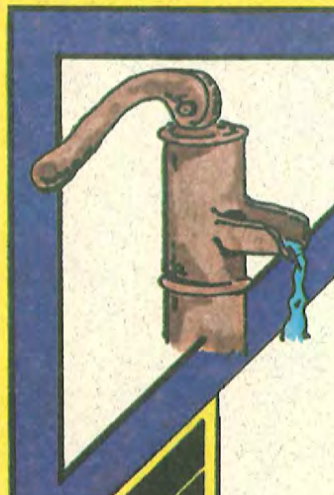
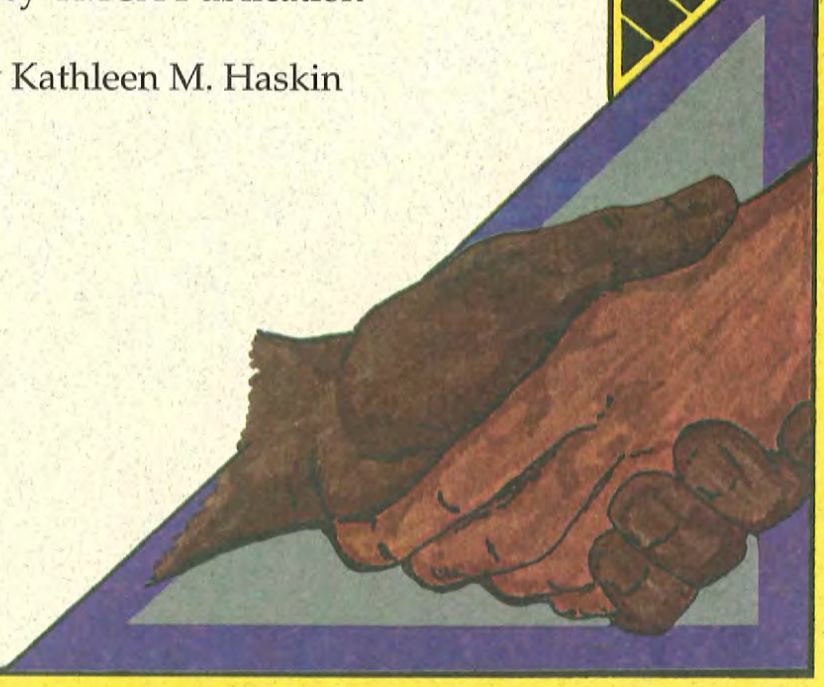


Linking Your Y With The World

An Instructor's Guide for Global Environment and Development Education

A Frost Valley YMCA Publication

Written by Kathleen M. Haskin



Linking Your Y With The World

An Instructor's Guide For Global Environment and Development Education

A Frost Valley YMCA Publication

Written by Kathleen M. Haskin

Preface by John Haskin

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Funded by
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and
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Our principal sources of information have been identified wherever utilized. The bibliographical information is provided under **Cited Resources**.

Acknowledgments

The development of these teaching materials has been generously supported by grants from The Geraldine R. Dodge Foundation and the United States Agency for International Development. The lesson plans reflect the commitment the Frost Valley YMCA has to the experiential foundations guiding the YMCA's Environmental Education and Global Awareness Programs.

We wish to thank the mission-guided staffs of the YMCA of the USA International Division and the Guatemala YMCA who have supported our efforts in cultural sharing through our YMCA partnership and in the production of this environment and development curriculum as well as it's companion piece the YMCA of the USA's *Linking Your Y With The World: Administrator's Guide.*

Special thanks go to the dedicated YMCA professionals at Frost Valley, including D. Halbe Brown, John K. Haskin, Jane Brown, Betsy Wasiak, Jeannine Lehman, Asha Verma, Mike and Diana Larison, Wanda Cypret, Tracy True, Sharon Atwell, Pratap Gohel and others. This and a multitude of other exciting projects are possible due to the combined efforts of the Frost Valley's Support Staffs whose service keeps the guests safe and comfortable, the Program Instructors whose tireless hours keep the students exploring, the Administrative Directors whose support guides our efforts, and the Trustees whose vision keeps us focused on our possibilities.

Preface

A recent article in the New York Times stated that scientists have found global warming to be posing a much greater risk to life than was previously thought. Not only are the polar ice caps threatened but recent studies indicate that the survival of life is threatened in *all the planet's major biological systems.* This article was not on the front page indicating headline news, but was buried on the seventh page of the third section. It is clear that modern lifestyles are threatening the ability of our planet to continue to provide a suitable habitat for all of life (including us). This simple yet devastating bit of information is played out for us again and again in our newspapers, radios, televisions and movies. But, who cares?

We have reached an interesting and challenging stage of the environmental movement. How do we make people aware of the enormity of our environmental situation without overwhelming them and thus having them tune us out? I can sympathize with many of our students (and even some of our instructors) when they ask... "What difference will I make?" "What possible difference can any one person really make?" This feeling of helplessness fuels a fire of hopelessness and leads to an attitude of indifference. I feel we have a responsibility to do more than inform people of the problems.

Our Frost Valley teaching staff has struggled with the task of globalizing our curriculum. From the beginning we felt strongly that we needed to maintain the experiential foundations which have guided our environmental program during the last 25 years. Several excellent development curriculum guides have been created for classroom teachers, yet none of these seemed right for our resident outdoor teaching situation. We felt an obligation to remain true to our values, that teaching even complex global environmental issues would require the unique perspective of experiential education we use in all of our other classes. This curriculum guide is an attempt to tackle the tough issues through familiar and realistic outdoor teaching formulas.

In working on this project we decided that rather than create one new class on developing world issues, that a school may or may not select (and for which we have no natural teaching resource), our goal would be to incorporate international ideas, critical thinking skills and problem solving experiences into already existing programs. We want to thank the Outdoor Environmental Education Directors from around the country who provided their class offerings lists so that we could create a common thread through this guide making these activities usable in nearly any center around the country.

This curriculum guide is a gift to all those instructors at resident outdoor environmental education centers who have wrestled with presenting the concepts of sustainability and developing world issues. Our hope is that you will accept the challenge to teach the tough issues while not sacrificing the methods of experiential instruction which we all value. Fear and guilt are out, global community development is in!

John Haskin
Director of Environmental Education
Frost Valley YMCA

Foreword

"Globalize our curriculum? We'd love to." , they respond with hesitation. That was often the answer to the not so simple question of "Would *you* like to globalize the curriculum you offer to your school groups?".

"Sure we can bring up global environmental and human rights issues in our discussions and conclusions, but how do we teach about the other side of the world experientially using a couple acres of forest here in the United States? What kind of extra training will I need to take on such complex issues? I studied biology and recreation, not politics!"

This guide was created with those instructors in mind. The people who are eager to take on the tough issues in their classes yet lack the universal training and clear vision on how to get started.

As we began to explore incorporating global issues into our classes, we identified a significant concern. What if the instructors bring up these subjects and do not present the entire picture? What if their knowledge and opinion of deforestation is limited to one side of the situation and they present a biased view of the concern? In doing this, we would create yet another injustice in the world. After all, it is the open-minded inquisitive students of life we all wish to develop in our classes.

There is no getting around the fact that we need to be prepared and informed on the subjects we explore with the students. That preparation for global issues should equal our effort for studies into our local ecology.

Embodied in this guide is our goal of aiding the instructors on their path to globalizing their lessons. This manual not only presents activities that combine our experience-based techniques with complex global issues but also involves a step-by-step process that an instructor may walk through in order to find the location in their curriculum into which they may incorporate these unique teachable moments.

Globalize our curriculum? We not only would love to - we need to. It's time to shed the hesitation and get started.

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Cultural Awareness

A recent poll showed that
20% of Americans cannot identify a single country in Europe;
1 in 4 cannot find the Pacific Ocean on a map;
1 in 17 cannot even locate the United States of America.
(*ASCD, "Global Connections", September 1991*)

Often we find it difficult to teach about areas of the world that are not right in front of us while still using our discovery-based learning that we encourage in our centers. Actually, with the right resources and direction, the students can learn about people on the other side of the world in an exciting, experience-based lesson without the cost of a plane ticket *or* missing lunch.

The activities and Instructor Thoughtsheets in this section will help you and your students get to know a variety of people around the world with a new perspective by exploring some of their customs, histories, economies, governments, literature and even games.

Cultural Awareness: People's Customs and Histories

Consider this:

Do your students know...

- how people in Sweden greet each other? (Fewer than 3% of our high school graduates reach "meaningful foreign language competence". - *The Myth of the American Eclipse, 1990*)
- where Egypt is on a world map? (Over 40% of American high school seniors could not do this accurately. - *The Myth of American Eclipse, 1990*)
- what children in Japan eat for breakfast?
- why farmers in Guatemala bury *Cantaros* in their garden beds?

"We do not adequately know the globe, nor the cultures of the people that inhabit it. This is called 'global illiteracy.'" *(Soutern U.S. Governors' Association)*

By teaching about ecology and the global environment, we have a natural opportunity to encourage students to explore the human species in the world around them *as well as* on the other side of the globe. **Before** you, the instructor, go any further with your lesson plans on **any** subject, consider the following. The above questions are simple yet they probably tax the average person's knowledge on the subjects. This unfamiliarity can be a wake-up call for educators who wish to broaden student's perspectives and outlooks on the world community.

Outdoor Environmental Educators often ask the question, "How does this huge global topic fit into my center's lesson plans?" By walking through the steps in the following Thoughtsheet on Cultural Awareness: People's Customs and Histories, you can find the place in your current curriculum that could involve global subjects such as these.

Cultural Awareness: People's Customs and Histories

Instructor Thoughtsheet

Select one of the questions from the preceding page that interests you and examine it a little closer. Now answer the question yourself.

Example: Why do farmers in Guatemala bury *Cantaros* in their garden beds?

Answer: *Cantaros* are actually porous clay pots that when filled with water and buried in a garden bed, will slowly leak out over a period of days thus continuously watering the plants above. With this method, the effects of water erosion and evaporation are avoided.
- The Guatemala/Frost Valley YMCA Partnership

Question: _____

_____

Answer: _____

_____

_____

Now, take your question with its answer and list the subjects in a standard school curriculum that could address that type of information.

Example continued: *Cantaros*: Earth Sciences, Social Studies, Art and Spanish

_____

_____

And finally, list the classes in <u>your</u> curriculum that involve one or more of these school subjects and you'll find the place where this information can fit into your current lesson plans.

Example continued: *Cantaros*: Gardening and Arts & Crafts

_____

_____

Greetings Friend!

Grades: 5 - 12
Topics: Languages, Social Studies
Classes: Cooperation Courses, New Games, Native American Lore

Learning another language does not have to be difficult or intimidating. Practicing something as simple as saying hello in a different language can be fun as well as useful for someone to know.

People around the world have developed many different ways to greet family and friends. Each greeting is made up of a series of words combined with gestures. Here are just a few examples:

China: People take off their shoes when they enter the home, bow and say "ne hou" (hello), "ne hou ma" (how are you?).

Congo, Africa: At a festival, people greet each other by saying "losako". It means "Hello, throw us a proverb.".

