you hitting your sustainability targets? Are there any unexpected obstacles? Regularly check in and tweak your plan if needed.

QUEST EVALUATION AND REPORTING: Once the quest is over, measure the outcomes and impacts. Report on what you achieved, any challenges you faced, and what you learned. Share these results with all players to celebrate achievements and plan for future quests. By using this game strategy, we can help players (students) become environmental heroes and create a culture of sustainability in our game world (school). Not only does this make the game more fun, but it also helps ensure our game world remains fun for future players.

8.1 PROJECT MONITORING IN ACTION

Project monitoring is like being a park ranger in the vast ecosystem of your project. The biosphere of your project is continually evolving, and as the ranger, you need to keep a close eye on it, taking several steps:

t1. WILDLIFE TRACKING

Just like tracking animals in an ecosystem, you need to keep track of all the tasks in your project. Spot which tasks need immediate attention and which ones can wait for later. Keep an eye on your resource budget to ensure everything is used wisely. Look for areas where your team can work more efficiently and whether any tasks are taking more time and resources than expected.

2. RANGER COMMUNICATION

Communication within your ranger team (project team) is key for successful project monitoring. Just like rangers have different responsibilities in the park, each team member should know exactly what their task is. Regular communication ensures that everyone knows what's going on and allows you to track task progress. Regular updates from your rangers help you assess the status of assigned tasks. Plus, it's crucial to have backup plans to give your team the flexibility to handle tasks effectively.

3. ECOSYSTEM REVIEW

After your project (ecosystem monitoring) is completed, it's important to reflect on your project plan and monitoring techniques. This is like doing a review of the health of the ecosystem after a season. Evaluate how the project progressed, identify which tasks needed less oversight, and spot areas that needed more attention.

By learning from your experiences, you can improve your ranger skills and handle future ecosystems (projects) more effectively. By using these monitoring practices, you ensure that your project ecosystem stays healthy, and any potential issues are spotted and addressed quickly. Effective project monitoring not only helps you successfully complete your current project, but also enhances your team's ability to handle future ecosystems with greater efficiency and insight.

8.2 PROJECT MONITORING TOOLS

Project monitoring is like being a nature guide in the sustainability park of your project. It's a huge part of making sure your project is a success, and there are lots of tools and techniques available to help you:

1. PARK MEETINGS

Regular meetings with your team (like a ranger meet-up) are an essential tool for monitoring your project. You can discuss the status of tasks (like how many trees have been planted or how much waste has been reduced), check on timelines, make necessary adjustments, and introduce new tasks as needed.

2. PROJECT MONITORING SOFTWARE

Just like having a high-tech ranger toolkit, using project management software with features like Gantt charts (a visual timeline of tasks), timesheets, resource management, and task tracking can greatly help you record, monitor, and manage tasks and workloads efficiently. These tools help simplify tracking, giving you a clear overview of how your project is progressing.

AS A NATURE GUIDE, HERE ARE SOME TIPS AND BEST PRACTICES FOR EFFECTIVE PROJECT MONITORING:

- Dive deep into understanding the project's goals through research and in-depth discussions with your team.
- Develop a clear description of your project, outlining its scope, goals, and objectives.
- Create a detailed project plan, including task assignments, timelines, and resources.
- Keep communication clear and constant with your team, ensuring everyone knows what's going on.
- Encourage feedback from team members and use their insights when necessary.
- Plan your resources well to ensure they're used efficiently.
- Set realistic expectations for both yourself and your team.
- Document everything. Record project details, changes, and decisions throughout the project.

  After the project is done, do a thorough review to extract key lessons and insights for future projects.

THERE ARE SEVERAL PROJECT MONITORING TECHNIQUES YOU CAN USE, LIKE:

- WORK BREAKDOWN STRUCTURES (WBS) Break down your project into smaller, manageable tasks. It's like creating a map of your park, showing all the different areas and tasks.
- GANTT CHART This is a visual timeline of your project tasks and their deadlines.
- PERT (PROJECT EVALUATION AND REVIEW TECHNIQUE) PERT helps you estimate project timelines by breaking tasks into activities and mapping them out.
- CRITICAL PATH METHOD (CPM) CPM is like creating a model of your park, including all tasks, their durations, and project milestones.

