



# TRAINING MATERIALS

STEP 4: MONITOR AND EVALUATE

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# Monitor and Evaluate means...

Finding out whether or not you are successfully achieving the targets set out in your Action Plan. In order to do that, you must monitor and measure your progress.

Monitoring and Evaluation



<https://www.ecoschools.global/seven-steps-methodology>

# Monitor and evaluate also means that...

1. **Pupils should be given the responsibility** for carrying out **monitoring activities** wherever possible
2. **Results** of monitoring should be regularly **updated** and **displayed** for the whole school to see
3. The **monitoring methods** that you use will depend on the **targets and measurement criteria** decided on in your **Action Plan** for the topics you wish to look at and the age and ability of the pupils and other individuals who carry it out
4. **Evaluation follows** on from monitoring. Evaluating the success of your activities will allow you to make changes to your Action Plan if required.

# 1. Pupils should be given the responsibility for carrying out monitoring activities wherever possible.



There are lots of benefits for the students involved in monitoring activities.

- **Practical Learning:** Students develop their research skills through hands-on experience in areas such as data collection, analysis, and problem-solving.
- **Engagement and Ownership:** In every step of the Eco Schools philosophy students learn how to be actively involved and the impact their actions have on the environment.
- **Responsibility and Accountability:** Students are accountable and responsible for carrying out the monitoring activities and are able to witness the outcomes of their actions
- **Collaboration and Teamwork:** In all stages, students work together, and develop their collaboration skills but also their leadership skills. Consequently, they build their confidence and a sense of belonging to a group that strives to change the school through teamwork.

## 2. Results of monitoring should be regularly updated and displayed for the whole school to see.

When schools monitor the results of their actions and display them for the whole school to see , they promote:

- Educational value because they help students learn how to read the results and develop problem-solving skills, which are essential for fostering future active citizens
- Engagement because when students, staff, and parents see the results of their efforts, they are more likely to stay motivated and participate actively.
- Transparency by providing the school community with accurate, up-to-date data about the projects.
- Celebration of success as the updates give the school community the chance to reflect on the progress made and celebrate the achievements.
- Motivation and inspiration because when students have evidence that an action they implemented had positive results, they are more inclined to take further action through similar initiatives and amplify the impact of the school's efforts.
- Data-driven decision making since the results can be used effectively to adjust the original action plan and improve the outcomes

### 3. The monitoring methods used should depend on the **targets, measurement criteria, age and ability of the students.**

- This means that the tools and techniques used for monitoring progress should be tailored to fit the specific goals set in the action plan, the standards used for evaluation, and the students' developmental levels and skills.



## 4. Evaluation follows on from monitoring.

This step is particularly important for the Action Plan as it will allow the students to make all the necessary adjustments. The questions answered in this stage are:

- **Are the goals met?**
- **To what extent?**
- **What worked well?**
- **What do we need to improve?**

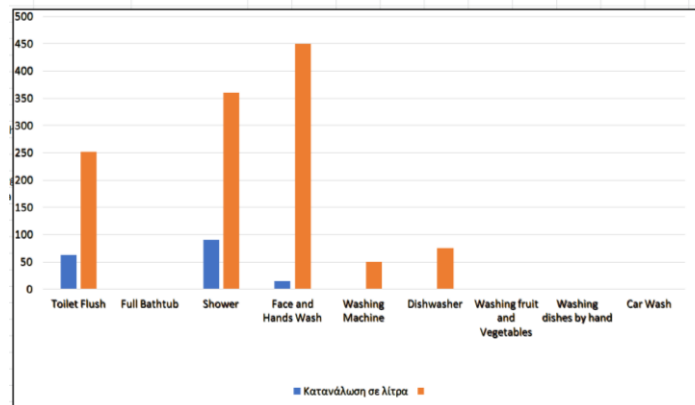
The whole school community can participate in the process of feedback collection that will inform the adjustments in the initial action plan. As a matter of fact, the various perspectives need to be considered so that the evaluation is valid and objective.



# Let's put the theory into practice

Depending on the main theme, students can carry out a variety of monitoring activities. For example, they can:

- Track recycling rates by weighing bins weekly
- Monitor energy use by reading meters
- Measure the number of students who used the compost bins in a week.
- Monitor water consumption at school and at home.



## Athens College Elementary School - RECORD SHEET

*I discuss in class the ways I use water every day. The children record the amounts of water they consume in the various uses with the help of the quantity table in the booklet. I continue the activity at home where I will measure the family's water consumption.*

*Then I draw my 'water footprint'. Our young students will formalize the quantities by painting, while the older ones can present the impression in a diagram.*

USE	Liters	My water consumption (in liters)	My family's consumption (liters)
A toilet flush	9/per time	27	108
Full bathtub	150	X	X
Shower	15 lt/min	30	90
Washing hands and face	30/2 min	30	90
Washing machine	150/per time	X	150
Dishwasher	50/per time		50
Washing fruits and vegetables	15 lt/min		15
Washing dishes by hand	150/per time		75
Car wash	150/per time		X
<b>TOTAL</b>			<b>578 liters per day</b>





# Let's put the theory into practice

Regarding the waste management project, here are some examples of monitoring activities related to the methods of Bioeconomy used at school.

- If students want to check whether the attitudes towards waste disposal have changed they can measure and compare the quantity and type of the waste produced every day.