France: People kiss the friend on both cheeks and say "Bonjour" (Good Day).

Germany: People shake hands heartily and say "Guten Tag" (Good Day).

Guatemala: People wave with a friendly smile and say "Buenos Dias" which means "good day".

India: People cup their hands together, bow slightly and say "Na-meas-de" which means "hello".

Israel: People say "shalom" which means "hello", "good-bye" and "peace".

Japan: People take off their shoes when they enter a home, bow and say "ohio-ga-zi-mas" (good morning); "ko-nich-e-wah" (good after noon); and "kom-ba-wah" (good evening).

Korea: People say "an anyung ha sea yio" (good morning, how are you?)

Paraguay: People say "hola" (pronounced ola), hug each other and kiss right cheeks first and left cheeks second.

Philippines: People say "Saan ka papun ta?" which means "Where are you going?" It is used the same way as "Hi, how are you?" is used in this country.

Sioux: People shake hands lightly, avoid direct eye contact (out of respect for the other person) and say "Haw kola" which means "Hi Friend".

Sweden: People shake hands heartily and say "hej", which is pronounced "hay".

Thailand: People cup their hands together, bow slightly and say "Sa-was-dee", which means "hi".

United States: People shake right hands or kiss and say "hello".

Zulu: People shake right hands while resting their left hand on the right wrist of the other person, bow their heads down slightly (eye level must be lower than the person you are greeting in order to show respect) and say "Sawbona" which means "I see you.".

Optional Greeting - **Eskimos of Alaska:** People hug and rub noses.

Materials: None needed

Procedures:

1. Pick a few greetings from people around the world and teach them to your students. Have them practice with a partner.
2. Once they have an idea of the words and motions, have everyone stand with their partner in a giant circle.
3. Place one pair in the center of the circle. This pair will decide together on one of the places you discussed earlier.
4. Together, they will shout out the name of the country and point at one of the pairs in the surrounding circle.
5. The pair that is chosen must then quickly turn to each other and greet one another with the words and motions of the people of the country chosen. If they are incorrect or not fast enough, they replace the couple in the center until they can catch another pair off-guard.
6. As a review each time a switch is made, have the whole group greet each other with the correct words and motions for the country named. Of course, feel free to complicate things by adding more greetings to their repertoire as they become more confident. Don't overlook the possibility that one of the students could teach a greeting they know to the rest of the group.

Further Discussion Questions:

- What language do you think would be useful to know?
- How many languages do you think there are in the world today?
- How would it feel to be in a foreign country if you didn't speak the native language?
- How would you communicate with someone if you did not share a common language?

Source:

Adapted from "Greetings" in the National 4-H Council curriculum guide: ...And My World

Is that what you really think?

Grades: 7 - 12
Topics: Social Studies, Language Arts
Classes: Cooperative Courses, Communication and Leadership

Whether we realize it or not, we all have ideas about the world and its peoples. These ideas form our attitudes and lead to our perceptions of the characteristics and qualities of people in other groups around the world.

Sometimes our attitudes and lack of information cause us to form stereotypes, or false generalization about people and cultures. Let's take a closer look at some examples of generalizations and discuss their validity.

Materials: Large sheet of paper and markers

Procedures:

1. While discussing stereotypes and generalizations in a "no put-down" situation, have everyone in the group find a partner and sit facing them. In each pair, one person should choose to be the Apple and the other will be the Orange. The pairs may want to spread-out in the area so that they have a bit of privacy.
2. Post some commonly stated generalizations on a board. Some examples may be:
   - "All kids are alike. They don't know how good they have it..."
   - "People in the United States are wasteful."
   - "Blondes have more fun."
   - "All women are bad drivers."
   - "Italians are all fat from eating too much pasta."
   - "The United States is a country of violence."
   - "People from Latin America all tend to be a little dirty."
   - "Most old people spend their days in rocking chairs, staring out the window."
   - "Most men are slobs."
3. After the group has had a chance to read them over, have each pair pick a statement that catches their attention.
4. During this first step, instruct the Oranges to listen carefully and remain silent the entire time. They may react with facial expressions but no verbal lan guage can be used.
5. At this time, the Apples have <u>1 minute</u> to explain exactly why the statement must be true. Make it clear to the students that imagination and exaggerations are allowed but examples of real life individuals **may not** be used.

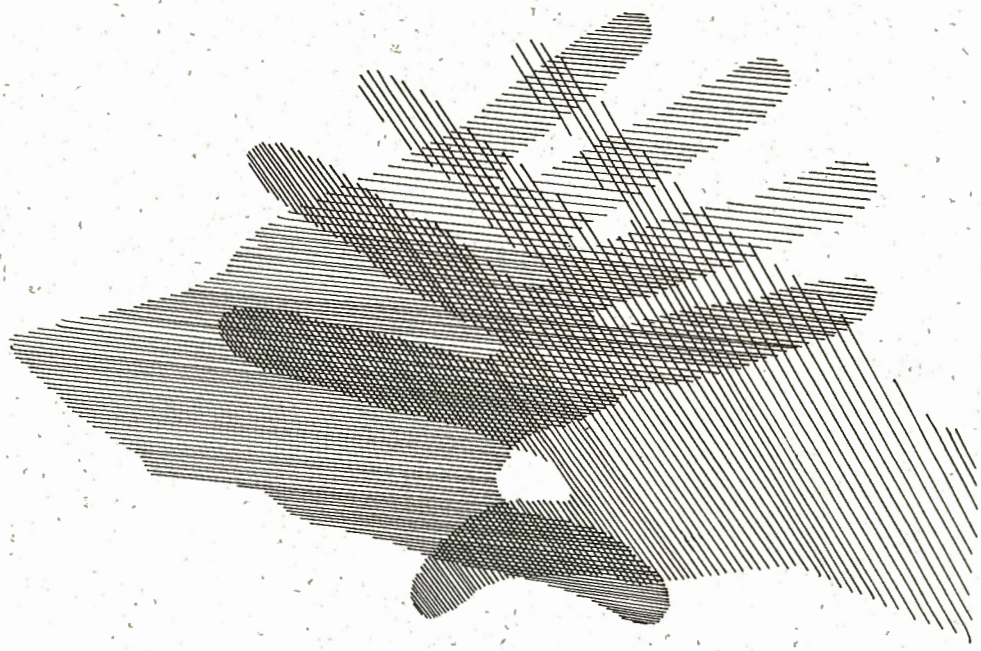
6. Next, the Apples remain silent and the Oranges have 1 minute to explain why this generalization could not possibly be true. The same rules for content apply.
7. The final step takes some detective work on the part of the students. In this step, both partners may speak. Give them one and a half minutes to discuss what they think is the origin of this false generalization, what groups or individuals commonly would use it and why.
8. Have the students share their observations with the entire group.

Further Discussion Questions:

- How do people develop their attitudes towards others?
- How does it feel to be the victim of a stereotype?
- What are the causes of these false generalizations?
- What are the dangers in believing false generalizations about other countries and cultures?

Source:

Adapted from "What Do You Really Think" in the National 4-H Council curriculum guide: ...And My World



Cantaros - Guatemalan Water & Soil Savers

Grades: 3 - 12
Topics: Social Studies, Earth and Life Sciences, Art
Classes: Arts & Crafts, Gardening

"Human activities are degrading much of the world's land surface, lowering the current and/or future capacity of the soil to support human life." (*The Teacher's Guide to World Resources 1992-93*)

In Guatemala, watering gardens and croplands efficiently can be difficult. Much of the agricultural land in Guatemala is steep and the exposed soil is often eroded by heavy rainfall and common irrigation techniques. With the leeching of nutrients and the erosion of the top soil, the land becomes unproductive and the farmer needs to then move and find another piece of land in order to survive.

In the Guatemala YMCA's effort to teach sustainable agricultural practices, they are encouraging farmers to use *Cantaros* in their garden beds as a method in watering many varieties of crops. A *Cantaro* is a porous clay pot that, when filled with water and buried in a garden bed, will continuously leak out, supplying the plants above with their needed hydration. The only part of the pot that is seen from the surface is the lid. Without the effects of massive erosion, the farmer is able to keep the valuable top soil and cultivate the same area for many years.

Cantaros make an interesting demonstration in a garden area or flower bed and they are simple and fun to make.

Materials: Low-fire red earthenware clay, a kiln (electric or sawdust), rulers, blades or knives

Procedures:

A full-size *Cantaro* is large and bulky. The tall containers are buried in deep garden beds supplying water for days. In making a full-size container, you will need to use about 10 pounds of clay using a mixture of coil and slab techniques in pot building. (*Cantaros* vary in dimensions. An average vessel = 2 ft. tall, 1.5 ft. wide body - rounded bottom - neck 4 in. tall, 5 in. wide)

With the students, it would be much more practical for them to make smaller *Cantaros* that they could use in flower boxes or pots at home. The method recommended depends upon the age of the students as well as the size of the desired container. For making *Cantaros* less than 5 inches tall, use the pinch pot method. For making *Cantaros* between 5 and 10 inches tall, the slab technique seems to work the best. The lids can all be made with the slab method and decorated as you wish. You will most likely need to work with your clay supply and kiln abilities to find the combination that produces pots that drain their water slow enough to be helpful to your plants.

Source: The Guatemala YMCA/Frost Valley YMCA Partnership

Finding New Foods

Grades: all ages
Topics: Health and Nutrition, Social Studies, Earth and Life Sciences
Classes: Gardening, Nutrition and Ecology

Thousands of plants are known to be edible yet only three plants - wheat, rice and maize - provide over half of the food humans eat. Unfamiliar fruits and vegetables are likely to appear in supermarkets in most communities, for example: carambola, jicama, Asian pears, and exotic mushrooms. Supermarkets sometimes even provide information about how to prepare unusual fruits and vegetables.

The following are a list of activities and programs that will encourage your students to explore new foods and share in knowledge from people around the world. Your center's efforts can be as simple as adding something to the dining hall menu or as complex as creating examples of gardens around the globe.

- **The Real Beginning To This Meal**

  During a typical meal in your dining hall, take the time to discuss with your groups where the food on their plates originated. Most will be surprised by just what goes into the production of a simple piece of toast.

- **A Little Something Special**

  Working with your food service, find a food that is common in another part of the world and unfamiliar to most of your students. A simple example is Carambola or Star Fruit which is not only tasty but when sliced makes an attractive garnish. As the meal is announced, take the opportunity to share with the students the source of their new delicacy.

- **The World's Nutrition**

  During an all day hike, have the students prepare a meal or snack that would be typical for someone in another part of the world.

- **Green-Thumbers at Work**

  If you have a garden area or greenhouse, you have the opportunity to develop programs growing foods that are staples around the world and not available in your community markets. Amaranth, for example, was once the Aztec's most important crop. The Winged Bean (*Psophocarpus tetragonolobus*) of New Guinea has been called the one-species supermarket. Depending on your growth region, the possibilities can grow.

Further Discussion Questions:

- Where do the ingredients in your favorite foods come from?
- What determines the diet of individuals in an area?
- What is organic gardening and how does it differ from conventional agriculture?

Cultural Awareness: Economies and Governments

Consider this:

Do your students know...