AND IN CASE YOU NEED TO ADJUST YOUR PROJECT PLAN, CONSIDER THESE STRATEGIES:

- PRIORITISE CRITICAL TASKS

  Focus on the most important tasks first.
- USE EFFECTIVE TOOLS AND TECHNIQUES

  Use project monitoring tools and techniques to track and manage project activities efficiently.
- KEEP COMMUNICATING WITH YOUR TEAM

  Keep talking with your team about task statuses and overall progress.

IF YOUR PROJECT HITS A BUMP OR NEEDS ADJUSTMENTS, CONSIDER THESE RE-PLANNING STRATEGIES:

- RESOURCE ADJUSTMENTS

  Consider changing how resources are allocated if your core project elements are solid.
- SCOPE ADJUSTMENTS

  You might need to change the project's scope, as long as the main goal stays the same.
- EFFECTIVE COMMUNICATION

  Always communicate any changes in the plan to your team and stakeholders promptly to ensure everyone is on board.

RECOMMENDED DIGITAL TOOLS TO CARRY OUT THE ACTIONS:

As we embark on the journey of crafting and implementing an M&E plan, the integration of digital tools becomes pivotal. Let us explore a selection of recommended digital tools to execute the outlined actions effectively:

M&E PLAN BUILDING

Project Management Software

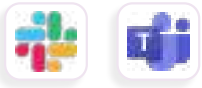
They facilitate defining goals, assigning tasks, and establishing timelines for seamless project execution.

Collaborative Documentation

Serve as our shared workspace, fostering collaborative planning, and documentation of goals, indicators, and data collection plans.

COMMUNICATION AND REPORTING

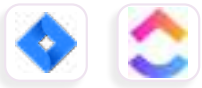
Communication Platforms



Presentation Software

ADAPTATIVE MANAGEMENT

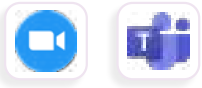
Project Management



Enable agile management, allowing us to adjust strategies based on evolving project challenges.

PROJECT MONITORING TOOLS

Regular Team Meetings



Serve as our digital check-ins, ensuring continuous monitoring of project progress and addressing obstacles.

By using these effective tools, techniques, and strategies, project monitoring becomes a dynamic process that enhances project success and adaptability.

Unit 9

9 DATA COLLECTION

9 DATA COLLECTION

Think of data collection like planning a school fair. There are different ways to gather information (or plan your fair), and each way has its pros and cons. The method you pick depends on factors like your budget, time limits, and the type of data you need. In general, these methods can be classified as quantitative (like counting the number of tickets sold) or qualitative (like asking students about their fair experience).

When picking your data collection method, you might want to think about these questions:

1. WHAT TYPE OF DATA (WHAT)?

Decide what kind of data will help you measure your goal. Quantitative data, like the number of tickets sold or the amount of money made, can be collected through surveys or by reviewing documents. On the other hand, qualitative data, which gives you detailed insights, is best gathered through interviews or group discussions.

2. WHO CAN PROVIDE THE DATA (WHO)?

Figure out who can provide the information you need. Do you need data from a large and diverse group of students, or will a few key people do? Pick a method that works for your target group, considering factors like language, reading levels, and how they prefer to give information.

3. HOW OFTEN SHOULD DATA BE COLLECTED (HOW OFTEN)?

Decide how often you need to collect data for your goals. Methods that collect data frequently, like daily or weekly surveys, are good for short-term goals. For long-term goals, you might only need to collect data every few months or even once a year. Your collection schedule might also depend on external factors, like the school calendar.

4. WHO WILL COLLECT AND ANALYSE THE DATA (BY WHOM)?

Think about who will be in charge of collecting and analysing the data. Check their skills and language abilities. Make sure they know how to use any necessary tech. Also, plan for data analysis, especially if you're going to collect a Think about who will be in charge of collecting and analysing the data. Check their skills and language abilities. Make sure they know how to use any necessary tech. Also, plan for data analysis, especially if you're going to collect a lot of data.

