



Photo by David R. Neilson

Where Do You Stand with Raptors?

Summary

In this activity, students will learn to identify different opinions related to environmental issues that raptors face as well as the information, values and beliefs that influence those opinions. They will use an opinion spectrum to analyze the range of opinions in their classroom on environmental issues and understand how these spectrums can be valuable.

Educational Standards

- Next Generation Science Standards: Science
- Common Core State Standards: Speaking and Listening

Learning Objectives

After this activity, students should be able to:

- Engage effectively in a range of collaborative discussions with diverse partners, building on others' ideas and expressing their own idea clearly.
- Identify beliefs about environmental issues.
- Promote critical thinking, education, and informed citizenship through presentation of controversial issues in a straightforward, primarily pro-con format.

Materials List

- A large room (or room with a long wall)
- Threats to Birds of Prey
- Aldo Leopold Nonfiction Article
- Aldo Leopold Response Sheet
- Issues Response Sheet
- Activity Opinion Spectrum Signs

Introduction

Everyone's values and beliefs influence their opinions. Because of this, people often have extremely different opinions about a certain issue. Can you think of an issue about which you have an opinion? (Note: teachers may need to prompt students at this point with suggestions; e.g., choices about what to have for dinner, what movie to see, and feelings about whether a drawing is good or not, etc.) An opinion is your view or your way of thinking about a particular issue. Some people have a hard time expressing their opinion while other people find it very easy publicize their beliefs.

Note to Teacher, our Rationale: Recent headlines in Bayfield County cover shootings of birds of prey, emphasizing that negative attitudes continue to exist towards these bird populations. In August, 2014, headlines were in newspapers as far as 200 miles away about a shooting of an osprey and a barred owl within 15 miles of the Cable Natural History Museum. Many local stories tell of historical trappings and killings of birds of prey. There is a homesteading attitude toward predators that can occur within our local hunting culture. The history of raptor-human interactions in North America clearly has shown continued persecution of raptors, especially as improvements in shotguns and rifles increased along with the popularity of game hunting, particularly in the eastern United States (Hornaday 1914, Bildstein 2001). Our DPI's Wisconsin Environmental Education Model Objectives stress the importance of gaining an awareness of the natural world that can lead to attitude changes and better stewardship of our environment, which is a goal the Museum hopes to achieve through our raptor education programs.

(Note: This activity is adapted from: *Environmental Issues (Hand-On Minds-On Science Series): Intermediate*, by Pauline Chandler and Investigating and Evaluating Environmental Issues and Actions Skill Development Modules, by Harold R. Hungerford, Ralph A. Litherland, R. Ben Peyton, John M. Ramsey, and Trudi L. Volk.)

Procedure

Before the Activity

- Make a copy of the *Threats to Raptors* and *Aldo Leopold* article to read aloud to students, or make copies for each student.
- Plan to work in a space where students can spread out in a straight line (classroom with desks moved, gym, hallway, common area, etc.)
- You may need to discuss the idea of an opinion spectrum or Likert-type scale (the range of opinions between strongly agree and strongly disagree) with the students. Some students may require help understanding the concept of a "neutral" opinion. If possible, come up with an example to help the students understand a neutral position (i.e., something very simple, such as: the school is getting new carpeting: the choices are black or dark blue. What do they choose? Hopefully, they just don't have an opinion between the two colors.)

With the Students

- Hooking the Students** - Have students stand up if they agree with the following:
 - Ice cream is one of the world's best desserts.
 - Brussel sprouts taste great!
 - Dogs make better pets than cats.
 - Wisconsin's Green Bay Packers are the best team in the NFL.
 - Cell phones should be banned across the world for people who are driving.
 - My bedtime should be later.
- Things to Talk About/Discussion Options** - Explain that a belief is an idea which a person holds to be true. The idea may or may not be true but the person believes it is. A person's beliefs are often tied to his or her values. A value is the worth a person (or a group) places on something. Usually, our values guide us in the choices we make.

An environmental issue includes humans, the environment, and interactions between the two, and issues involving differing beliefs and values that can lead to differing positions regarding the solution to the issue.

