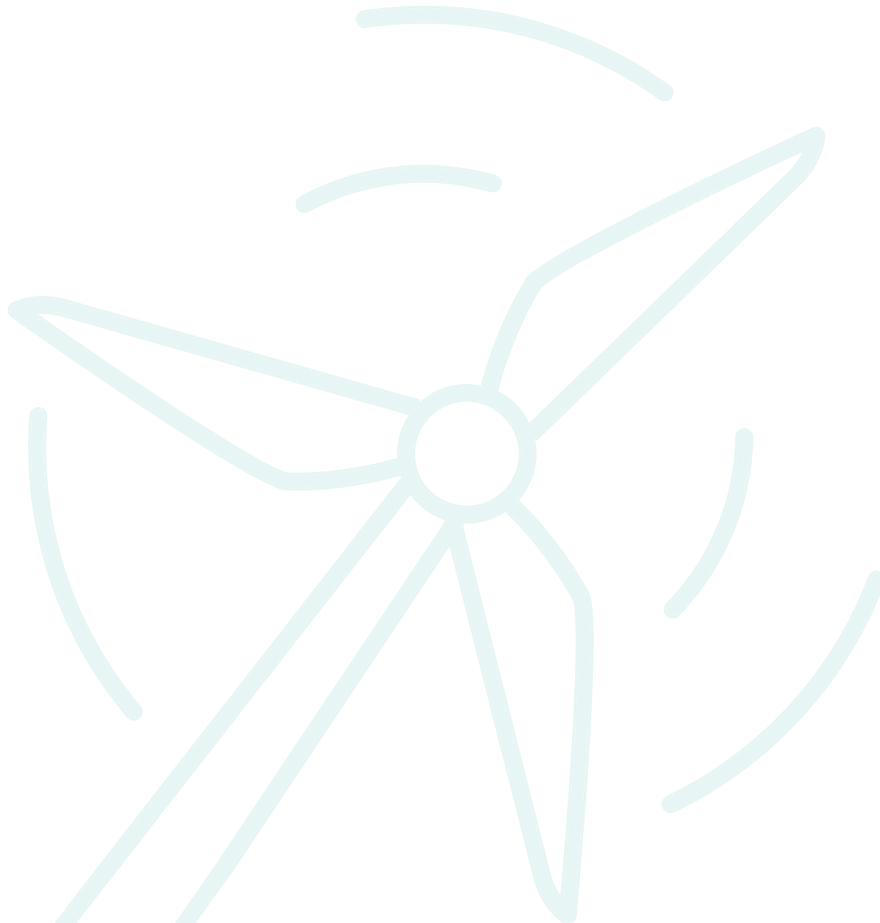




EDUCATOR GUIDE



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INTRODUCTION

FACILITATION TIPS

Dear Educator,

Welcome to the Student Eco Citizenship Program! Thank you for your commitment to create the next generation of active environmental citizens and leaders!

Before you begin, you will want to review the student materials. Take some time to engage the students in a discussion of the topic “protecting the earth and environment”. Explain to students that the goal of the program is to develop engaged eco-citizens.

Some suggested questions to start the discussion:

- **What does it mean to be an eco-citizen?**

Note: Students likely will come up with a number of ideas or responses. What you may want to confirm, (if not in student responses) is that eco-citizens act and participate as agents of change in their private (homes) and public spheres (communities) through individual and collective actions to solve present-day environmental problems. (*Source: National Center for Biotechnology Information*).

- **What are the environmental issues that most concern you?**
- **What is your responsibility in finding solutions for them?**

Next, explain the program and how students will participate. Explain to them that they will work in teams (minimum of three and maximum of five students to research, select and implement a solution to an environmental problem.

We have created four lessons to help guide your students. They include:

- **Lesson 1: Research and Solutions:** students will research an environmental issues, identify a problem within it they want to solve and decide on the solution.
- **Lesson 2: Action Plan:** students will prepare an action plan to implement the solution.
- **Lesson 3: Act and Evaluate:** students will carry out or implement their solutions and evaluate the results.
- **Lesson 4: Share, Submit and Celebrate:** students will create a two-four page document and use this as their submission. Once complete, celebrate their successes!

You should find the above tips and lessons helpful, however please also make sure to visit the program website at www.ecocitizenship.org for student learning standards, competition rules and more.

If at any time you have questions or need assistance, please feel free to reach out to us at any time.

Sincerely,

Diane Barrett, Executive Director
Foundation for Impact on Literacy and Learning
www.ecocitizenship.org



LESSON 1

RESEARCH & SOLUTIONS

OBJECTIVES

60-90 minutes of class time with time out of class to complete research.