- where the ingredients in the average candy bar come from?
- how much of the United States' industrial output is exported annually?
- how many American jobs depend on international trade?
- what Native American government our fore fathers used as a model in creating our form of democracy?

"Americans to often see themselves as an island separate from the rest of the world, surrounded on the east and west by great oceans and to the north and south by friendly neighbors, but here is the reality:

- Almost one fifth of our industrial output is exported.
- Two of every five acres of farmland are used for export.
- About one third of our corporate profits flow either from exports or investments abroad.
- One fifth of our corporate assets are outside the United States.
- Some five million American jobs depend on trade.
- About fifteen hundred U.S. banks belong to syndicates with loans of about $550 billion to nations whose ability to repay is periodically in doubt."

(The Myth of American Eclipse, *1990*)

By teaching about ecology and the global environment, we have a natural opportunity to encourage students to explore the human species in the world around them *as well as* on the other side of the globe. **Before** you, the instructor, go any further with your lesson plans on **any** subject, consider the following. The above questions are simple yet they probably tax the average person's knowledge on the subjects. This unfamiliarity can be a wake-up call for educators who wish to broaden student's perspectives and outlooks on the world community.

Outdoor Environmental Educators often ask the question, "How does this huge global topic fit into my center's lesson plans?" By walking through the steps in the following Thoughtsheet on Cultural Awareness: Economies and Governments, you can find the place in your current curriculum that can involve global subjects such as these.

Cultural Awareness: Economies and Governments

Instructor Thoughtsheet

Select one of the questions from the preceding page that interests you and examine it a little closer. Now answer the question yourself.

Example: Where do the ingredients in the average candy bar come from?

Answer: The average candy bar assembly involves 8 different countries including: Cocoa from Ghana, Peanuts from Sudan, Corn Syrup from Iowa, Coconut from the Philippines, Sugar from Ecuador, Wrapper from Canada...
- Office on Global Education

Question: _____

_____

Answer: _____

_____

_____

Now, take your question with its answer and list the subjects in a standard school curriculum that could address that type of information.

Example continued: Global Resources: Earth Sciences, Social Studies and Economics

_____

_____

And finally, list the classes in <u>your</u> curriculum that involve one or more of these school subjects and you'll find the place where this information can fit into your current lesson plans.

Example continued: Ingredients: Resource Management, Ecology, Leadership

_____

_____

Globalizing your Cooperation Course

Grades: 5 - 12
Topics: Languages, Social Studies, Economics, Government, Earth and Life Sciences
Classes: Group Dynamic, Cooperation and Communication Courses

In each group dynamic activity, be it Project Adventure or another cooperative course, we often put the students into situations using active scenarios. Globalizing this part of your curriculum is as simple as globalizing your scenarios. Here are a few suggestions.

Materials: The existing course materials

All Aboard

- an activity that has the students trying to fit everyone onto a small platform at the same time:

Can be changed to . . . All at Once

- an activity with the same physical objectives but a with global scenario discussing how different countries use the same world resources "all at once".

The scenario: The platform is a rain forest in Guatemala. Have the students name the ways in which rain forests are used today (i.e. wood industries, pool for species diversity, cleared for agriculture, livestock practices or mineral mining). The individuals of the group represent the groups of people and industries all trying to use their "share" of the rain forest resources. As the students proceed, they will find that only cooperation can lead to the multi-use of this resource.

Debriefing Questions:

- What if one individual used more space (resources) than they needed?
- What if one country misused the platform (rain forest) and damaged it for future use?
- Are there other resources in the world that are used by many groups of people?
- Are there resources in your school or community that everyone uses?

The Land Skis

- an activity that has students standing on huge wooden "skis" with rope handles and cooperatively moving across the terrain:

Can be changed to . . . The Peace Movement

- an activity that has the same physical objectives but puts the students in the position of leaders from the different countries in the United Nations that share common problems. In working with a global concerns, leaders are faced with

many challenges in creating a common solution. First, many different countries are often involved, each with their own perspective on what the problem and its solutions are. Often a group only has information on part of the situation at hand and the groups need to pool their information and resources to create a successful effect. Adding to the difficulty of the task are the language barriers that prohibit clear communication.

The scenario: This group represents the United Nations Assembly. Separate the assembly into 4 groups or countries. Each country speaks a different language so verbal or written communication is not allowed during the activity. Give each group one of the Peace Movement Task Cards. Together the cards give the group all of the necessary information including: the situation, the action steps needed and the method used to move the boards. After re-emphasizing their language difficulties (they may not show their cards to another country), present the boards and instruct them as follows "Determine what you should do and begin. The situation and solution you need for this activity are in your hands."

The Peace Movement Task Cards:

- Your task is to move these boards forward 50 feet.
- The boards may only be moved if everyone is standing on them.
- To stand on the boards, everyone should place their right feet on one and their left feet on the other. The ropes are for your hands to hold on to.
- For effective movement, it is important that everyone's right steps happen at the same time and everyone's left steps happen at the same time.

Debriefing Questions:

- What would have made this situation easier?
- How did you communicate without a common verbal language?
- What is it like trying to solve a problem without all of the information you needed at once?
- What are ways in which we can work toward bettering global communications?

The Nitro-Crossing

- an activity that has the students on a journey between two points about 20 feet apart carrying a quantity of water (nitroglycerin). The path involves swinging on a rope hanging over the center of the two locations because "there is a giant pit they must cross". If the "nitro" (water) spills, BOOM!

Can be changed to . . . Survival Crossing

- an activity with the same physical objectives with a scenario that is all too realistic to many people in developing nations. In order to find potable water for their families, women in developing countries often travel by foot many miles a day, carrying the water in hand-held containers. "In order for a family to survive, they need approximately 40 liters or 10.9 gallons of water daily. (This is the equivilent of 21 #10 cans from your kitchen.) To keep a family clean and healthy, she would need to fetch 200 liters of water every day!" (Taking the World to Camp)

The scenario: Your family is on its way back from finding a terrific new source of water for your home. On your way home is a terrifying gorge. The way around it is at least a day and half journey and there are no sources of fresh water on your side of the gorge. In order to transport enough water for your group to survive, you need to carry across with you one can of water for every person you have. (The group may reuse the same water and can for practical logistical purposes. Just hand it back to them after each crossing.) When the group is finished and all water and people have crossed safely, think about it, this could be a daily journey for some people in order for them to survive. It's a lot of work.

Debriefing Questions:

- Carrying water for a family is often done by the women. How would you feel having to do this journey on your own each day?
- If a person is unable to make a journey such as this, what are their alternatives?

The Lap Sit

- an activity that has the students in a tight circle facing in same direction and arranged so that when they all sit at the same time, every person will provide a "lap seat" for the person in front of them all the way around the circle:

Can be changed to . . . The Missing Link

- an activity with the same physical objectives that takes on a global ecology scenario with the same emphasis on cooperation and trust.

The scenario: You are the life forms in a tropical rain forest (i.e. trees, birds, insects). Have the students choose what individual in a forest they would like to be. Point out the web-of-life in the food chains represented. Perform the lap sit as usual stressing the interdependence of everyone's lap as well as their rain forest food chains. Congratulations! Now, what if, one of the links in our food chain was missing? Our rain forest chain works well if all of the links are working and present. Unfortunately areas are often disturbed and situations like deforestation take their tolls. Without anyone else moving, remove from the circle any students that chose to be a tree. Have the students perform the lap sit without the missing links.

Debriefing Questions:

- Often the students try to move and adjust their position in order to accomplish the lap sit without the missing links. In what ways do the creatures of a rain forest need to adjust after deforestation?
- Is adjusting always possible?
- What would happen if we removed the trees and everyone that depended on the trees for survival?
- The rain forest is a community. How is your community at home similar to a forest community?

The Paper Bag Game
- The Guatemala Version

Grades: 6 and up
Topics: Social Studies and Economics
Classes: Cooperation Courses, Communication Classes, Leadership

Guatemala is a country with vast economic and sociological problems. Helping students truly understand the real pressures of trying to survive in an economy where there is massive unemployment and no social security is a challenge. Sitting and explaining the situation to students is not only difficult but also often-times not effective. Yet, as we teach in our classes about communication, cooperation and depending on and working with each other, we have a perfect opportunity to talk about economies both foreign and domestic.

Guatemala:

The urban areas in Guatemala, like in many developing countries are growing. As people are displaced by the effects of poverty, war or destruction of the resources, they are seeking refuge in the cities. The increase in population has put an enormous strain on the urban areas. The living conditions for most of these displaced families are very poor with homes made of straps of metal and wood if found. They may not work in the formal sense, but the people themselves have created their own industries and services using the resources they can find. Making pottery from local clay, wood crafts from surrounding forests and toys from fabric scraps from city factories are some examples of the Guatemalan people's resourcefulness.

In order to understand the ramifications of living under these conditions, let's put ourselves in their position. Our industry uses something we have in abundance, waste paper. Our product will be paper bags.

Materials: A lot of paper, glue, a large quantity of popcorn, sample worksheets

Procedures:

1. Have an example of a hand-made paper bag on hand.
2. Introduce the game with a short discussion - What is hard work? Does any one here do any work to earn extra money? What do you need money for?
3. This is a role play activity that places everyone in the slums of Guatemala City, Guatemala. "The slums are make-shift dwellings with inadequate sanitation and they are terribly cramped. However, all of your friends are there and life can be fun when you are not working to survive. You have no permanent job, and there is no Social Security. You earn a living by making bags from scrap paper which you sell to the shopkeeper. However, there are

many other families in the bag-making business and competition is fierce. The bags are made by folding and gluing. They can be sold in batches of ten to the shopkeeper. The going rate is 1 *quetzales* for every bag. (At this time, 4 *quetzales* = 1 US dollar, 100 *centavos* = 1 *quetzales*) Any substandard bags will of course berejected by the shopkeeper."

4. Demonstrate how to make a bag. Then divide the group into smaller groups of 3 or 4.
5. Each group is given 5 pieces of corn that signify one *quetzales* each.
6. Let the bag-making begin! This time period should continue for around 20 minutes. The bag-makers may purchase large quantities of scrap paper and glue from the shopkeeper for two *quetzales*. The leader or teacher can play the role of the shopkeeper providing supplies and deciding which bags are of high enough quality to be purchased. The shopkeeper may also set their own prices for bags depending on quality as well as quantity. (Suggested bag price • 1 bag = 25 - 50 *centavos*)
7. After 20 minutes, close the shop. Have the students count the money they have earned and figure out what they would earn in one week by the following calculations:
   (*quetzales* earned in 20 minutes) x 3 = *quetzales* earned in one hour
   (*quetzales* earned in one hour) x (8 hours working a day) = daily earnings
   (daily earnings) x (6 working days in a week) = **weekly earnings**
8. Discuss what an average family needs to purchase weekly in order to survive. Ask the players to look at what they would choose to buy from the shopkeeper with their earnings.
9. Using the worksheets, have the students figure out whether, working at this rate, they could earn enough to meet their daily, and weekly needs. As a rough guide, an adult living in Guatemala City would buy the following each day:

1/2 kilo of black beans	1
1/2 kilo of vegetables	2
oil for cooking	+ 1
	4 *quetzales*

This would be enough for two meals. But they would also need to spend money on rent (1 *quetzales* per day) and perhaps one or two extras: a cup of coffee (20 *centavos*) or some fruit (1 *quetzales*). So, basic daily expenditures would add up to six or seven quetzales daily - the bare minimum for survival.

