



Ecology in Classrooms & Outdoors

ECO HEROES TEACHER GUIDE

Introduction

Who inspires you to be a hero for our planet? Throughout history, people of all backgrounds and cultures have proven through their actions that we truly can make a difference for the environment. And, a healthier environment goes hand and hand with a healthier and more just society! In this lesson, students will learn about a handful of amazing players in a variety of environmental and social justice movements, then research and create a presentation about someone who inspires them.

Materials

- [ECO Heroes Presentation](#)
- [ECO Heroes Worksheet](#), print or digital
- Pencil
- Computer and internet access
- Additional books, documentaries, journal articles (optional)

Lesson Length

30-60 minutes, asynchronously or combination

A note on this lesson

This lesson is to be used as a jumping off point and is by no means a comprehensive study of environmental heroes in history! There are many directions to take this lesson, so we are including a handful of options for educators to choose from, depending on the grade level of the students and the depth you'd like to go.

This lesson can be divided into multiple parts over the course of days, or done as a short introduction to the history of environmental movements. It may be completed synchronously or asynchronously, or a combination of the two. Note that many terms may be advanced for elementary students, so it may be helpful to present synchronously for K-5 students to ensure you can break down terms or provide definitions as you go along.

Standards

NGSS

K-ESS3-3 Earth and Human Activity

Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

5-ESS3-1 Earth and Human Activity

Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Social Science

Social Science Analysis 5.26

Gather, assess, and use information from multiple primary and secondary sources (such as print, electronic, interviews, speeches, images) to examine an event, issue, or problem through inquiry and research.

Historical Thinking 5.24

Explain why individuals and groups, including ethnic and religious groups, and traditionally marginalized groups during the same historical period differed in their perspectives of events.

Geography 5.11

Describe how physical, human and political features influence events, movements, and adaptation to the environment.

Geography HS.50

Determine the influence of long-term climate change and variability on human migration, settlement patterns, resource use, and land uses at local-to-global scales.



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Lesson Procedure

1. ECO HEROES PRESENTATION

Shown as a class or assigned to students to read through on their own, the presentation ECO Heroes includes information about seven diverse people or groups who have made a difference in their communities and the world around them. Slides are arranged with one introductory slide and a following slide with additional resources on the person or group.

The ECO Heroes we selected for their contributions to the environment and their communities include:

Rachel Carson: scientist who wrote *Silent Spring* in 1962 calling out the use of toxic synthetic pesticides, sparking the environmental movement of the 1960s and the creation of the Environmental Protection Agency. Resources: [Rachel Carson, The Life and Legacy](#) (website), [How one scientist took on the chemical industry - Mark Lytle](#) (short video), [Chapter 1 | Rachel Carson | American Experience | PBS](#) (in-depth video, chapter one from a full-length documentary)

César E. Chávez: Latino American activist, who created the National Farm Workers Association in one of the most prominent case studies for environmental justice. Resources: [The Story of Cesar Chavez - UFW](#) (website), [Cesar Chavez: American Civil Rights Activist - Fast Facts | History](#) (short video)

Wangari Maathai: Kenyan social, environmental, and political activist and founder of the Green Belt Movement that gave rural women jobs and planted millions of trees globally. Resources: [The Green Belt Movement](#) (website), [Wangari Maathai - Biographical - NobelPrize.org](#) (website), [Wangari's Trees of Peace](#) (video read-aloud book)

Nancy Russell: founder of the Friends of the Gorge and naturalist who eventually helped establish the Columbia River Gorge as a National Scenic Area. Resources: [History of Friends of the Columbia Gorge](#) (website), [Oregon Live Article](#) (web article)

Greta Thunberg: Swedish teenager leading the School Strikes for Climate that have gained momentum across the globe. Resources: [Greta Thunberg: TIME's Person of the Year 2019 | Time](#) (web article), [Greta Thunberg Is Leading a Global Climate Movement](#) (short video)

Xiuhtezcatl Martinez: Colorado-based Indigenous and Latinx hip-hop artist, writer, and activist, youth director of Earth Guardians and one of 21 plaintiffs in the *Juliana vs. US* lawsuit. Resources: [Xiuhtezcatl Martinez](#) (website), ['I love calling out politicians': meet the student suing Trump over climate change](#) (web article), [Xiuhtezcatl, Indigenous Climate Activist at the High-level event on Climate Change](#) (video)

The Water Protectors: group of activists who come from a variety of tribal nations and unite with the common belief that water is sacred; famously demonstrated in opposition to the Dakota Access Pipeline fight at Standing Rock starting in April 2016. Resources: [Meet Autumn Peltier: 15-year-old internationally recognized clean...](#) (web article), [We Are Water Protectors by Carole Lindstrom READ ALOUD ~RING AROUND RONINA~](#) (video read-aloud book), [Standing Rock activists: Don't call us protesters. We're water protectors](#) (web article)

2. ACTIVITY OPTIONS

K-5 students:

1. Have students use the ECO Heroes Worksheet to complete a short research project on a hero of their choice in the presentation.
2. Have students prepare a short presentation in which they share what they've learned, either using an online presentation platform or by creating a poster and sharing a photo of their poster.
3. Have students draw themselves as an "ECO Hero". For this activity, students will draw a person with exaggerated features that represent characteristics of themselves as a hero to the environment. For example, they may add a large green heart, to represent a love of nature. Or, they may add question marks in their head, to represent curiosity, a large smile because they are kind, strong muscles to carry heavy problems, etc. They may also add features to represent the actions of an ECO hero, such as them growing a garden, saying "no" to plastic utensils, using a microscope to conduct an experiment, or carrying a sign to show support for a movement. This is an opportunity to be creative!



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Lesson Procedure, cont.

Middle school students:

1. Select three or more ECO Heroes from the presentation to have students learn about in-depth by reading their introductory slide and engaging with the additional resources on the following slide. Then, have students select one of the heroes to focus on by filling out the ECO Heroes Worksheet for that person. Have students turn in their worksheet or share their findings with the class.
2. Have students create an action plan for how they will become a hero for a cause they personally care about. For example, if their cause is solving plastic pollution, have them think about steps they must take to accomplish this goal. Will they need a certain type of experience? Will they need to learn about politics and government, or do scientific research? Will they need to activate other people to help them along the way? What challenges will they have to overcome?

High school students:

1. Take an in-depth look at each ECO Hero from the presentation by reading their introductory slide and engaging with the additional resources on the following slide. Then, have students select one from the list or another of their choosing and conduct a longer research project on that subject (assignments include write a written report, write a journalistic article, create a presentation, etc).
 - a. Some categories students may look to find heroes in: marine biology/ocean conservation, climate change research, animal welfare/animal rights, agriculture/food systems, Indigenous rights
 - b. Some questions to get students going: how did this group or person influence society around them? What might this person or group's bias be, and how might their biases influence their own actions? Does this person or group have opposition, and if so, from whom?
2. Dig deeper by selecting a nonfiction book, longer journalistic piece, or a full-length documentary film to learn more about a person, group, or movement. Then, write a report or create a presentation on what they learned.

3. SHARE

Invite students to share their work in a way that works for your class, and discuss how learning about ECO Heroes influenced their way of thinking about environmental and social justice.

Sharing suggestions include: uploading posters or worksheets in a gallery on Google Slides, SeeSaw, or other platforms; sharing posters, presentations, or worksheets live during a Zoom session; writing reports and sending them to classmates for peer review.