5. RESOURCE AVAILABILITY (CAN WE DO IT)?

Check if your project has enough time, money, and expertise for your chosen data collection method. Some methods are cheap and simple, but others need more resources. Balance the benefits of getting high-quality data against any limitations you might have.

It's worth checking if there are existing data collection tools that could work for your project. If other projects have used tools for similar goals, it could save you time and resources, plus ensure you get good quality data.

Think of data collection like planning a school fair. There are different ways to gather information (or plan your fair), and each way has its pros and cons. The method you pick depends on factors like your budget, time limits, and the type of data you need. In general, these methods can be classified as quantitative (like counting the number of tickets sold) or qualitative (like asking students about their fair experience).

When picking your data collection method, you might want to think about these questions:

- DATA COLLECTION METHOD

  Goals that can be measured with the same data collection method (like surveys or interviews).

- SOURCE

  Goals that come from the same source, like a particular group of students or a specific location.

- COLLECTION SCHEDULE

  Goals that need data collection at the same time, whether that's weekly, monthly, or yearly.

By grouping your goals, you can make your data collection more efficient. If you find goals that don't fit into any group, think about whether they're important enough to need a unique data collection tool or if they can be tweaked to fit into existing groups. This way, you can streamline your data collection process, making it more efficient and cost-effective.

9.1 TIPS FOR CREATING DATA COLLECTION TOOLS

Designing data collection tools, like making a quiz for your classmates, should be user-friendly and efficient to get accurate info. Here are some tips:

1. KNOW YOUR USER

Figure out who will be using the tool. Could be your classmates, teachers, or club members. Consider their comfort level with technology and experience with data collection. Understanding your users will help you create a tool that suits them.

2. STICK TO THE BASICS

Don't overload your tool with unnecessary stuff. Focus on the key info you need. For example, if you're trying to understand the favourite sport in your school, you might ask for their gender, grade, and favourite sport.

3. GET METADATA

Along with the main data, collect metadata, which is basically data about your data. This might include info like when and where the data was collected. This helps you track where your data came from and keeps the quality high.