Further Discussion Questions:

- What would it be like in the United States if there was not any insurance or social security?
- Why is the shopkeeper so powerful?
- Who are the equivalents to the shopkeepers in our society?
- Did we compete as groups? Or did we cooperate? Which is better in real life?

Source: Adapted from "The Paper Bag Game" in the YMCA Canada curriculum guide: Taking the World to Camp

Paper Bag Game
Sample Worksheet

Our Earnings:

Number of bags made in 20 minutes = ____
Number of bags possible in one hour = ____
Number of bags possible in one day = ____
Number of bags possible in one week = ____

The going rate is 1 *quetzales* per bag

Prices in Guatemala City:

Food:

1 kg vegetables = 3 *quetzales*
1 kg black beans = 2 *quetzales*
1 dozen eggs = 6 *quetzales*
1 liter milk = 6 *quetzales*
1 kg flour = 2 *quetzales*
1 chicken = 20 *quetzales*
1 kg butter = 30 *quetzales*
6 bananas = 2 *quetzales*
cup of coffee = 20 *centavos*

Other Goods:

blanket = 40 *quetzales*
rent per week = 7 *quetzales*
primus stove = 50 *quetzales*
1 liter paraffin (wax) = 2 *quetzales*

Clothes:

trousers = 40 *quetzales*
shirt = 30 *quetzales*
cheap sandals = 10 *quetzales*

Medicine:

doctor's fee = 4 *quetzales*
aspirin (each) = 5 *centavos*
50 antibiotic tablets = 5 *quetzales*
bottle of cough syrup = 1 *quetzales*

Sundries:

newspaper = 20 *centavos*
Guatemala City to
San Christobel railway ticket
= 87 *quetzales*

How to Make a Paper Bag

1. Fold side of paper to the middle with a slight overlap (figure 1).

2. Glue the overlapping edge onto the edge underneath it (figure 2).

3. Turn up the bottom edge about 3 inches; crease and unfold (figure 3).

4. Fold up the bottom corners to the crease (figure 4).

5. Press down and crease the corners (figure 5).

6. Unfold (figure 6).

7. Tuck the corners up inside the tube (figure 7).

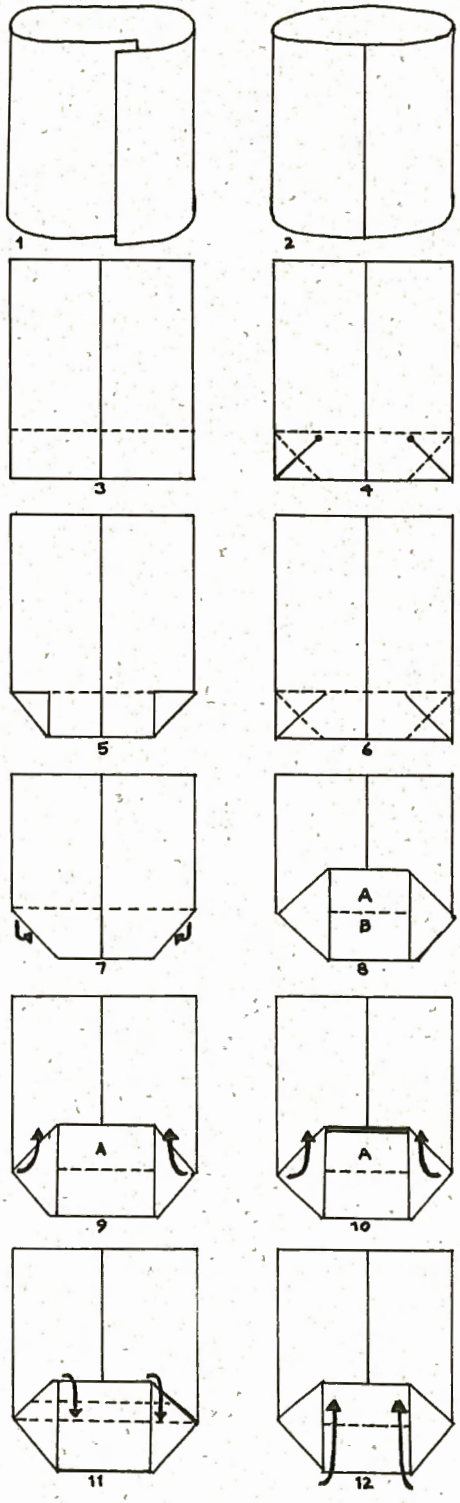
8. You now have a bag with two flaps, A and B, as in figure 8.

9. Fold back the upper flap, A (figure 9).

10. Put a line of glue along the upper edge of flap A (figure 10).

11. Fold it down on itself to the middle line (figure 11).

12. Fold up the lower flap, B, to overlap the glued area and glue down (figure 12).



The World Around Me

Grades: 5 - 12
Topics: Social Studies and Earth Sciences
Classes: Resource Management, Cooperation, Ecology Classes

"Before you finished eating breakfast this morning, you've depended on more than half the world. This is the way our universe is structured... We aren't going to have peace on earth until we recognize this basic fact of the interrelated structure of all reality." - *Martin Luther King, Jr.*

If you simply look around an average American house, you can find examples of developing countries of the world everywhere.

Tungsten filaments in light bulbs from Bolivia
Clothes from Costa Rica
Baseball and glove from Haiti
Rubber from Thailand
Radios assembled in Taiwan
Bastnaesite for televisions from Burundi
Electricity from coal mined in Kentucky
Copper in a light switch from Zaire
Meat, tuna and bananas from Somalia
Coffee from Guatemala
Pineapples from the Philippines
Cocoa and fish from Ecuador
(The Third World in My Home, Seeds)

Materials: Paper and pencils

Procedures:

1. This can be a great activity while riding in a van/bus or even while waiting for another activity to begin. Start with the discussion of what resources and items we use in our everyday lives.
2. Have each student write down as many countries in the world of which there is evidence right in that area (in the room, van or on each person).
3. Have each student share their findings and explain each connection they found.

Further Discussion Questions:

- From where do a lot of our resources come?
- How do our consumer decisions affect developing countries?
- How is this interdependence important to our economies?
- What lessons in cooperation apply to economic situations?

The Free Tree Seedlings Role Play

Grades: 6 - 12
Topics: Languages, Social Studies, Economics, Earth and Life Sciences
Classes: Ecology, Communication and Cooperation Classes, Leadership

This role play activity that demonstrates that in order to help people and work well together, first you need to understand and communicate well with each other.

Materials: Free Tree Seedlings Role Play Cards

Procedures:

1. Explain that this is a role play activity and that everyone will be playing a character in a situation. They will be given their roles, but can choose their own words to say as long as they stay true to their characters.
2. Read the situation to the students.
3. Divide the students into characters: two development workers and the rest of the group evenly divided into villagers and officials.
4. Explain that a meeting has been called by the development workers inviting the officials and villagers to discuss the cause of the misunderstanding could be found.
5. Give each group their role play cards describing their characters' opinions and attitudes. Give them time to discuss in their small groups what their purpose and arguments would be at this meeting.
6. When they are ready, step back and let the development workers run the meeting fairly, hearing everyone's opinions and helping the group come to a joint conclusion.

The Situation:

For many years, the local people have collected their firewood from the forests around the village. They have also collected wild fruits, wild honey, and roof poles for their houses whenever necessary. With the new clinic, fewer young children died. There were more mouths to feed, so the forest near the village had been cleared to make room for more fields. Every year, the women had to walk further and further in search of firewood.

Then the government started a new development program in the area. The Agricultural Department offered young fruit trees - oranges, guavas and lemons to the people. The Forestry Department recommended seedlings of a type of tree which grew very quickly, provided shelter from the wind and timber that could be sold in the towns. Government officials held meetings in the village and offered to bring free tree seedlings at the beginning of the rains.

Eventually, the truck arrived. An agreed number of tree seedlings were given to each family head. The men were told to take the little plants back to the shade of their house verandahs and to plant them as soon as possible.

Two weeks later, a few of the fruit trees had been planted and were growing well. All the rest of the tree seedlings had died, still sitting in their plastic containers on the house verandahs.

Information for the Role Play Cards:

Officials

- You are anxious to help these people but very frustrated at the outcome of this project. You are glad the Development Workers are here to help with this misunderstanding.
- You are very angry about the situation and blame the villagers for being backward, uncooperative and lazy.
- Raising trees for fruit, shelter and timber sales seems to you like a great job for these people.
- As you see it, your department provided the trees free of charge to the people and all of that money went to waste.
- You don't understand why the elders agreed on the plan and number of trees at the meeting and then didn't follow through on their part of the responsibilities.

Villagers

- You are grateful for the governments help in the past and anxious to be understood in this situation. You are glad the Development Workers are here to help with this misunderstanding.
- You agreed to receive the trees during the meeting because the trees were being provided without a charge. You didn't feel responsible for them.
- You don't understand why the officials are so upset with the situation. The program was not your idea. If they had thought about you and your lifestyle, they would understand why this project was so difficult for you.
- The trees were for you to sell the fruit, shelter and timber in town. You are a farmer. Selling timber is not your job. You just wanted a source of firewood that was closer.
- From the beginning, the distribution of the trees didn't sound right to you. The women are the ones in the families who are in charge of the fruit and firewood collection yet the men in the family were given jobs planting the trees.
- Also, the trees arrived at the beginning of the rains. That is the time when you are working hard at planting your crops. You have no time for any additional work that time of year.

Government Development Workers

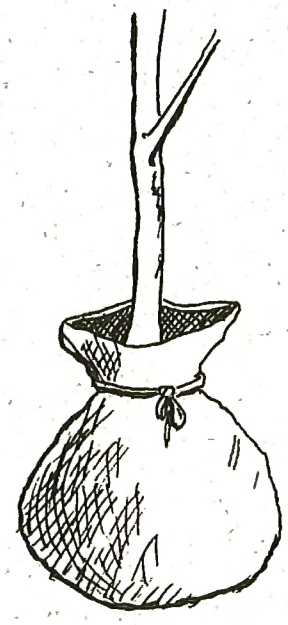
- Your job is to initiate projects in this community that help the people make better life for themselves.
- Both the government officials and villagers trust your opinion.
- You have gathered these people together to try to fully understand what brought on this confusion and to help them work towards a solution.
- At the end of this meeting, you need to have an action plan for your superiors describing the next project the government and people will work on together.

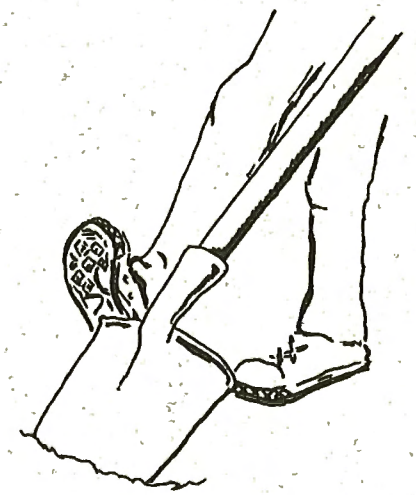
Further Discussion Questions:

- How did this misunderstanding happen?
- What are some of the difficulties involved in helping other cultures?
- What are some of the benefits that come from helping other cultures?
- Can you find an example of a situation like this one in our country?