When people differ in their beliefs and values, they usually disagree on how an environmental issue should be solved. They have different ideas how the issue should be solved.
- Reading Activity:** Take a look at some of the threats to raptors like Theo, Aldo, or Carson, the birds brought to the school by the Cable Natural History Museum. Read through the *Threats to Raptors*.
- Where Do You Stand Activity:** Sometimes, it is easier for a person to express their opinion about something when they are given a list of words to choose from to help them describe how they feel. When there is a large group of opinions you are trying to understand, having each person choose from a common list of words is also helpful. People may be asked to rate their feelings on a spectrum. This is called an *opinion spectrum* or *Likert-type scale*, in which the range of opinions between strongly disagrees and strongly agrees is known. Can you think of a time when you "strongly agreed" with something versus just "agreed" with it? Maybe it was the difference between "Yes, that sounds good for dinner" and "Wow! Yes, that's exactly what I want for dinner. That's my favorite meal!" How about a time when you really did not have an opinion either way? We call this state of thinking — when you neither agree nor disagree with something — a "neutral" opinion.

A common opinion spectrum that will be used today includes the following responses: agree, neutral, and disagree. Have you ever been asked a question with a range of answers like that? What are some other examples of this type of system? (Answer: Rating systems, grading scales, etc.)

It is through discussions and the use of an opinion spectrum, people become well-informed about the community's needs and beliefs. It is helpful for a person to be aware of their beliefs and values. Sometimes a conflict pops up inside a person when they feel like they are caught between two values. The choice may not be between a "good" and a "bad" but instead between two "goods."

In the following activity you will have an opportunity to examine some of your ideas about several environmental issues. You will have an opportunity to share your beliefs about these issues with your classmates. You will also be able to talk about why you feel the way you do and just what it is that you value. Some of your ideas may change a bit as a result of your discussion.

5. Assign an area of the room for students to walk to if they agree with a statement. Select another area for students to walk to if they are neutral, and a third area if they disagree (you can add strongly agree and strongly disagree if you wish, and you could also arrange a chair or desk in a row, leaving several feet in between to form separate areas for people to stand.) Set up conversation guidelines (one person talks at a time, we accept all people's ideas even if we don't agree, etc.)
6. Read an issue statement from the list. See the "Teacher Opinion Statements" for an easy to read list.
 - ❖ Raptors are amazing birds and should continue to have protection from the federal government so they cannot be hunted for any reason.
 - ❖ Lead fishing weights and lead gun ammunition (called shot) should be banned from use in the United States in order to protect birds.
 - ❖ Pesticide use should be banned and responsible farming methods be required.
 - ❖ Legislation should require power companies to create raptor-friendly power pole systems.
 - ❖ All nations should work together to make sure oil spill prevention and response plans are continually assessed and updated. OR Off-shore oil drilling should be decreased to protect our raptors and ocean systems. OR All nations should address oil dependence and do everything it can to depend more on alternative energy sources like solar, wind, or geothermal energy.
 - ❖ I can and will do something to protect raptors in my life.
7. Ask students to stand near the sign that best describes their position after you read each statement.
8. After all students have settled in their places on the spectrum, ask one student in each category to explain why s/he chose that position (what things influenced their decision?). Be sure that they include some of their values/beliefs that influence their opinions. Continue the same procedure for other statements.
9. Repeat the above steps with a new issue statement as many times as desired.

10. **Read** the Aldo Leopold Article. As a class, discuss Aldo Leopold's initial opinion about killing wolves. What things influenced his opinion? How did he change his opinion? What things influenced this change?
11. **Connect your Reading to Writing:** As a class or in small groups, discuss using the Aldo Leopold Response Sheet. Ask students to write their answers in the space provided or discuss them as a class. Emphasize that they should explain the reasons for their opinions.

Ask the students to write down two of the issue statements from the spectrum activity and the position they chose. Have them write an explanation for why they chose to stand in the position they did (what things influenced their decision?). (They can write in their science journals, on the Issues Response Sheet (attached), create a t-chart outline, etc.) Check to see that they have supported their decisions with information, values and/or beliefs.

Attachments (with link)

- Activity Opinion Spectrum Signs (pdf)
- Issues Response Sheet (pdf)
- Aldo Leopold Nonfiction Article (pdf)
- Aldo Leopold Response Sheet (pdf)

References

Chandler, Pauline. Environmental Issues (Hand-On Minds-On Science Series): Intermediate, Westminster, California: Teacher Created Materials, Inc., 1994.

https://www.teachengineering.org/view_activity.php?url=collection/cub_/activities/cub_environ/cub_environ_lesson02_activity1.xml

Investigating and Evaluating Environmental Issues and Actions Skill Development Modules, by Harold R. Hungerford, Ralph A. Litherland, R. Ben Peyton, John M. Ramsey, and Trudi L. Volk.)

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Where Do You Stand?

Teacher Opinion Statements

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