Our litter the first three days after talking about the project

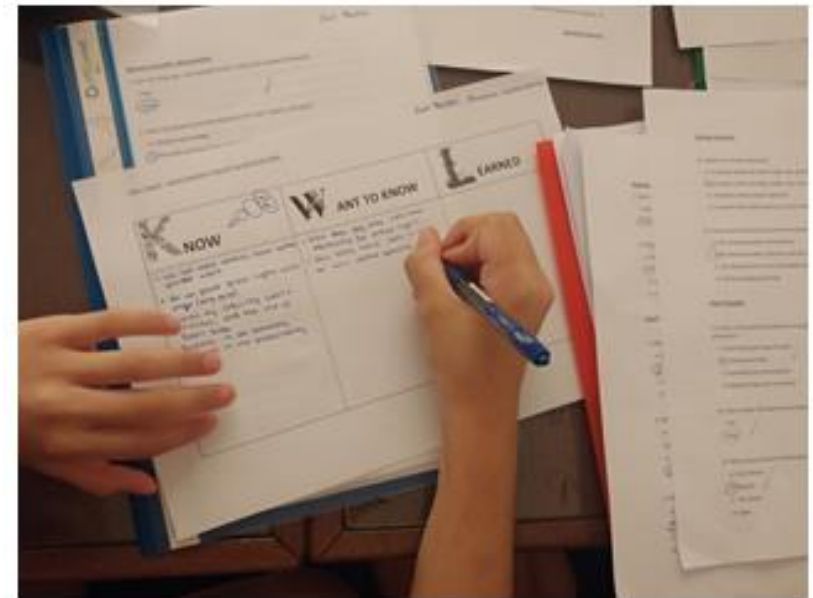
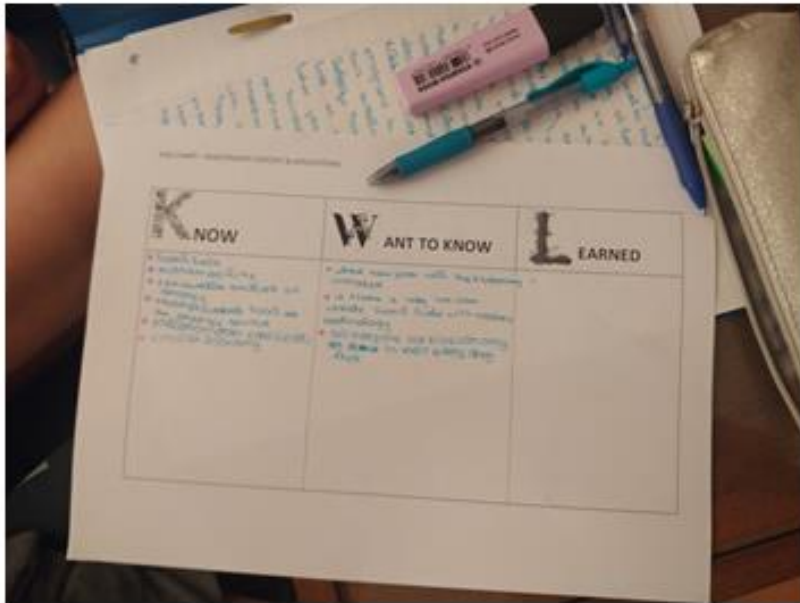


It's getting less and less...



# Let's put the theory into practice

Students in Middle and High Schools can also design monitoring activities to evaluate biobased product education programs through questionnaires that they design and distribute to peers to assess their knowledge before and after an educational programme or a campaign on biobased products.





# Let's put the theory into practice

Students can update and display the results in a number of ways. For example:

- They can use digital screens in the main hall, the cafeteria, the library and the school website to display real-time data on waste management and the use of biobased products.
- The Eco committee can ask for a board in the main hallway, which can be updated weekly with graphs, charts, and summaries of data related to the waste management project.







# Let's put the theory into practice

Students can update and display the results in a number of ways. For example:

- **Monthly School's Newsletters** in which the Eco Committee can publish a section with updates on environmental projects, including data on the use of bio based products and their impact. The newsletters can be distributed to all students, staff, and parents.
- **Classroom Presentations and Assemblies** which can take place at the end of each term, the student coordinators of the Eco Committee can present to their peers, teachers, and parents the results of their monitoring activities and the progress regarding the initial goals.





# Let's put the theory into practice

Following up on the action plan regarding the waste management at school:

- Elementary school students would probably use simple charts and logs to estimate the amount of waste they produce.
- Middle school students would estimate the monthly waste reduction by reading the results and comparing changes.
- High school students would be able to do a survey and a statistical analysis related to the compost process and calculate the amount of the money saved for the school on a monthly basis.



# Let's put the theory into practice

In a recycling program monitoring aiming at waste reduction, the students may decide to compare the total paper recycled over a three-month period and compare it to the initial target. If the target is not met, they can try and find the reasons.

- **Could this be the case due to lack of awareness?**
- **Could it be due to an insufficient number of bins?**

Then, they can and adjust the plan by increasing awareness through campaigns or add more bins.



# Let's put the theory into practice

- In a monitoring regarding the use of bio-based products to carry the food and snacks in the school cafeteria, the students can review the survey results during the first semester.
- If the use hasn't increased, as it was originally expected through the action plan, the students may look into the parameters of cost and availability.
- A possible modification of the plan would be to find cost-effective suppliers or inform the school community through a campaign about the benefits of using bio based products.







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