Source:

Adapted from "Time to Listen: The Human Aspect in Development" by Lawrence Taylor and Peter Jenkins and "The Free Tree Seedlings" from the YMCA Canada curriculum guide: Taking the World to Camp





Cultural Awareness: Literature and Games

Consider this:

Do your students know...

- the significance of a *Quetzal* to the Guatemalan Mayans?
- the origin of the sensory game *Sound off*?
- the name of a Native American story?
- the rules to the rhythmical African game, *Match My Feet*?

The UN Convention on the Rights of the Child states "Children have the right to rest and leisure, to engage in play and recreational activities and to participate freely in cultural life and the arts." All children of the world share this right.

By teaching about ecology and the global environment, we have a natural opportunity to encourage students to explore the human species in the world around them *as well as* on the other side of the globe. **Before** you, the instructor, go any further with your lesson plans on **any** subject, consider the following. The above questions are simple yet they probably tax the average person's knowledge on the subjects. This unfamiliarity can be a wake-up call for educators who wish to broaden student's perspectives and outlooks on the world community.

Outdoor Environmental Educators often ask the question, "How does this huge global topic fit into my center's lesson plans?" By walking through the steps in the following Thoughtsheet on Cultural Awareness: Literature and Games , you can find the place in your current curriculum that can involve global subjects such as these.

Cultural Awareness: Literature and Games

Instructor Thoughtsheet

Select one of the questions from the preceding page that interests you and examine it a little closer. Now answer the question yourself.

Example: What is the significance of a *Quetzal* to the Guatemalan Mayans?

Answer: The *Quetzal* is the national bird of Guatemala and a source of many of the Mayan people's myths and legends. - *The Guatemala/Frost Valley YMCA Partnership*

Question: _____

_____

Answer: _____

_____

_____

Now, take your question with its answer and list the subjects in a standard school curriculum that could address that type of information.

Example continued: Central American Myths and Legends: Life Sciences, Social Studies and Literature

_____

_____

And finally, list the classes in your curriculum that involve one or more of these school subjects and you'll find the place where this information can fit into your current lesson plans.

Example continued: The *Quetzal*: Ornithology, Native American Lore and Campfires

_____

_____

People and Their Words

Grades: all
Topics: Language Arts, Social Studies
Classes: Native American Lore, Campfire Stories

Stories are a wonderful way of sharing enjoyment and contemplation and even of encouraging further reading. They can range from the observant to the philosophical and always promise to entertain. Whether you choose to share a story through reading or role playing is up to you and your goals with the students. Story sharing is a terrific way of exposing your students to the people and cultures around the world.

Cultural myths and legends tell us more than just a simple story. In the people's own words, they take us to another place, soaking in their customs, beliefs and lifestyles.

Materials: Stories from different regions of the world

The people of Guatemala are rich in culture and legends. The following is a special legend of the *Quetzal*, the symbol of their nation and much more.

The Legend of the Quetzal

The Quetzal, the national symbol of Guatemala, is a small bird with brilliant blue and green plumage. It lives in the lowland jungles of the country. The Quetzal cannot survive in captivity, and has traditionally been revered as a symbol of freedom by the people.

Many years ago there was a city that in our language [the Mayan Language] was called Kumarkaaj, which means "the place where the reeds wither". Today this is the location of the city we call Guatemala. In this city there was a flower that was very good and very beautiful, as good and as beautiful as all children should be. This flower loved its father very much; its father was a handsome pine tree. This tree was very sacred; in our language it is called chaaj, which means "the tree through which one can hear the murmur of the voice of God". The flower loved its mother also, which was the light of a star, the light of the star of the afternoon...

The flower had many sisters, which were always at its side, surrounding it and caressing it. These sisters were the beautiful orchids of Guatemala.

One afternoon the beautiful flower, thinking of its beloved parents and sisters, softly fell asleep. The flower had a dream so sweet and beautiful, as sweet and beautiful as are the dreams of children. The flower was attracted by maternal affection to the lap of Ixmucané, the grandmother of the hero twins. In her lap the twins, Junapuh and Ixbalamqué, fondly and gently played with the flower. In their hands the flower was transformed into the symbol that represents all of the art and glory of the Mayas.

[For] The next morning, when the flower awoke, it was no longer a flower. The flower found itself transformed into a beautiful bird that could fly very high. [For] The bird into

which at dawn, the flower was reincarnated, through its goodness, it spiritualness, it delicateness and it beauty, was none other than the Quetzal. The Quetzal! Fierce and beautiful, willing to die for its liberty...

•••

In the beginning the Emerald with Wings, the Orchid that Flies, the Quetzal, covered its body with green feathers, like the green of the mountains. But one day the Spanish came to the land of the Quichés. Tecún Umán, our leader, was chosen by the gods to drive the invaders from our land. He was anointed by Tohil, the god of war, who placed in the breast of Tecún Umán a piece of his own heart. In this sacred enterprise Técun Umán was accompanied by the Emerald with Wings, the Quetzal, who was his nahual, or spiritual guardian. The Quetzal at this time was still the green of the mountains, without the patch of red on its heart. Tecún the valiant, Tecún the heroic, whose spirit lives still in the heart of the Quiché people; the Tecún engaged in battle with Tonatiuh (Pedro de Alvarado), the leader of the Spaniards, on the banks of the river Xequijel, whose waters were tinted with blood, such was the quantity that was shed in this epic battle. Tecún Umán, as valiant as the people he commanded, fought hand to hand with Alvarado. All the time the Quetzal fluttered about his head, and its wings guided his spear. Tecún Umán thought that Alverado and his horse (an animal the Mayas had never seen before) were one body. Because it formed the greater part of this strange being, it was at the horse that Tecún Umán directed his sacred lance. Alvarado seized this opportunity to sink the steel tip of his lance into the breast of Tecún Umán, in whose breast rested a piece of the heart of the god of war, Tohil. Thus fell our great leader, never again to rise.

But one drop of his blood, the blood of the invincible Mayan race, spurted from the breast of Tecún Umán, staining the Emerald with Wings, the Queztal, which from that day forward has had a red breast. And that is why The Orchid that Flies, the Emerald with Wings, the Quetzal, now has set in its breast a ruby.

And that is why today the Emerald with Wings, the Quetzal, flies above our mountain peaks, displaying its long tail, which is a rainbow of peace for our people, and showing its breast, in which is set for all time a drop of blood from the breast of Tecún Umán.

Further Discussion Questions:

- Can you find similar lengends in other cultures throughout the world?
- Name other groups of indigenous peoples that were "conquered" in the past.
- Name some examples of cultures conflicting in the world today.
- What do you think it would be like not to be allowed to speak your own language or practices your families customs?

Sources:

"La Leyenda del Quetzal" and "La Púrpura del Quetzal;" Gálvez, Francisco Barnoya, *Cuentos y Leyendas de Guatemala*, Guatemala, C.A,: Piedra Santa, 1989. Translated by Kathy Davin. Printed in Central America in the Classroom.

World Awareness

Grades: 4 - 12
Topics: Language Arts, Social Studies, Earth and Life Sciences
Classes: Nature Hikes, Campfires, Thoughts of the Day, Ecology

"I know this place too well — but do I really? Maybe if I look at it from a different angle, change my whole perspective, then it will be new. Will that happen?" (Acclimatizing)

Sometimes a small object or thought can lead to exploring a whole world, just by widening your perspective. The following is a collection of activities that will encourage students to discover other people of the world using a personal reflective approach.

A World in My Hand

Materials: Small objects of any kind from different cultures or areas

Select some small objects which the students can hold in their hands (i.e. a coin or a piece of cloth from another culture). Have them examine their object closely — as if they were going to locate it in a pile of twenty other objects just like it. As they get to know their object, encourage the students to use their imaginations to trace their object back to its original owner, decode the symbols, colors and languages or imagine what events this object must have seen through the years. When they are finished, give each student the opportunity to create a story about their object and share their discovery with the rest of the class.

The Big Picture

Have your students imagine that your center had its own satellite capable of taking pictures of any view from as small as your finger nail up to as large as the galaxy. Having this tool would give us the unique ability to explore the world around us starting with one object right in front of us and enlarging the view over and over so that we could take in the big picture.

For example: Look about — find something small like a leaf on the forest floor. Site your satellite camera on it and take a picture of it. What do you see in the picture? Now have the camera back up a couple miles or so into the sky, taking in a larger view of the same area. Now, what do you see? Continue backing up enabling your view to include more and more of the surroundings from your area, your state, your country and as far as your imagination will take you. Give the group the opportunity to separate into the woods and take what ever pictures that will activate their imaginations. Other possibilities include:

- Have each student draw the pictures their camera takes.
- Have each student write a story of the pictures their camera takes.
- Create a guided imagery in which the pictures begins centering on another country like Guatemala and continues *down* to a small clay pot on a craftman's table. Share it for a relaxing moment.

Nahuals, Totems and Symbols

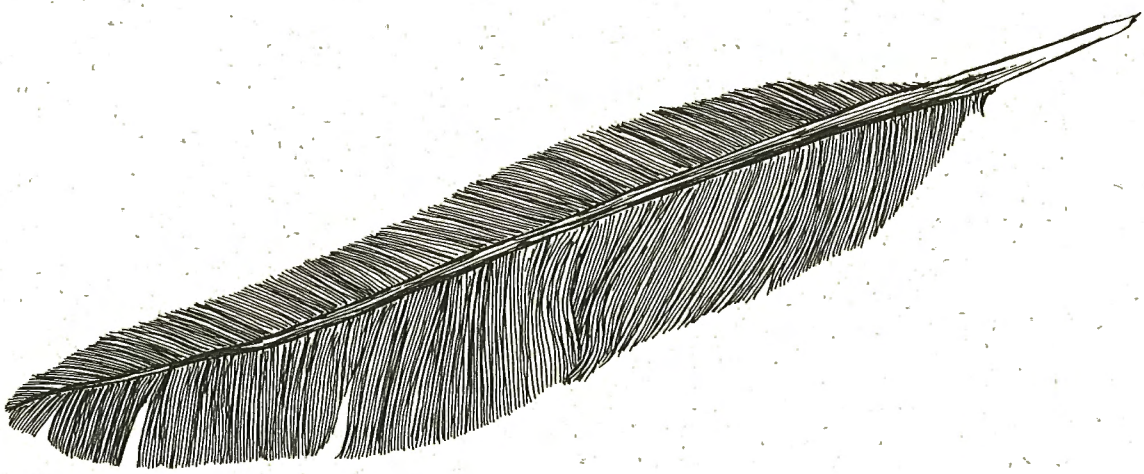
When a Mayan child is born in Guatemala, their *nahual*, or spirit animal is chosen. Though the animal is chosen by the date of the birth, the child and animal are said to share characteristics, abilities and even fates. "The *nahual* is the representative of the earth, the animal world, the sun and water, and in this way the child communicates with nature." (I, Rigoberta Menchu)

In many Native North American cultures, natural totems are selected for individuals that are said to represent the qualities of that person. Even states and nations throughout the world have chosen animals and plants to represent the people of their cultures. Here are some examples:

The United States' national flower - The Rose
New York's state animal - The Eastern Bluebird
New Jersey's state tree - The Red Oak
Guatemala's national animal - The Quetzal
Canada's national tree - The Sugar Maple
India's national animal - The Peacock
South Africa's national animal - The Springbuck
Scotland's national flower - The Thistle

While on a hike or in another class held in the woods, take some time to discuss these natural symbols and what makes each of them powerful and important to people of those countries. For example, the Quetzal is a Guatemalan bird that is unable to live in captivity. Guatemalans often feel that this is the perfect animal to represent them and their strong desire for freedom.