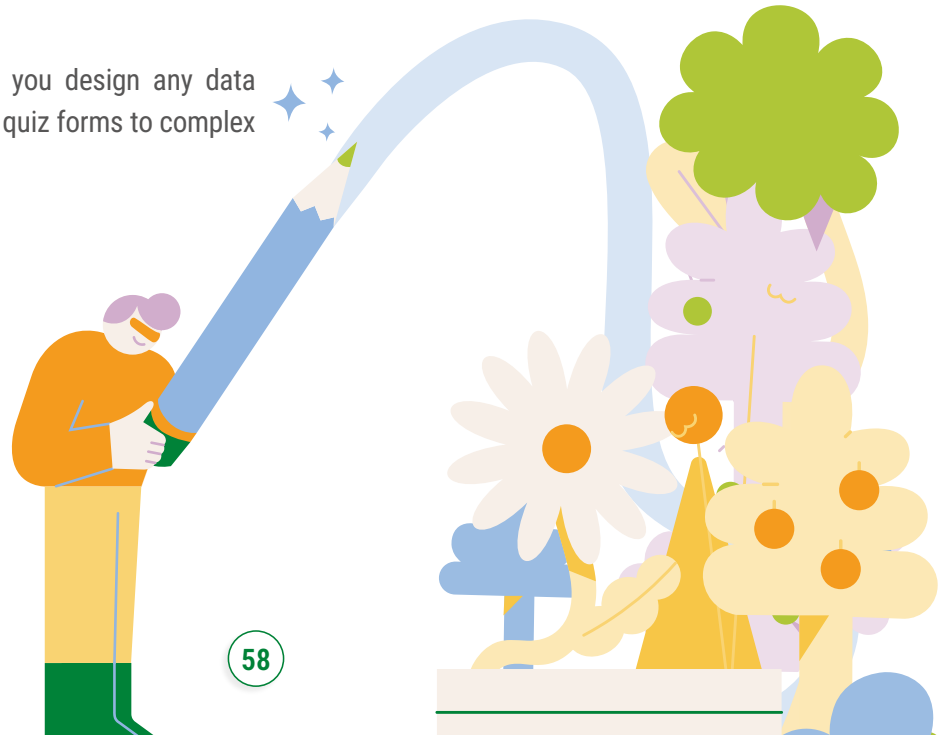
4. TEST YOUR TOOL

Before you use your tool, test it with your users in an environment similar to where you'll actually use it. Pay attention to any problems or misunderstandings and use this feedback to improve your tool.

4. TRAIN USERS AND INCLUDE INSTRUCTIONS

Don't assume everyone will know how to use your tool. Give a proper explanation to users to make sure they get it. You might even do a role-play exercise where one person pretends to use the tool and another acts like a participant. Also, include clear instructions with your tool explaining its purpose and how to use it.

These guidelines can help you design any data collection tool, from simple quiz forms to complex questionnaires.



Think of managing data like running a candy factory. You take raw materials (data), process them, and turn them into finished products (reports). Here's how it works:

STEP 01

DATA COLLECTION

Collect your project data using different methods and tools.

STEP 02

DATA ENTRY AND ORGANIZATION

Enter the collected data into a system, like a digital database or spreadsheet. Organise the data by grouping similar info together.

STEP 03

DATA ANALYSIS, VERIFICATION, AND STORAGE

Analyse your data to answer questions and draw conclusions. Check your data for accuracy to make sure it's reliable. Store your data for the project's duration, and consider saving some info for future reference.

STEP 04

DATA USE

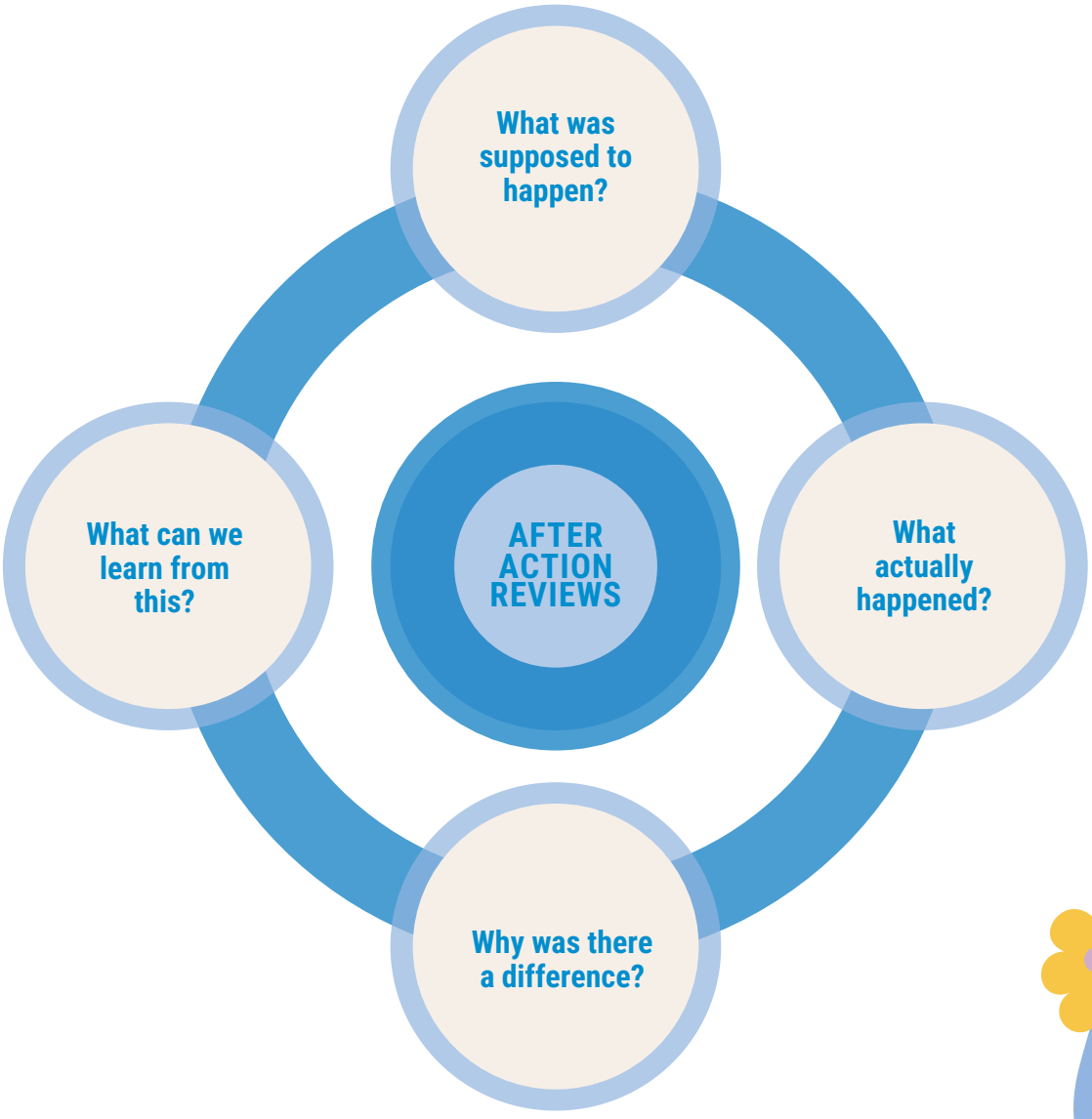
Use your data for different purposes, like making reports, sharing results, making decisions about your project, and planning future projects. You should plan how you're going to use your data right from the start to make sure the data you collect serves a purpose and helps your project succeed.

