

# *GlobalTribe* Educational Curriculum

Mexico Lesson:  
Monarchs: The Interconnection of Humans and Nature

January, 2003  
[www.pbs.org/globaltribe](http://www.pbs.org/globaltribe)

*GlobalTribe* is a PBS series that combines the spirit of travel with a meaningful exploration of the global issues that affect us all. On our journeys to remote corners of the world, we seek to understand in human terms the universal struggles of our planet: from healing racial wounds to saving the environment to improving the lives of the poorest among us. Our quest is also to find solutions and to meet the unsung heroes in every country who offer us hope and a path to a better tomorrow.

For more information, contact:

Creative Visions  
1223 Sunset Plaza Drive  
Los Angeles, CA 90069  
[www.creativevisions.org](http://www.creativevisions.org)

Developed by:

Creative Visions &  
Jennifer New



## **Introduction / Pre-viewing**

---

1. Make a list of what students know about Mexico (this might be based on first hand experience, family member's stories, or information from books and other media). Then make a list of what they want to know about Mexico. Look at the list and discuss whether they think it should be different, given that Mexico is one of our two bordering neighbors.
2. Share some basic statistics about Mexico City with the students: 1,000 babies are born a day; approximately 1/6<sup>th</sup> of the population live in extreme poverty, going without basic necessities such as indoor plumbing; city services, including garbage pick up, are sporadic. Given these facts, ask the students what they think it would be like to be a teenager growing up in Mexico City? What problems might they face? Especially consider problems caused by overpopulation, poverty, and environmental degradation.
3. Ask the students what they know about deforestation. If they're unfamiliar with the term, you might briefly tell them that it is when many trees are removed from a large area. What are some of the reasons for deforestation (e.g., trees are needed to make paper)?
4. Tell the students that one part of the program they'll be watching deals with an endangered animal that is being killed because many people enjoy eating it. Is there anything they eat that other people might find wrong or bad? Have they ever considered not eating a certain food because of environmental or ethical reasons? Who should make the decision about what people can and cannot eat?

## **Monarchs: The Interconnection of Humans and Nature**

---

**Objective:** Students will understand the ways in which people and monarchs are sometimes in conflict. They will identify environmental/human conflicts in their community and research one of the issues they've identified, gaining awareness of all sides of the issue.

**Time:** Lesson is adaptable to between 4 and 10 in-class hours.

**Grade Level:** 9-12

1. Give students a homework assignment to learn about monarch butterfly migration. They should find short answers to the following questions:
  1. How and when does the migration happen?
  2. Where do the butterflies migrate to and from?
  3. What is necessary for monarchs to stay healthy and plentiful?
  4. What forces are hampering their survival?
2. As a class, collect answers to the four homework questions, posting them where everyone can read them. Then provide the students with this quote from GlobalTribe:

“We tend to separate human needs from the environment, and I think that’s impossible.”

– Guadalupe Del Rio, Alternare

Discuss this quote in relation to your findings about monarchs. Find examples of monarch’s needs and migration patterns coming into contact with humans. When do the needs of the two conflict with each other? (Alternative: You may choose to have students write about this instead of discussing it as a class.)

3. Briefly ask students for other notable examples of human and environmental needs coming into conflict (e.g., dolphins getting tangled in fishing nets). Then remind students of what Guadalupe said next: “There’s no way you can conserve resources if people are hungry.” For each of their examples, can the students imagine the people who would be negatively impacted if the practices identified, such as fishing tuna with nets, suddenly ended? Try to point out the often complex interactions between the environment and economic systems, human population and natural resources.

Then ask students to think of examples closer to home. Where in your town, state, or region do the environment and humans come into conflict? Perhaps a new housing development is threatening a rare turtle, or farming is affecting water quality. Try to identify several examples and then ask students to choose one to study in-depth.

4. Working in small groups or independently, students should research the conflict from all angles. Not only should they understand the basic issues involved, they should talk to people representing all sides. Interview environmentalists about what is at stake. Talk to business people who are associated with the human endeavor (e.g., a land developer). AND talk to the people who have the most to lose: people who could lose jobs or who need low-cost housing. Sometimes the two groups of people will be the same—this is often the case with farmers and fishermen—and sometimes they’ll be different.
5. Have students compile their findings in a magazine-style article in which they not only inform readers of the issues and players involved, but also propose solutions. (For more examples of Alternare’s creative problem solving in Mexico, see: <http://wildecology.ifcnr.com/article.cfm?NewsID=201>.)

**Assessment**

1. Publish the articles in a class magazine. After students have had an opportunity to read their work side by side with that of their classmates, ask them to write a self-assessment. Does their article clearly explain the conflict? Does it provide the perspectives of all involved in the conflict? Does it provide solutions? Provided you took time to review magazine writing, also ask whether the student’s writing includes such basic elements as a good lead and appropriate citation of sources.
2. Based on their own and their classmates’ work, have students write essays about human and environmental conflicts: Is one side “right?” Are there any solutions to these conflicts that can be applied in most, if not all, cases? Their answers should reflect a synthesis of the issues, their research, and the concepts presented in *GlobalTribe*.

**Extending**

1. Once again using Guadalupe’s full quote—“We tend to separate human needs from the environment, and I think that’s impossible. There’s no way you can conserve resources if people are hungry.”—ask students to reflect on the situation of Baja’s sea turtles and Mexico City’s children. How does the quote apply to each situation?
2. Both human and insect migration is mentioned in this *GlobalTribe* segment: the monarchs migrate between Mexico and the United States and Canada, and people, like the farmer Erasmo, migrate between rural and urban areas. Compare and contrast human and creature migration, including the reasons for each and the effects on the environment.
3. Encourage students to get involved with a local environmental issue, including the ones studied for this assignment. They may find themselves building nesting boxes for a depleted bird population or writing letters to political decision makers.

**Resources**

The Journey North  
<http://www.learner.org/jnorth/>

Monarch Watch  
<http://monarchwatch.org/>

“Monarch Butterflies Dying in Mexico”  
<http://www.northamericaninstitute.org/articlearchive/nytimes021302.htm>

**Standards**

Uses the stylistic and rhetorical aspects of writing  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=7&StandardID=2>)

Gathers and uses information for research purposes  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=7&StandardID=4>)

Uses reading skills and strategies to understand and interpret a variety of informational texts  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=7&StandardID=7>)

Understands that scarcity of productive resources requires choices that generate opportunity costs  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=15&StandardID=1>)

Understands the characteristics and components of the media  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=7&StandardID=10>)

Understands and applies the basic principles of presenting an argument  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=21&StandardID=1>)

Understands global development and environmental issues  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=8&StandardID=18>)

Understands relationships among organisms and their physical environment  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=2&StandardID=6>)

Performs self-appraisal  
(<http://www.mcrel.org/compendium/Benchmark.asp?SubjectID=23&StandardID=2>)