Give the students the opportunity to spend some time by themselves in order to search for their *nahual*, totem or symbol. Encourage them to find something in their habitat or possibly another with which they feel they are able to relate to and identify.



The Universality of Games

Grades: all
Topics: Social Studies, Physical Education, Free Time
Classes: Native American Games, New Games, Any Play Time

Throughout the world, children like to have fun, challenge themselves and practice their mental and physical skills by playing games. To help students realize the universality of games, have them play a few games from other people and cultures throughout the world. Here are some examples of games for many age groups.

Match My Feet - from Congo, Africa

Have all the players stand in a circle, clapping their hands in rhythm. Select one person to be "it". Have that person stand in front of someone and perform some footsteps in rhythm with the clapping. The person he or she is facing must imitate the motions exactly. If the person doesn't imitate the motions exactly, he or she becomes "it". But if "it" is imitated perfectly, then the same person must be "it" again. - ...And my World

My Right is Free - from Brazil

Have your group sit in a circle and give each member a number. The person who begins should have an empty space to his/her right. The starter calls out, "My right is free for number ____." The person who has this number must immediately run to the place they are called to. At this point, their number changes to the number of the seat they moved to. If they don't get up in time, they must give up one of their belongings, i.e. a shoe, to the leader (just for the length of the game!). After that, the person in the group who has an empty space to their right, calls out another number. (As people run around, they are likely to forget that their numbers change.)

At the end of the game 4 or 5 articles are held by the leader. Those who had to give up something like a shoe or a piece of clothing, must sing a song, tell a joke, etc. to get it back. - Taking the World to Camp

A Game With a Ball and Stick - from South India

Draw a circle about 15 feet in radius. Place a flat, square stone in the center. Place a smaller, round stone on top of the larger stone. Give each player a ball, stick or stone. Everyone has two chances to knock the small stone off the large stone. (Optional: If the thrower fails, he or she has to limp or hop a certain distance and back as a penalty.) All throwing must be done from outside of the circle. - ...And my World

Cultural Awareness: Actions and Commitments

Consider this:

Do your students know...

- what materials their school recycles?
- the structure of their local government?
- the ways their lifestyles affect people in developing countries?
- what being a *Warrior of the Rainbow* involves?

"The prophecies say that the time will come when the grandchildren will speak to the whole world. The reason for the Akwesasne Freedom School is so the grandchildren will have something to say." - *Sakokwenionkwas (Tom Porter), Mohawk Chief*

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Cultural Awareness: Actions and Commitments

Instructor Thoughtsheet

Select one of the questions from the preceding page that interests you and examine it a little closer. Now answer the question yourself.

Example: What does being a *Warrior of the Rainbow* involve?

Answer: This is a program written by the Canada YMCA in which young people can test themselves, find their spirit and take action in order to be called a *Warrior of the Rainbow*. - *One Earth Resource Kit*

Question: _____

_____

Answer: _____

_____

_____

Now, take your question with its answer and list the subjects in a standard school curriculum that could address that type of information.

Example continued: Commitment to action: Social Studies, Earth and Life Sciences and Art

_____

_____

And finally, list the classes in your curriculum that involve one or more of these school subjects and you'll find the place where this information can fit into your current lesson plans.

Example continued: *Warriors of the Rainbow*: Resource Management, Ecology, Leadership, WRAP, Arts and Crafts

_____

_____

The Warriors of the Rainbow

Grades: 6 - 12
Topics: Art, Earth and Life Sciences
Classes: Arts & Crafts, Resource Management, Leadership, WRAP

"When the Earth has been ravaged and the animals are dying, a tribe of people from all races, creeds and colors will put their faith in deeds, not words, to make the land green again. They shall be known as the Warriors of the Rainbow — Protectors of the Environment." - Hopi Prophesy

The Warriors of the Rainbow Club evolved from a Native legend which symbolized not only the Native people but all people of the earth. Warriors of the Rainbow are those young and old who work toward affecting personal and environmental change through love, caring, understanding and compassion. The keys to action lie in knowledge, personal experience, sharing and you, the individual.

When we make the decision to be responsible "keepers" of the Earth, we must follow that with a personal commitment to change. In this activity, students can find the commitment to action in themselves that identifies them as a *Warrior of the Rainbow* and wear an outward sign of their inner promise. Each person creates a string of beads symbolizing a particular task for each color on the beads. Each bead represents the environmental task which the student has committed him/herself to complete. The bracelet or necklace is then worn as an outward sign of their inner promise to complete the task signifying them as *Warriors of the Rainbow*.

Materials:

Materials for making clay beads, paints, thin leather strips for bracelets or necklaces, copies of "How Can I Earn My Beads"

Procedures:

1. Read the legend aloud to your group.
2. Discuss the types of commitments they would and could make on behalf of the environment.
3. Read over the "How I Can Earn My Beads" list or create objectives of your own.
4. Discuss the time limits or proof required before a bead is earned. It could be simple, a personal note by the person, or elaborate, witnessed by others. Let the *Warriors* choose for themselves.
5. As the students make and paint their beads, discuss their commitments and plans. As a written reminder, have each student write down the promises they wish to keep for each bead and color on their string.

The following is a brief description of the Warriors of the Rainbow legend:

The old woman sat under the shade of the cottonwood tree by the creek and nodded, her head dozing a little. She was so very old that the wrinkles made little fine ridges all over her face and her eyes seemed hidden among the ridge like springs lost in the desert. But when a sand lizard ran among the folds of her skin, her eyes were bright and glowed with life like two points of black desert opal sparkling in the sun. Now, Jim, a boy of twelve summers, wandered down the creek, looked straight into her eyes and said, "I want to ask a question. Why did our grandfather in the sky allow the white men to take our land and let such sad things happen to our people?"

Eyes of Fire, as she had been called, became still as a desert fox crouched at a hold of a kangaroo rat. "You are the first to ask that question," she whispered. "The Heart of all Beings sent them because the white men came from a land where only white men lived and it was necessary for them to come to this place where they would learn about other races and learn to live with them, and that one day, when the Indians got their old spirits back again, they would teach the white men to really love one another and how to love all people."

"Now, because the Indians were humbled and made poor by the white man's conquest, they have been cleansed of all selfish pride. They are ready for a great awakening and they will awaken others. In their dreams the old ones saw that Indians would go through a very bad time, that they would split up into different kinds of religion of the white men. Like the white men, they would try to find what these strange people called success. But one day the Indians would begin to wake up, the old ones told me. They would see that those white people who chased after personal pleasure left behind the truly important things in life. The Indians would see that their people in the old days were in tune with something far more wonderful, the Spirit of Life."

As she stopped talking, they saw a great rainbow flaming across the sky where a thunderstorm had passed. "The rainbow is a sign from Him who is in all things," said the old wise one. "It is a song of union of all peoples like one big family. Go to the mountain, child of my flesh, and learn to be a Warrior of the Rainbow, for it is only by spreading love and joy to others that hate in this world can be changed to understanding and kindness, and war and destruction shall end!"

Source:

Adapted from "The Warriors of the Rainbow" from the YMCA Canada International: <u>One Earth Resource Kit</u>

How I Can Earn My Beads

Color	Kind	Examples of how to earn each bead
Purple	Courage	By making a change in yourself, your feelings, your attitudes: become a leader, start an environmental club at your school, clean your area of garbage, teach others about respecting nature, write poetry expressing how you feel about world problems.
Blue	Appreciation	Minimum six hours spent in parks or natural areas, resulting in a better understanding of Nature; write a report or poems or story about your experiences, observations, feelings - can include Earth sport activities (cross-country skiing, bicycling, snow-shoeing).
Green	Planet Change	Setting up a compost pile at home or school,starting a wild garden, raising seedlings & planting trees, removing toxic products from home and replacing them with safe cleaners and many more possibilities.
Yellow	Action	Letter writing to companies or your representative regarding an earth issue. Changing family shopping habits to green, starting a school involvement project (garbageless lunch, paper recycling, etc.).
Orange	Peace/Humanity	Action towards helping people: clothing or food collection, visiting the elderly, doing something for others, stopping fights at school.
Red	Commitment	Take on something with all your heart: you decide what this is and act on it.
Black	Knowledge	A report in detail on an earth issue: acid rain, global warming, ozone depletion, nuclear issue, habitat destruction, endangered species, hunger, recycling, pollution, native people, population, ways to help the earth, etc. Report can be in the form of an essay, comic book, photo journal, story, poems...
White	Sharing	Similar to above, resulting in a display for your school or library that many can enjoy (like a science fair project or bulletin board display).

How Green Is Your School?

Grades: 5 and up
Topics: Earth Sciences, Economics
Classes: Resource Management, Ecology, Town Planning, Leadership

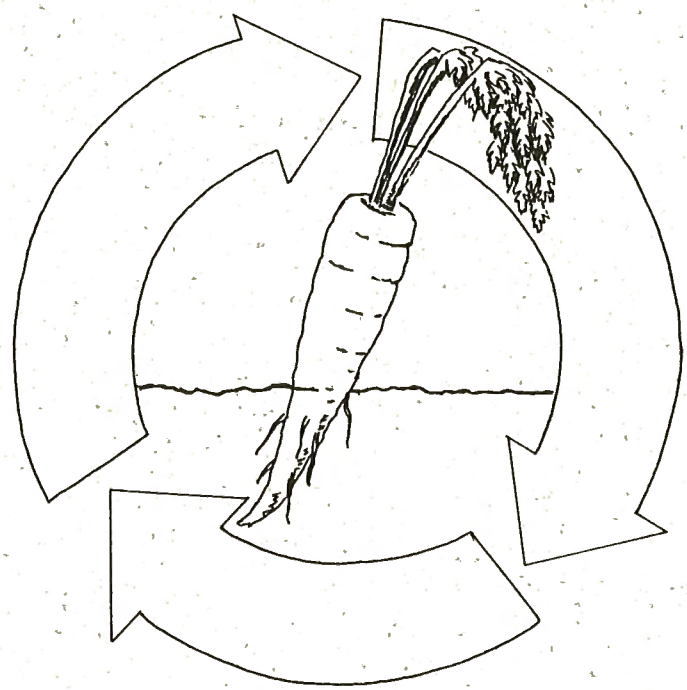
"If the USA's yearly garbage could be made into one large cube, it would be 160 million tons, almost 230 stories high." - *USA Today 1990*

As we explore topics in ecology, resource management and town planning with our students, the group cannot help but discover that even one person's actions can have global reactions. This activity is a great back-at-school follow-up for any of these topics because it encourages the students to go back to their communities and take a closer look at their immediate world around them. The "How Green Is Your School Survey" guides students in their exploration of their school's environment. The awareness that this exercise creates identifies many areas that students can help to improve in their own communities.

