

VICE DOCUMENTARIES: LESSON PLAN

EVALUATING AN ENVIRONMENTAL PROBLEM

GOAL Students will learn about an environmental problem and evaluate possible solutions that could be used to address it.

TIME REQUIRED One 45- to 60-minute class period

MATERIALS REQUIRED

- HBO's *VICE* documentaries focused on the environment, located at hbo.com/vice-in-the-classroom

- ▶ *The Future of Energy*
- ▶ *Plastic Oceans*
- ▶ *When the Earth Melts*
- ▶ *Greenland Is Melting*

- Student activity sheet: "Finding Environmental Solutions"

INSTRUCTIONS

1. Begin by asking students what effects of human activities they have noticed in their environment. (For example, students may have seen smog in the skies around cities, pollution coming out of factories or cars, or trash in natural areas such as forests or rivers.) Write student examples on the board.
2. Challenge students to identify the types of human activities that can lead to the effects you listed on the board. Prompt them to describe any other changes in the environment that could be caused by humans.
3. Choose one of the following three documentaries to watch:
 - ▶ *The Future of Energy*, a 30-minute episode highlighting green-energy solutions such as solar, wind, and nuclear fusion.
 - ▶ *Plastic Oceans*, a 15-minute episode about the massive amounts of plastic that have polluted the oceans.
 - ▶ *When the Earth Melts*, a 15-minute episode about how warming temperatures in the Arctic are causing permafrost to melt.
 Show students the first few minutes of the selected documentary. Pause the video after the introduction (at 2:25 for *The Future of Energy*, 0:44 for *Plastic Oceans*, or 1:45 for *When the Earth Melts*).
4. Ask students to share their observations about the environmental problem discussed in the video. What changes did they see in the environment? What human activity contributed to these changes? Spend a few minutes brainstorming solutions that could be used to address the problem. Make a list of their solutions on the board.
5. Distribute the "Finding Environmental Solutions" student activity sheet and review the questions aloud. Allow students to write their answers to the first question. Tell them to consider the remaining questions as they watch the rest of the video.
6. Resume the video. Immediately after the video, have students complete the activity sheet. When everyone is done, reconvene as a class and discuss their answers. Be sure to explore differing opinions and interpretations. Continue the discussion with an evaluation of the solutions proposed in the video. Ask the students to explain whether they believe these solutions will or will not be effective. What could be the outcome of these solutions? What limitations might they have? Brainstorm ways the solutions could be improved.



From the documentary *Greenland Is Melting*

7. Tell students that there are many ways to address environmental problems. Prompt students to consider ways that individuals can contribute to solutions. Challenge them to come up with 10 specific actions that can help address environmental problems. Write the ideas on the board. Separate students into groups and challenge them to come up with ways they could work together to implement some of the solutions.

GOING FURTHER You may choose to wrap up the lesson after one documentary, or you could continue the conversation by watching any of the other videos in the materials list and using the activity sheet to evaluate additional environmental problems. You may also choose to highlight the connections between environmental issues by having students watch *Greenland Is Melting*. This video is different in that the problems are not spelled out. After watching, challenge students to make connections between the problem in Greenland and the problems discussed in the other episodes. Why is the ice melting? (Carbon emissions are causing temperatures to rise, pollution is causing ice to become dirty and warm faster.) As students work in groups to brainstorm solutions to the problem, remind them to incorporate what they may have learned by watching any of the other three episodes.

EXTENSIONS FOR OLDER GRADES Make an action plan. Have students create a PowerPoint slide show that includes the following elements: 1) statement and images of the environmental problem; 2) description and evidence of the human activities contributing to the problem; 3) actions being taken to address the problem; 4) a five-point action plan students can implement to address the problem at a local level. Challenge students to make their action plans impactful and actionable. Have students present their solutions to the class. You may choose to have the class vote on their favorite plan and work together to implement it.

STANDARDS

NSES: 6, 7.

NGSS: LS2.C, LS4.D, ESS3.C, ETS1.

CCSS: R7, W2.

Get the full list of standards [here](#).

FINDING ENVIRONMENTAL SOLUTIONS: STUDENT ACTIVITY

DIRECTIONS: Your teacher will show one of the three following documentaries highlighting current problems in the environment.

- ▶ *The Future of Energy*
- ▶ *Plastic Oceans*
- ▶ *When the Earth Melts*

Gather information from the documentary to answer the questions below. Be sure to include evidence to support your answers.



THE PROBLEM What environmental problem is highlighted in the video? _____

THE EVIDENCE What observations or data have scientists collected about the problem? _____

THE CAUSES What human activities are causing the environmental problem? _____

THE EFFECTS Describe at least two potential impacts of this environmental problem on wildlife or humans. _____

THE POSSIBLE SOLUTION(S) What possible solution(s) to this problem are presented in the video? _____

EVALUATE AND DISCUSS Evaluate the solution(s). Which seem effective and why? What could be the outcome? Are there any limitations? Brainstorm ways the solution(s) could be improved.