After-Action Reviews (AARs) are like a post-game chat where you analyse your actions and figure out what worked, what didn't, and how to do better next time.

They involve answering these four questions:

- What was I trying to do?
- What actually happened?
- Why did it happen?
- What can I do differently next time?

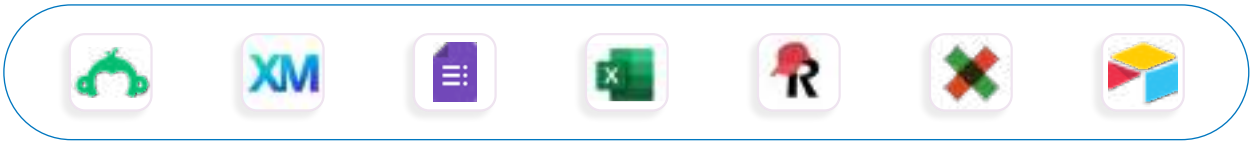
AARs are team meetings held after a project or big event ends. They are a great way to learn from both successes and challenges, helping your team continually get better. Remember, AARs are about learning and improving, not blaming.



RECOMMENDED DIGITAL TOOLS TO CARRY OUT THE ACTIONS:

Efficient data collection is the cornerstone of successful project monitoring, akin to orchestrating a well-organised event. The choice of tools significantly influences the quality and reliability of the collected data. Some of the examples of data collection tools include:

DATA COLLECTION

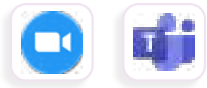


AFTER-ACTION REVIEWS (AARS)

Collaborative Review Platforms

Are ideal for conducting After-Action Reviews with our team.