Materials: The survey and pencils

Source:

Adapted from "How Green is Your Y??" from the YMCA Canada International: One Earth Resource Kit



How Green Is Your School?

Take this quiz and find out!
Scoring: "Yes" = 2
"Partly/We are discussing this" = 1 , "No = 0

1. Does your school have a system to collect waste paper for recycling?
2. Does your school collect cardboard for recycling?
3. Does your school collect cans and bottles?
4. Does your school have a policy to use paper made with recycled fibers?
5. Does your school encourage people to minimize paper use, by doing two-sided photocopying, using scrap paper for phone messages and re-using envelopes for internal mail?
6. Has your school eliminated the use of aerosol sprays and fire extinguishers that contain ozone-destroying CFCs?
7. Does the maintenance staff regularly check freezers and air-conditioning units for leaking CFCs?
8. Does your school use environment-friendly (non-toxic and phosphate-free) cleaning products?
9. Does your school avoid the use of garden and household pesticides?
10. Has your school examined ways of reducing the use of chlorine and other chemicals in swimming pools, saunas, steam rooms and whirlpools?
11. Does your school have an active policy and strategy to reduce energy use?
12. Does your school have an active policy and strategy to reduce water use?
13. Does your food service offer a choice of healthy food with vegetarian options?
14. Does your school encourage the use of reusable cups, plates, utensils, etc., instead of disposable?
15. Is your school making an effort to make its grounds, play areas and settings attractive by planting trees, shrubs and flowers?
16. Does your school encourage the growing of plants in offices and corridors?
17. Does your school offer environmental education in children and youth programs?
18. Does your school offer environmental education in adult programs?
19. Does your school encourage staff to use public transit, bikes and car-pooling?
20. Has your school undertaken an environmental audit of its operations?
21. Have staff in your school met to discuss and identify actions that will be implemented to become more "green"?

Scoring:

35 - 42: You're doing excellent work. You deserve a Green Medal!**
22 - 34: You're doing well. How about trying for the whole way?
13 - 21: You've made a start — but you're not a Green School yet.
0 - 12: Plenty of room for improvement. What will you do next?
* * Let us know your score, so we can share your achievement with other schools in your area!

YMCA Earth Service Corps

Grades: 8 - 12
Topics: All Possibilities
Classes: Community Outreach, Leadership

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." - *Margaret Mead*

Earth Service Corps seeks to involve students in a process of thinking globally about the environment and acting locally. It works with teachers to help create environmentally responsible global citizens.

Earth Service Corps is a "back-at-school" program designed to involve students in environmental understanding and positive community response. The Frost Valley staff have felt for some time that a key element that was missing from our program was pre-work and follow-up to the Frost Valley experience back at school. Through the Earth Service Corps model we foresee action-oriented projects of local need initiated and carried out by students.

Organizationally, Earth Service Corps would function at two levels. School chapters initiate action projects such as recycling programs, neighborhood clean-ups, restoration and research projects unique to the needs of the community. Frost Valley would provide support in basic skills development such as communication skills, community action and environmental understanding during visits to Frost Valley in the form of school visits and/or Leadership-Training Weekends. Participation in Earth Service Corps will increase the impact of the Frost Valley experience.

We CAN make a difference. Whether we have a desire for a change in the global environment or the environment of our own communities, Margaret Mead's words ring true. In the YMCA Earth Service Corps program, the students choose their own issues and paths. We are merely the resource people for their actions.
Here are some additional possibilities of awareness, education or activation projects groups may choose:

Community Education

- Organize cooperative learning experiences - i.e. debates, seminars and conferences on local or global sociological issues
- Prepare a school board presentation addressing solutions to community social issues
- Host a multicultural fair
- Organize a cultural exchange program for students in the community
- Establish cross-cultural interaction with students in developing countries through a direct communication system - i.e. pen pals, pictures and artwork or videos
- Make a demographic map of the community using statistics from the county office, etc. Identify the issues that address these groups.

- Host a "Reality Banquet" in which the guests are served a menu representative of the distribution of food throughout the world
- Provide support in a local food kitchen

Environmental Awareness

- Organize cooperative learning experiences - i.e. debates, seminars and conferences on a local or global environmental issues
- Initiate a neighborhood clean-up
- Paint an environmental education mural in the community
- Organize tree planting projects
- Monitor the water quality of local watersheds
- Create educational activity books for elementary school children about environmental issues
- Beautify a community area - i.e. planting gardens and constructing play areas
- Organize community or school recycling programs
- Money earned in these projects can be sent to support various individuals, groups or projects in their community or a developing country
- Evaluate school environmental effectiveness - i.e. energy audit and waste stream analysis

Leadership Training

- Attend Leadership-Training Weekends
- Participate in YESC Week-long Adventure Trips
- Facilitate local club meetings, field trips and decision-making
- Collaborate with other YESC clubs in their area
- Demonstrate the acceptance and development of their own life skills and independence

Activate Change

- Organize petition drives
- Contact government representatives, local editors and community businesses about the group's concerns on local issues
- Design and sell tee-shirts with a population or environmental logo

•• For more information or to register for trainings, contact your local YMCA Earth Service Corps National or Regional Resource Centers:

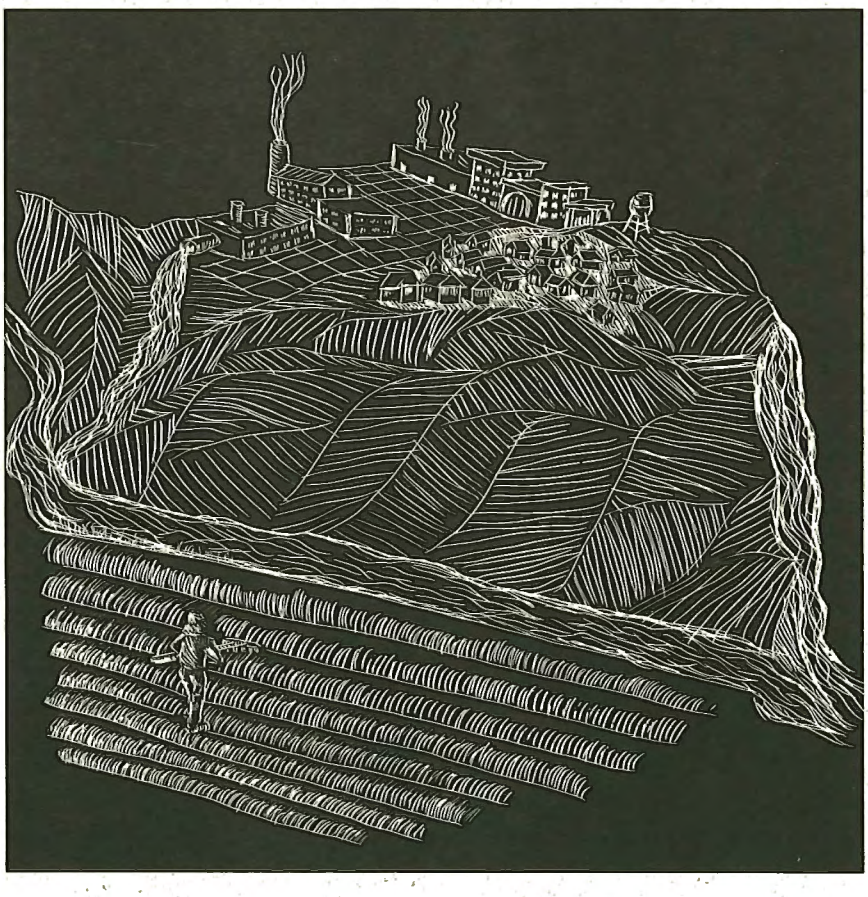
Frost Valley YMCA, NY RRC, 2000 Frost Valley Rd., Claryville, NY 12725-9600
Denver, CO RRC, Aurora Family YMCA, 445 S. Lansing St., Aurora, CO 80012
Chattanooga, TN RRC, Chattanooga Metro. YMCA, 301 W. 6th St., Chattanooga, TN 37402
Dayton, OH RRC, YMCA Camp Kern, 5291 State Rt. 350, Oregonia, OH 45054

National Resource Center, Metrocenter YMCA, 909 4th Ave., Seattle, WA 98104

Development Education

As stated in the YMCA's Call for Action on the Environmental Crisis adopted by the 12th World Council of YMCA's in August of 1991, "The advanced countries are consuming over 80 percent of the total quantity of energy every year. They are exporting polluting industries through the foreign investment of transnational corporations, primarily responsible for spreading the environmental crisis world-wide.... Developing countries, preoccupied with the distorted beliefs of 'development' or 'growth', are generating other causes of pollution through deforestation, desertification, marine pollution, soil erosion and various kinds of public diseases. This policy should be transformed in a way of searching for the harmony and coexistence of the environment and development."

The activities and Instructor Thoughtsheets in the following sections will help you encourage your students to take a closer look at the issues involved in the development of countries and the effects on the human, economic and environmental dimensions of growing societies.



What is Sustainable Development?

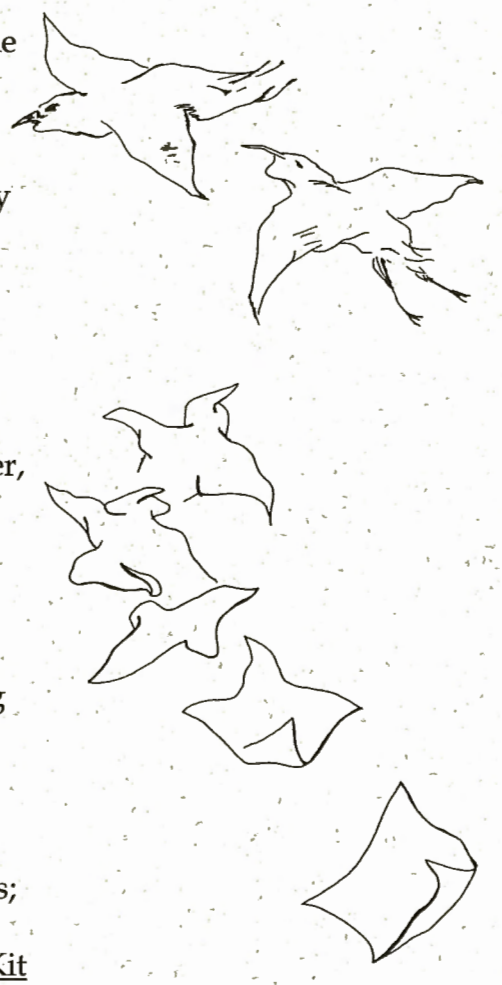
The World Commission on Environment and Development defines sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." (*Our Common Future*) Each country's path toward sustainable development is unique to that country's human, economic, technological and environmental dimensions.