Students will:

- Research and share information about environmental issues.

- Draw conclusions about how their actions can positively affect the environment
- Decide on an environmental problem and solution.
- Identify a project goal.

ACTIVITY 1 FACILITATION TIPS

Ask a student or you read the first paragraph of the instructions for Activity 1. Explain to students that the issues listed on the chart are broad, wide-ranging environmental topics designed to be their first step in identifying a problem they want to tackle.

- Direct the student teams to select one to two issues from the chart.
- Have the students read the next section, “How do you go about conducting research?” (The students’ prior knowledge and understanding of research will determine the time you spend on how to research a topic or issue.)
- Emphasize to students that Air Pollution is only an example used to help them better understand the suggested research process for this project. In this process, student teams will:
 - Select the issue.
 - Decide on their questions. What do you want to know about the issue?
The example suggests three questions that take the research from the definition of the issue, to its causes on a global, national, or local level. Suggest to students that they could go one step further and ask the question, what are the primary causes of _____ in their county or city.
- Encourage students to take notes on what they find in their research.
- This is a good time to suggest students have a defined place to record their research and organize it by topics or key words. (This also will be helpful to them as they gather other materials or documents throughout the lessons for this project.) They could do this electronically or use a dedicated notebook.
- Remind students that, as they collect information they believe they will use, they must cite the source and if it is a direct (word for word) quote, the citation should be in quotations.
- Give students sufficient time to conduct their research. Suggest to students to research helpful websites. Consider a bulletin board or space where students could place and share “did you know” facts found in their research.
- Monitor the research activities and help the teams to identify from the list of causes identified, one that is of particular interest to them. Refer to the example in their materials showing mobile sources, specifically cars, as a major cause of air pollution.
- Guide them in a second tier of research on how the cause they selected could be refused, reduced, reused or recycled. The example shows the results from asking the question, “how can car emissions be reduced.”



RESEARCH & SOLUTIONS

ACTIVITY 2 FACILITATION TIPS

- You may need to assist some teams to select one problem to address. Explain that the problem is stated as a claim or belief to be verified or confirmed. Using the example, the stated claim is “Car idling causes air pollution.”
- As students state their chosen problem, ask clarifying questions and ask other students if they have questions or comments.
- If more than one team has chosen the same problem, explain they will need to come up with different actions or solutions for it.

ACTIVITY 3 FACILITATION TIPS

- Have students tell you what they think a brainstorming session is. Clarify any misconceptions.
- Encourage students to be creative and innovative in considering solutions to their chosen problems. What are some possible solutions that may be considered unique?
- Monitor the brainstorming activity among the teams.
- As the final step in this process, explain that students must decide on a project goal or what they expect to happen as a result of implementing their solution? What do they believe their solution can do — eliminate the problem, slow down the problem, or perhaps publicize the problem offering user alternatives or options.
- Ask teams to again state their problems, solutions and goals or expectations on competing the solution. Highlight any inhibitors you think may effect the implementation and ask if they have ways to overcome them.

OPTIONAL BRAINSTORMING ACTIVITY

Items needed: pads of sticky notes.

- *Give each team member a sticky note.*
- *Ask each team to take five minutes to write down as many possible actions to solve the problem. Remember, no idea is too small or too big.*
- *Place the sticky notes on a wall/poster board for the team members to see. Cross out duplicate ideas.*
- *Review, as a team, the remaining ideas. Are there ideas that may need some “tweaking” to work? Are there ideas that may take too many resources including time?*
- *Is there one solution (action) the whole team can agree on?*



LESSON 2

ACTION PLAN

OBJECTIVES

Students will:

- Create an action plan to implement their project solution.
- Conduct a peer review to get feedback on their solution and plan to implement it.

ACTIVITY 1 FACILITATION TIPS

(60-90 minutes)

- Encourage students to list every step or task they think is needed to carry out their solution.
- As they complete their list of tasks, remind them to include where and how they will get the resources, if needed, to complete their solution.
- If more than one team has chosen the same problem, explain they will need to come up with different actions or solutions for it.

ACTIVITY 2 FACILITATION TIPS

- The Action Plan template in the student lesson provides limited space for students to document their tasks or steps. They may want to consider options such as creating an electronic version, or use a separate paper to write the tasks, or other options they create to capture their action plan.
- As they complete their action plan remind students their final document of 2–4 pages requires a description of the actions taken to create their solutions. Be sure students are thinking carefully about the steps and clearly articulating them in their action plans.
- Give students the date for their final document (submission). They should be mindful of that deadline when they identify due dates for the tasks on their action plans. Encourage students to follow the guidelines in their materials to create their due dates by working backward from the submission deadline to ensure they complete their project on time. An electronic calendar for team members to access will help them to stay on task and time.

