



POINT OF VIEW

*Thinking
strategies
to enhance skills
of analysis,
creativity,
and problem
solving.*

ENVIRONMENTAL PERSPECTIVES

Lesson Description: Students apply their understanding of different habitats and further explore the concept of diversity as they role-play a meeting between creatures from different habitats. For the first part of the lesson, small groups are assigned different habitats and review the characteristics of different creatures from that habitat. During the second part of the lesson, the groups are reorganized so each habitat is represented in new groups and the new groups will be given a different environmental issue. Students role-play their different creatures as they will discuss their reactions to the environmental issue in front of the rest of the class.

Pre-assessment/Prior Knowledge:

- Students have indicated a basic understanding of the Questioning strategy through the introductory lesson (p. 21).

SOL/POS Objective:

Sci. 3.6 The student will investigate and understand that environments support a diversity of plants and animals that share limited resources. Key concepts include:

- water-related environments (pond, marshland, swamp, stream, river, and ocean environments)
- dry-land environments (desert, grassland, rain forest, and forest environments)
- population and community.

Eng. 3.1 The student will use effective communication skills in group activities.

- Listen attentively by making eye contact, facing the speaker, asking questions, and summarizing what is said.
- Ask and respond to questions from teachers and other group members.
- Explain what has been learned.

Eng. 3.2 The student will present brief oral reports.

- Speak clearly.
- Use appropriate volume and pitch.
- Speak at an understandable rate.
- Organize ideas sequentially or around major points of information.
- Use grammatically correct language and specific vocabulary to communicate ideas.

Instructional Strategy:

Identifying Similarities and Differences- Students compare and contrast various perspectives in order to develop viable solutions to environmental problems.



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Materials:

- Chart paper
- *Environmental Problem Statements* (p. 108)

Enduring Understanding:

- There are many different ways to view and interpret events or situations.
- Personal experiences may impact one's perspective.
- An individual's perspective may affect his or her actions.
- A person's perspective can be enhanced and may change as a result of new knowledge.
- Multiple perspectives apply within and across disciplines.
- Asking questions and listening is key to understanding others.

Introduction/Essential Questions:

- How might the needs of different individuals affect their perspectives on similar situations?
- How can environmental problems be resolved without damaging other ecosystems?
- What human decisions have a positive impact on the population in an ecosystem?
- What human decisions have a negative impact on population in an ecosystem?
- How can viewing situations and problems from multiple perspectives lead to compromise?
- How can viewing situations and problems from multiple perspectives lead to conflict?

Teach and Explore Strategy:

- Equally divide students into five habitat groups: pond, swamp, ocean, desert, and forest.
- For the first part of the lesson, students assigned to each habitat will meet to review the characteristics of their habitat. (For example, all the students with "pond" cards will work together to identify the characteristics and needs of the pond habitat.) Students may want to make notes to refer to during the large group discussion.
- After student groups have investigated their habitats, reorganize groups into Environmental Think Tanks that include representatives from each habitat (pond, swamp, ocean, desert, and forest).
- Separate the environmental problem statements (p. 108) and distribute, one problem for each group.
- Think Tank groups discuss their assigned Environmental Problem Statements. Monitor groups to ensure each habitat representative offers his or her perspective. (Students may want to pick specific creatures from their assigned habitats to enhance their role-playing.)
- Facilitate the discussion with focusing questions. Help students understand that there are many different ways to view and interpret events or situations, and that an individual's perspective may affect his or her actions.



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Thinking strategies to enhance skills of analysis, creativity, and problem solving.

- Groups share answers to their problem statements on chart paper. The class asks questions to help further articulate the presenting group's findings.
- Ask probing questions: How did various knowledge and different perspectives enhance or frustrate the groups' progress? How did your perspective or knowledge change as you worked with group members? How does this impact our ability to problem solve throughout the school day?

Assessment Evidence:

- Teacher observations of student behavior, questions, and responses throughout the lesson.
- Group solutions to the environmental problem statements.

Metacognition:

- In Thinking Journals or during a class discussion, students reflect on how viewing situations from different perspectives can help people make informed decisions about environmental issues.
- Ask students to pick an issue, then prompt them to respond to the following statement: "If you were a _____, how would you react in this situation?"

Extensions:

- Have students create an environmental issue mind map. Their mind map should include the different habitats explored during this lesson and environmental issues that affect each.
- Ask students to research the pros and cons of an environmental issue of personal interest.



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Environmental Problem Statements

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A dry-land environment has been experiencing a drought lately. Trees, plants, and crops are dying. The local government has proposed pumping water from a nearby freshwater source. How will this impact your habitat positively? How will it impact your habitat negatively?

A new species has been introduced to your habitat. This animal is an amphibious herbivore with a very large appetite. The other creatures in your community want to get along with the new one, but have some concerns about its impact on the habitat. What concerns and compromises could exist in your habitat?

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There has been an oil spill in your habitat. People are working to clean it up, but it will have a lasting impact. What will the oil spill do to each of your habitats?

People who are tired of aquarium-dwelling pets have been abandoning the aquariums in your habitats. The people are pouring fish, snails, frogs, and aquarium grasses into ponds, swamps, and the ocean, and leaving gerbils, hamsters, rats, snakes, and exotic lizards in forests and deserts. How will these new creatures and plants impact your habitat?

Student
Handout