

EARTHRISE PHOTOGRAPH: INSTILLING REVERENCE FOR THE FARTH

"We were all awestruck by the beauty of the Earth and its color against the blackness of space."

-Astronaut Bill Anders

OVERVIEW

Students watch the film Earthrise and reflect on the power of the Earthrise image to foster reverence and responsibility for the planet.

PLANNING FOR IT

WHEN YOU MIGHT USE THIS PRACTICE

- At the start of a unit on earth science, environmental science, ecology, or astronomy
- On Earth Day, April 22nd
- Anytime throughout the school year, but especially to foster a sense of global citizenship and interconnectedness

TIME REQUIRED

• One class period (approximately 60 minutes)

LEVEL

- Middle School
- High school
- College

MATERIALS

• Internet access and TV/projector

- Earthrise film (30:01)
- Earthrise photograph

LEARNING OBJECTIVE

Students will:

• Explore how the Earthrise photograph provides a context for fostering a sense of common humanity and inspiring people to protect our planet

ADDITIONAL SUPPORTS

- Making Practices Culturally Responsive
- Adapting Practices for Students with Special Needs
- Making Classrooms and School Trauma-Informed and Healing-Centered

SEL COMPETENCIES

Responsible Decision-Making

HOW TO DO IT

REFLECTION BEFORE THE PRACTICE

- Take a moment to reflect on the Earthrise photograph. Do you feel a sense of reverence or expansion? Does it shift your thinking about your place--or humanity's place--on this planet or in the universe?
- If possible, preview the film *Earthrise* before showing it to your class, to help determine how best to connect it to the purposes of your class/course and curriculum.

INSTRUCTIONS

BACKGROUND AND THEM "REVERENCE FOR THE ENVIRONMENT"

In 1968, three astronauts completed the first manned orbit around the moon, becoming the first humans to see the Earth from space--as it had never been seen before. The first color photograph taken beyond Earth's orbit was later titled *Earthrise*.

This new perspective, shared with the world through the Earthrise photograph, radically changed humanity's view of itself and our relationships with each other and the planet. The visible lack of national boundaries and seeing the Earth as a beautiful complete whole in the vastness of space, provided a window into the beauty, unity, and vulnerability of life on Earth.

The word "revere" can be defined as having a deep respect or admiration for something. Reverence for life is a fundamental experience of being human--to be in awe of life and all its forms of expression. When we hold our environment and natural world with reverence, we are often inspired toward conscious, ethical, and moral

decision-making about how to live on our planet. This could include a commitment to do no harm, to live sustainably, and to take action towards protecting the planet's oceans, forests, and species.

The astronauts of Apollo 8 left Earth to learn about the moon, but returned to Earth with a renewed reverence for the beautiful blue marble we call home. Astronaut Bill Anders summarized his feelings about the trip: "We came here to explore the moon, and the most important thing is that we discovered the Earth."

For the first time in human history the Earthrise photograph offered a new way to see the Earth. Astronaut Frank Borman said that "everything we held dear" was on that planet. The astronauts were struck by how the vast emptiness of space accentuated the beauty and vulnerability of Earth. They acknowledged that "you don't see cities, you don't see boundaries" on Earth from space. Instead, the planet appears as one entity, one entire community of life, one ecosystem.

The image was an inspiration for the creation of Earth Day and the Environmental Protection Agency. In 1970, five days after the Apollo 13 return, the first Earth Day took place and remains on calendars today, symbolizing environmentalism, sustainability, and ecological justice It is estimated that over 1 billion people participate in Earth Day activities each year.

Nature photographer Galen Rowell declared the Earthrise image as "the most influential environmental photograph ever taken." Viewing the Earth from space allowed the astronauts and the world to recognize, honor, and revere the Earth as home to all living aspects.

PRESENTING THE PHOTO AND FILM

- Begin the practice by displaying the Earthrise image so that all students can see it. Ask students to jot down answers to the following questions:
 - o What do you see?
 - O What do you think about that?
 - O What does it make you wonder?
- Encourage students to take their time and note all of the ideas that come to mind. Then, have students share their responses with the class. You might consider recording answers to the third question to discuss after watching the film.



- Before showing the film *Earthrise*, share background information about the film and about the theme "Reverence for the Environment":
 - o In 1968, three astronauts completed the first manned orbit around the moon, becoming the first humans to see the Earth from space--as it had never been seen before. The first color photograph taken beyond Earth's orbit was later titled *Earthrise*.
 - The film *Earthrise* tells the story of this image captured by the Apollo 8 astronauts—Bill Anders, Frank Borman, and Jim Lovell—and recounts their experiences, exploring the beauty, awe, and grandeur of the Earth against the blackness of space.
 - The word "revere" can be defined as having a deep respect or admiration for something. Reverence for life is a fundamental experience of being human--to be in awe of life and all its forms of expression. When we hold our environment and natural world with reverence, we are often inspired toward conscious, ethical, and moral decision-making about how to live on our planet. This could include a commitment to do no harm, to live sustainably, and to take action towards protecting the planet's oceans, forests, and species.
- Ask students to look for moments of reverence while watching the film.
- Watch the film *Earthrise* (30:01) with students.
- Then ask students where they found moments of reverence for the environment during the film.

