



PROJECT 2 : Creation of Public Campaign on Environmental Impacts of Smartphones

Lesson 1

Fostering Informed Decisions

Learning Objectives:

1. Analyze the connection between human actions (or inactions) and the impacts on the environment.
2. Appreciate that understanding and stakeholder engagement are essential components of identifying and implementing policy.
3. Explore policy development in terms of providing information, changing decision context, creating incentives, and setting rules and regulations.



► In creating a campaign to inform and persuade others, students will need to understand how to analyze the problem, understand who needs to be involved in decision making and implementing a given solution. In the *Environmental Engineering for the 21st Century* study, Grand Challenge 5 explores ways to “Foster Informed Decisions and Actions”.

This is not about changing people’s preferences or making the public “care” more about the environment. Rather, it is about equipping people with options that provide solutions and with information to make wise choices based on an understanding of the potential outcomes and costs associated with each course of action and the potential risks from inaction (page 66).

1

Start class by displaying the following:

Tell students the school wants to change the dress code. Ask how they would want this to happen? What would they want to know? How would they want to participate?

Students might discuss that they would want to understand why the changes are being made and be able to participate in the decision.



The goal of this discussion is to have students appreciate that in creating new policies, the elements of understanding and ‘stakeholder’ engagement and collaboration are important.

Wrap up the discussion by having students read pages 66–67 in the report (available in the resource section and in the student section of this website) and take notes on the concepts of understand and stakeholder engagement in environmental problems.



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2

Display the following statement:

The choices made by individuals or groups can have spill-over impacts on the well-being of others.

Tell students they will examine this idea with the following example:

> A farmer needs to decide how much nitrogen fertilizer to apply to the field.

What are the benefits of additional fertilizer? Students should understand there would be a higher yield of crops.



In a Think-Pair-Share have the students discuss the following:

- What is the impact for the farmer?
- What is the impact for the environment? (Students may need resources)
- If the farmer is aware of the environmental consequences, should they reduce the amount of fertilizer?
- What is the farmer’s social responsibility?

As student pairs share back to the group, identify the lines of evidence that fall under each category of a “triple bottom line” approach - environmental impacts, social responsibilities, and financial returns - which can be used to choose among alternative management or policy options.

3

Adopting Policy Solutions Activity:

In this activity students will create a policy solution for an environmental issue at school.

The first step in the activity is to understand the four elements of policy solutions:

- | | |
|----------------------------------|----------------------------------|
| A. Providing information | C. Creating incentives |
| B. Changing the decision context | D. Setting rules and regulations |

Students will read pages 73-76 to gather information about the four elements of policy solutions.

Divide the class into groups of 4. Each group should identify an environmental issue at the school that they believe needs to be addressed. Some examples might be: too many students driving to school, food waste in the cafeteria, not enough students using the recycling bins.

Tell students that they are to create a policy solution for this issue. Using the four elements of policy solutions, they will develop a solution to present to the class.

Students can use PowerPoint/Google Slides or video to create presentations. We have provided Student Planning Sheets for students working in groups or to aid independent study.