ACTIVITY 3 FACILITATION TIPS

- Ask students about questions or comments they received from the peer reviews of their solutions and action plans and if and how, they made any adaptations to either or both.
- Review the action plans to clarify or make suggestions on tasks and timelines.



LESSON 3

ACT & EVALUATE

OBJECTIVES

Students will:

- Implement their plan to achieve their eco project goal.
- Collect data and report outcomes.
- Develop a plan for next steps.

ACTIVITY 1 FACILITATION TIPS

- Meet with each team to confirm they have the resources and permissions required to carry out their solution.
- Schedule times to meet with teams throughout their actions. Consider a calendar visible to all teams with the dates and times of planned activities. (Some teams may be conducting their solution over a period of days or weeks whereas other teams may be conducting a one-time activity.)
- Confirm that students have a strategy for collecting data on their project progress and outcomes. Remind them they will be capturing and documenting both quantitative (what can be measured or counted) data and qualitative (what can be observed but not measured) data.
- The final submission requires two photos or illustrations (may be hand drawn) of the teams' actions. You may need to remind students to have one or more team member(s) assigned to this task.
- Because some teams may be conducting their actions in the school environment, advise other teachers and school leadership about the activities.
- Remind students that social media is a good strategy for getting information/publicity about their action out to the school and/or community.

ACTIVITY 2 FACILITATION TIPS

- In their materials students are directed to respond to the questions about their successes and challenges. In their description of successes remind them to include all data captured during and after their actions. They will need these data for the final submission. Help them consider ways they can present the data — graphs, charts, infographics in that final submission.
- Not all teams will have numbers to document their successes. Explain to students that there are a number of ways to measure success including anecdotal information or evidence. This type of evidence could include fostering a strong team ethic, comments/responses they received from participants including those on social media.
- Some teams may not meet their project goals. This is a good opportunity to talk with students about what they can learn from not meeting a goal. They can and should take the time to review the possible reasons — flawed statement of the problem, inappropriate solution to the problem, key steps or actions not completed, time. Have them consider recommendations for strengthening the project goal and actions?



LESSON 3

ACT & EVALUATE

ACTIVITY 3 FACILITATION TIPS

- Refer back to the first day when you asked students — “What is an eco-citizen?” Remind them of the definition discussed at that time. Eco-citizens act and participate as agents of change in their private (homes) and public spheres (communities) through individual and collective actions to solve present-day environmental problems.
- Consider a discussion of ways or strategies for continuing and strengthening their roles as eco-citizens.
- Have students complete the Next Steps chart in their materials. Remind them that these next actions will be included in their final document of 2–4 pages (competition submission).





LESSON 4

SHARE, SUBMIT & CELEBRATE!

LESSON 4 OBJECTIVES

Students will:

- Prepare their final document of 2–4 pages for competition submission.
- Share their document with peers and teacher to receive feedback.
- Celebrate their efforts with their peers.

ACTIVITY 1 FACILITATION TIPS

- Review with students the requirements for their team submissions.
- Allow time for the teams to collect the information needed to document their projects and outcomes.
- Encourage the teams to think creatively about how they can present their project and outcomes to be visually appealing, clear, concise and accurate.
- Share the examples of the final document by visiting the Competition page of the program website. Remind student this is only one example, and they should consider other strategies as creative for their final document.
- Monitor the teams' activities providing direction and guidance, as needed.

ACTIVITY 2 FACILITATION TIPS

- Direct students to share their document with at least one other team and teacher or principal/assistant principal for their comments and suggestions to strengthen it.
- Review the document to ensure it includes all requirements and are in the correct format.
- Have each student team send their final document to you, the teacher.
- Remind each team to:
 - Save their document in PDF format.
 - The PDF document should be saved and labeled with the following details: School name, Teacher name, City, First name of each student on the team.

Teachers! Please note the following:

- Each student team must have different actions if using the same topic. Please do not submit the same entries for each student team.
- You must review each of your student team entries and choose the three best entries to upload and submit into the competition.
- Entries not in the proper format will not be accepted!



SHARE, SUBMIT & CELEBRATE!

ACTIVITY 3 FACILITATION TIPS

- Consider ways for students to celebrate — pizza party, cake--their work.
- Add a note of appreciation to all the student teams on the school daily announcements or the school's social media platform. Include some highlights of the projects.
- Have students complete the Next Steps chart in their materials. Remind them that these next actions will be included in their final project submission.