DISCUSSION

- Lead a discussion which explores the theme "Reverence for the Environment," choosing from the
 prompts below. Timestamps are included when quotes from the film are referenced.
 - Define reverence for the environment in your own terms. Why might reverence for the environment be a necessary beginning point for a change in perspective?
 - o "The one overwhelming emotion that we all carried with us is the fact that we really do all exist on one small globe. When you get out 40,000 miles, it really isn't a very large Earth." (24:06) The astronauts had two consistent and contrasting responses to seeing the tiny Earth from space. The first response was how small and insignificant the Earth is in contrast to the vastness of outer space, and the second was a sense of love and awe at Earth's beauty and importance as our only home. These feelings might seem opposed to each other. Do you think they are? How might they relate to each other, if at all.
 - "Lovell was overwhelmed by the smallness of Earth, home to three and a half billion (in 1968) who, from this vantage point, all wanted the same things--a family to love, food to eat, a roof over their heads, children to kiss. From this distance, he could scarcely comprehend the fragility of Earth's atmosphere, a layer no thicker than the skin on an apple, the only thing that protected those lives, and life itself," wrote Robert Kurson in Rocket Men. What message does this send?
 - The Apollo 8 astronauts were asked if the mission had changed them. Borman said that the experience "amplified" a feeling he had for many years, after his experience of orbiting the Earth for two weeks on a Gemini mission. On Earth, he said, "the boundaries we have are really artificial ones." How might this view, of Earth's interdependence, contribute towards supporting an environmental ethic?
 - Author and environmentalist Wendell Berry wrote, "The care of the Earth is our most ancient and most worthy, and after all our most pleasing responsibility. To cherish what remains of it and to foster its renewal is our only hope." Describe some ways people can foster renewal and cherish our planet.

- o In 2018, the United Nations Intergovernmental Panel on Climate Change (IPCC) released a report on the serious impacts of global warming. The report warns that warming must be kept at a maximum of 1.5C, and going beyond, the globe will see an increase in droughts, floods, and poverty. A member of the panel said, "It's a line in the sand and what it says to our species is that this is the moment and we must act now." What aspects of human behavior do you think have prevented society from moving forward to more sustainable models of living on the planet? How might the symbol of the Earthrise photograph galvanize people into action? What actions are you interested to take? Why?
- Director of *Earthrise*, Emmanuel Vaughan-Lee, described what inspired him to make the film. He said, "I wondered what role this image could offer us 50 years later as we face intense political, social, and ecological upheaval. Could it become a symbol of remembrance that unites us? Could it act as a catalyst, enabling us to see our planet as one ecosystem?" What do you think? What does the film offer us 50 years later during "ecological upheaval?"
- O Define in your own terms what it means to be a global citizen. In what way is the Earthrise photograph a symbol for what it means to be a global citizen?

CLOSURE OR HOMEWORK

- Give students **one** of the following reflective writing prompts to demonstrate their understanding of the film *Earthrise*. Length: 2-3 paragraphs
 - o In 1968, ecologist and philosopher Garrett Hardin wrote about an idea he called "the tragedy of the commons," implying that humans will overuse resources for personal gain if given the chance. He writes, "Each man is locked into a system that compels him to increase the herd without limit--in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons." How does the Earthrise photograph help convey the need to regulate the commons (our shared resources) before the commons is lost?
 - Since 1968, Earth's population has roughly doubled from 3.4 billion to over 7 billion in 2018. Edgar Mitchell, Apollo 14 astronaut, said, "beneath the blue and white atmosphere there was a growing chaos...that population and conscienceless technology were growing rapidly way out of control." What do you think Mitchell means by "conscienceless technology"? Describe some ways in which we can use technology to help humans strengthen our resolve to work together towards solutions on Earth.
 - The film Earthrise premiered online on *The New York Times* Op-Docs. One viewer commented, "I wonder whether it takes such a voyage to produce a permanent perspectival shift in humans. I wonder what national and global politics would be like if every political representative had to take such a voyage before assuming a governing role." What do you think about this comment? What if environmental decisions were made by people who took a voyage into space? Describe the pros and cons.

REFLECTION AFTER THE PRACTICE

How did students respond to the film and/or photograph? Did you notice whether some students expressed a feeling of reverence or a shift in how they viewed themselves or humanity and their place in the world?

THE RESEARCH BEHIND THE PRACTICE

EVIDENCE THAT IT WORKS

The authors of this practice mention in the introduction that reverence is "to be in awe of life." The astronauts, too, mentioned feeling "awestruck by the beauty of the Earth."

Awe is the feeling we get in the presence of something vast that challenges our understanding of the world, like looking up at millions of stars in the night sky or marveling at the birth of a child. When people feel awe, they may use other words to describe the experience, such as wonder, amazement, surprise, or transcendence.

Scientists have found that awe has an amazing capacity to make us feel more connected to other people and humanity. In one study, participants spent time near an awe-inducing Tyrannosaurus rex skeleton or in a regular hallway. When asked to describe themselves, the dinosaur viewers were more likely to use universal descriptors (such as "a person" or "an inhabitant of the Earth") rather than more specific descriptors (such as "tall," "friendly," or "a student") than the other people, suggesting that awe increases our sense that we are part of a greater whole.

WHY DOES IT MATTER?

According to researchers, <u>empathy</u>--a critical quality that helps humans feel connected and compassionate towards one another--may be on the decline in students.

Reminding students of their common humanity, whether through an awe-inducing experience or just a <u>gentle</u> reminder like the Earthrise photograph, can help to foster positive school relationships, cultivating classroom and school climates where all students feel safe and that they belong. And students who grow up with this sense of connectedness eventually become adults who may contribute to creating a more connected world.

SOURCE

The Global Oneness Project is a free multimedia platform that brings the world's culture alive in the classroom by using stories as a pedagogical tool for growing minds. Their collection of documentary films, photo essays, and lesson plans highlight cultural, environmental, and social issues with universal themes including our common humanity. https://www.globalonenessproject.org/.

To access the entire Earthrise curriculum, visit the Global Oneness Project: click here