Video Conferencing

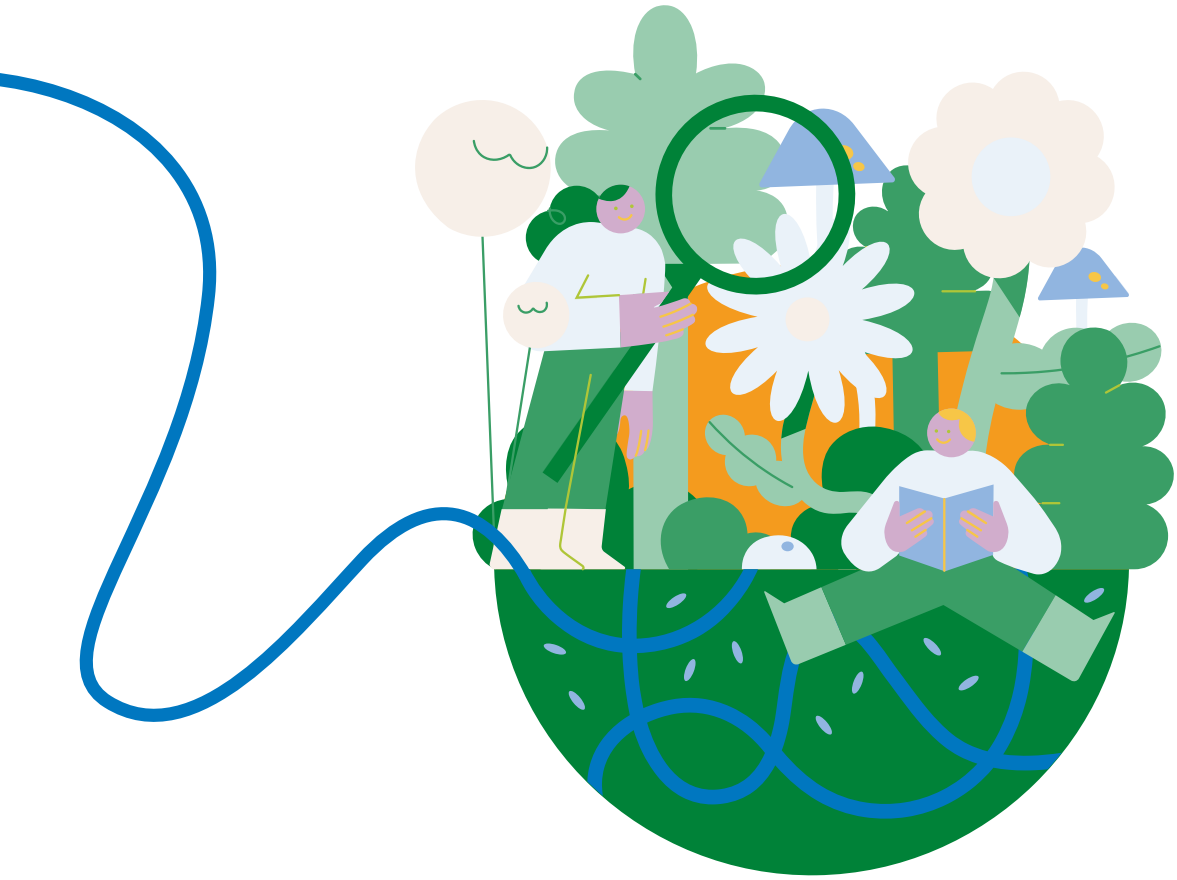


Conducting AAR meetings via video conferencing tools ensures effective communication and collaboration.

AARs serve as post-game chats, analysing actions to discern what worked, what did not, and how to improve. Addressing questions like the intended goal, actual outcomes, reasons behind outcomes, and improvements for the future, AARs are essential team meetings held after project or event completion. Emphasising learning and improvement over blame, they provide valuable insights for continual team enhancement.

In this realm, collaborative review platforms like Google Docs or Microsoft Word Online, alongside video conferencing tools like Zoom or Microsoft Teams, facilitate effective AAR discussions

Our commitment lies not just in adopting these tools but in continually assessing their effectiveness and embracing new possibilities as technology evolves. The collective journey toward efficiency and excellence is fueled by our dedication to learning, improving, and making informed decisions.



Unit 10

CONCLUSIONS

10 CONCLUSIONS

In conclusion, this comprehensive manual, titled "Roadmap and Practical Strategies for Monitoring and Evaluating Sustainable Education Projects," serves as a powerful resource for transforming your educational institution into a more sustainable and effective learning environment. It begins by establishing the context and significance of sustainability within your school, providing clear definitions and setting the stage for your journey.

The manual guides you through the process of assessing the sustainability of your school, prioritising key issues, and engaging all relevant stakeholders in the pursuit of positive change. It offers a detailed roadmap for crafting innovative and feasible solutions, complete with measurable objectives. A vital component of this process is continuous monitoring and evaluation, ensuring that your initiatives are not only effective but also sustainable in the long run.

We've delved into various aspects of project monitoring, examining different methodologies and tools at your disposal. Additionally, the manual offers valuable insights into the art of data collection, providing guidance on creating effective data collection tools that yield accurate and actionable information.

Ultimately, this manual empowers you to be a change agent within your educational institution, armed with the knowledge and practical tools needed to overcome challenges and drive progress. Your commitment to enhancing education and fostering sustainability is the driving force behind positive transformations in your school. We stand with you every step of the way, ready to support your efforts.

As you embark on this transformative journey, remember that your dedication and hard work can lead to lasting improvements in the educational experience for both students and staff. Your role as a catalyst for change is pivotal in shaping the future of your school. We applaud your commitment to education enhancement and wish you immense success in your endeavours. To further aid your mission, the manual concludes with a valuable list of resources and helpful links for further reading and information.

As we, the creators of the "Roadmap and Practical Strategies for Monitoring and Evaluating Sustainable Education Projects" manual, extend our heartfelt gratitude to the entire school communities that are participating in this European Project Viral. Your dedication to the pursuit of sustainability and educational excellence is truly commendable, and it has been an honour to collaborate with you on this endeavour.

We are deeply appreciative of the commitment demonstrated by the school administration, teachers, students, administrative staff, families, and the local community in embracing the principles and strategies outlined in this manual. Your enthusiasm and willingness to engage in sustainable practices and improve the educational experience for all have been truly inspiring.

Together, we have embarked on a journey to make a positive impact on the learning environment, and your active participation and dedication are the driving forces behind our shared success. By working collectively to implement the strategies and tools provided in the manual, we are paving the way for a more sustainable, inclusive, and effective educational institution.

It is our hope that the knowledge and resources offered in this manual, which is part of the European Project Viral, will continue to empower you as agents of positive change within the school community. Your ongoing efforts to monitor, evaluate, and enhance sustainability initiatives will undoubtedly contribute to a brighter future for all stakeholders involved.

We want to express our gratitude for the trust you have placed in us and the belief in the transformative power of education. Together, we, as part of the European Project Viral, have the potential to create lasting improvements in the educational landscape, and we look forward to witnessing the positive impact our collective actions will have on the school's future.

Once again, thank you for your unwavering commitment to education, sustainability, and positive change. Your dedication is a testament to the remarkable potential of our school community, and we are excited to see the positive outcomes that lie ahead.

Unit 11

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Unit 12

USEFUL LINKS

- A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities
- Adaptive Project Management: Leading Complex and Uncertain Projects
- Declaración de Buenos Aires
- Design Thinking in Education: A Toolkit for Teachers
- Eco-Schools Global
- Environmental Protection Agency - Sustainable Schools
- Google Workspace / Microsoft 365
- Green Schools Alliance
- Green Schools National Network
- Guide to Project Monitoring and Evaluation
- Guidelines for the Preparation of Results Frameworks
- Hegoa
- How to Write a Project Plan: A Step-by-Step Guide
- IDEO U: Courses on Design Thinking
- Key Performance Indicators (KPIs) in Project Management
- Learning and Adapting: The Role of Monitoring and Evaluation in Systematic Adaptation
- Microsoft Project
- Microsoft Teams
- Monitoring and Evaluation (M&E) Framework Template
- Monitoring and Evaluation in a Project Lifecycle
- Monitoring and Evaluation News
- Project Management for Wildlife Conservation
- Results-Based Management in the Public Sector
- SMART Criteria - Project Management
- The Compass for SBC
- The World Bank - Baseline Surveys: Practical Guidelines for Agro-Enterprise Projects
- The World Counts - Environmental Statistics
- UNESCO - Education for Sustainable Development
- UNESCO: Education for Sustainable Development Goals: Learning Objectives

Unit 13

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VIRAL

EnVIRonmental evALuation project method
for secondary schools

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