Countries can be commonly divided into three categories depending on their position in the industrial and human development timelines. Countries that are established as high-income countries that also rank high on human development are considered **industrialized countries** (i.e. the United States, Japan, Australia, Germany & The United Kingdom). Countries that have strong industrial sectors but do not yet rank high in human development are considered **rapidly industrializing countries or RICs** (i.e. Thailand, Indonesia, Mexico, Brazil and Chile). And finally, countries that are considered lower-income, are primarily agricultural-based and rank low in human development are known as **developing countries** (i.e. India, China, Guatemala, Ethiopia, Togo and Tanzania).

Though no country is yet pursuing a complete policy of sustainable development, the goals are clear if a country is to meet its needs of the present as well as the future.

Development is sustainable if it:

1. can be carried on indefinitely;
2. does not lead to permanent or widespread damage to the environment;
3. makes use of renewable materials;
4. relies on naturally replaced flows of energy (eg. small scale hydro, wind, solar), not depletable stocks of energy (eg. fossil fuels, uranium)
5. operates in cyclical, not linear fashion, i.e. products and by-products are recycled;
6. does not contribute to "garbage", "pollution", "hazardous waste" or other disposal problems;
7. does not depend on depletable materials;
8. values natual life-support systems - clean air, clean water, soil fertility, genetic diversity and stability of species;
9. does not disperse chemicals into the environment;
10. does not displace ethnic peoples from cultural heritage;
11. does not incur rural costs to provide urban benefits;
12. does not contribute to increased urbanization;
13. employs people in interesting and healthy ways for long periods;
14. promotes distribution of income to poor people;
15. encourages cooperative, communtiy activities;
16. encourages local ownership and responsibility;
17. allows affected local people to make important decisions;
18. promotes understanding of human relationship to other organisms and to the biosphere. - <u>One Earth Resource Kit</u>



Development Issues and the Environment

Consider this:

Forests

- About half of the world's tropical rain forests is already gone. Tropical forests still cover an area about the size of the United States but each year many areas together totaling the size of Indiana are eliminated. - *Exploring the Third World*
- Due to deforestation, scientists estimate a million species of life in the tropical forest will become extinct by the year 2000. - *Exploring the Third World*

Soil

- In the past 45 years, an area the size of China and India combined has suffered moderate to extreme soil degradation. - *Teacher's Guide to World Resources 1992-93*
- Causes of soil degradation include overgrazing by livestock, agricultural practices, deforestation, overexploitation of vegetation for fuelwood and industrialization. - *Teacher's Guide to World Resources 1992-93*

Water

- The use of synthetic fertilizers and pesticides is responsible for more than half of all water pollution in the U.S. - *The New International*
- To date, more than 700 chemicals have been detected in the United States drinking water, 129 of which the Environmental Protection Agency calls dangerous, including industrial solvents, metals and radioactive substances. - *Only One Earth*

Air

- 2/3 of the world's 1.8 billion city dwellers breathe air that contains dangerously high levels of sulphur dioxide and dust. - *Only One Earth*
- The 1980's were the warmest decade on record; the warmest years this century were (in order) 1988, 1987, 1983, 1981, 1980 and 1986. - *The New International*

Waste

- Western industry produces vast amounts of toxic waste, much of which is dumped in the Third World. - *The New International*

You don't have to go very far to run into statements like the above. But are these "facts" the whole story? By teaching and presenting these findings alone, we may encourage yet another injustice in the world and that is people drawing conclusions from information from only one side of a situation. Let's consider this **before** you, the instructor, go any further with your lesson plans on these subjects.

Outdoor Environmental Educators often ask the question, "How does this huge global topic fit into my center's lesson plans?" By walking through the steps in the following Thoughtsheet on Development Issues and the Environment, you can find the place in your current curriculum that can involve global subjects such as these.

Development Issues and the Environment

Instructor Thoughtsheet

Select one of the statements from the preceding page that interests you and examine it a little closer. Now take the line you chose and write or find a sentence that would explain one other side of the agrument or situation. In doing this, we are opening our eyes to the multiple causes in a situation as well as the cascade of ramifications that would be created if we did a "quick fix" to each of these global environmental problems.

Example: The use of synthetic fertilizers and pesticides is responsible for more than half of all water pollution in the U.S. - *The New International*

Other Side: In order to produce the visually perfect food in large amounts that the public demands, farmers are finding it necessary to use mass quantities of synthetic pesticides and fertilizers.

Question: _____

_____

Answer: _____

_____

_____

Now, take your topic and list the subjects in a standard school curriculum that could address that type of information.

Example continued: Agriculture: Social Studies, Earth and Life Sciences

_____

_____

And finally, list the classes in <u>your</u> curriculum that involve one or more of these school subjects and you'll find the place where this information can fit into your current lesson plans.

Example continued: Pesticides and Fertilizers: Water Studies, Ecology, Acid Rain Studies and Gardening

_____

75% of the Earth Surface

Grades: 5 - 12
Topics: Earth and Life Sciences, Social Studies
Classes: Water Studies, Ecology, Outdoor Living Skills

Water is a precious natural resource to us and probably our most limited one. Although 75% of the earth's surface is water, it is not available to us.

Materials:

One clear 10 gallon container, 10 gallons of water, three clear 5 gallon containers, one cup, one eyedropper

Procedures:

1. To help the students visualize the world distribution of water, present a 10 gallon container filled with water to represent all of the water on earth. As you talk about the location of water throughout the planet, remove the quantities into other containers.
2. 97.1% of all of the water on earth is in the oceans and seas. This water con tains dissolved solids, mostly salt. It can be used for transportation. How ever,it is unfit for drinking, washing, irrigating crops and industrial purposes. When this amount of water is removed from the 10 gallon container, 4 & 1/2 cups of the water remains.
3. Place 4 & 1/2 cups of the water into a smaller container. This amount represents the total amount of fresh water on our planet. But, 3 & 1/2 cups are located in glaciers, ice-caps, the soil and the atmosphere. These cups are not directly available for use by humans.
4. Place 1 cup of the fresh water supply into the next container. This is the fresh water available to us though it is not evenly distributed throughout the world. Of this 1 cup of available water, we must consider that water is found in remote locations where few people live, trapped underground and also polluted attimes. The remaining usable fresh water supply is about 10 drops!
5. Place 10 drops of the water into the final container. Have the students name all of the ways we use water that must share these 10 drops.

Further Discussion Questions:

- Is water a renewable or non-renewable resource?
- What is the water cycle?
- How much water do you use everyday at home or school?
- What are some ways in which you can conserve water?

Source:

Adapted from "Info on Water" from the YMCA Canada curriculum guide: Taking the World to Camp

It Looks Clean

Grades: 5 - 10
Topics: Earth and Life Sciences, Social Studies
Classes: Water Studies, Ecology, Outdoor Living Skills

"Each day, a person in the United States uses about 70 gallons of water. But millions of people living in developing countries around the world (about 65 countries in Africa, South and Southeastern Asia and Latin America) cannot get clean, safe water. They must walk miles each day to watering holes or collect water from dirty puddles, streams or ditches." (...And My World)

Water quality is an issue that is a survival concern for many people in our world today. How clean is a water source and how can you tell? This activity points out that it's not as easy as just looking.

Materials:

Four small jars with the following water samples: pure, clean tap water; half clear water, half rubbing alcohol; muddy water; and water filled with sand or gravel. Additional jars of clear water and a variety of household chemicals

Procedures:

1. After a discussion on water quality with the group, present the prepared jars of water to them.
2. First, with just a visual observation, have the students choose which water they would choose to drink.
3. Now give them the opportunity to smell the jars and change their choice if they would like.
4. Discuss the abilities of chemicals to "hide" in a water source and the dangers involved.
5. As a further demonstration, have the students split into groups of three or four. Give each group a jar with some water and access to a variety of house hold chemicals (cleaners, disinfectants, vinegar and other foods, etc.). Take care to instruct the students on the safe ways of working with and disposing of these types of chemicals.
6. Challenge the groups to mix together using scientific method, a polluted water jar that appears clean visually. Have the students record how many chemicals they could add to their samples without changing the appearance of the water.

Further Discussion Questions:

- What are some industrial and agricultural uses of water?
- What are common sources of water pollution?
- How do people living in a desert get water?
- Where does your community's drinking water come from?

Source: Adapted from "Water is Precious" from the 4-H curriculum guide: ...And My World

Our Forests

Grades: 9 - 12
Topics: Earth and Life Sciences, Social Studies
Classes: Ecology, Resource Management, Hikes

Any forest between the Tropics of Cancer and Capricorn is considered tropical. These forests may differ depending on elevation and average rainfall, but all are important for many reasons.

Although they cover 7% of the earth's surface, tropical forests are home to half of all the known plant and animal species. Tropical forests play an important role in the water cycle, produce oxygen and absorb carbon dioxide. They also protect against erosion and floods, yield fuel for cooking and heating, supply timber for construction, produce many common food items from bananas to black pepper and provide raw materials for 25% of all prescription medicine used in North America.

Materials:

Forester's tape (or brightly colored cord) for marking trees, measuring tapes, tree guide, paper and pencils

Procedures:

1. Take the students to a forested area.
2. Use the tree guide to identify as many species of trees as possible.
3. Have the students mark off an area that is 7 feet by 8 feet. The space will be 56 square feet or about the size of a king-sized bed.
4. Instruct the students to record the following:
   The number of trees (by species)
   The number of trees over 50 feet tall
   The number of saplings
5. Bring the students together to discuss their findings. Explain that the same space in astatistically average tropical forest would contain one 60 foot tree, 50 saplings, and 20-30 different tree species - the equivalent, when reduced to grassland for beef production, of only one four-ounce hamburger!

Further Discussion Questions:

- In what ways is our forest different from a tropical forest?
- Why does a healthy forest have many different sized trees?
- Why is species diversity important in a forest?
- Name some different types of forests?

Source:

"Our Forests" from the Frost Valley YMCA curriculum guide: Revise, Recycle and Recover: Realizing Our Resources

Our Webs of Life

Grades: 5 - 12
Topics: Life Sciences, Social Studies
Classes: Ecology, Hikes, WRAP (conclusion to a trip)

> "Light, air, water, and soil are the elements of life,
> Life is divided into producers, consumers, and decomposers
> Everything is becoming something else;
> Everything has a home,
> Homes in a defined area form a community,
> Inhabitants of these communities live together in competition,
> cooperation or neutrality;
> Man is the chief predator." - Acclimatization

There is a wide variety of ways to present the Web of Life activity to students. The following is a globalized version of a commonly used form demonstrating not only our inter-relatedness but also our common dependence on natural resources.

Materials:

Preprinted cards with names of members of two ecological systems,
The Catskill Mountains: Grasses, Human, Dragonfly, Minnow, Trout, Algae;
The Guatemalan Mountains: Banana Tree, Maize (corn), Human, Quetzal (bird), Mountain Lion, Monkey;
several balls of string (one blue, one red, one brown and two or three multicolored)

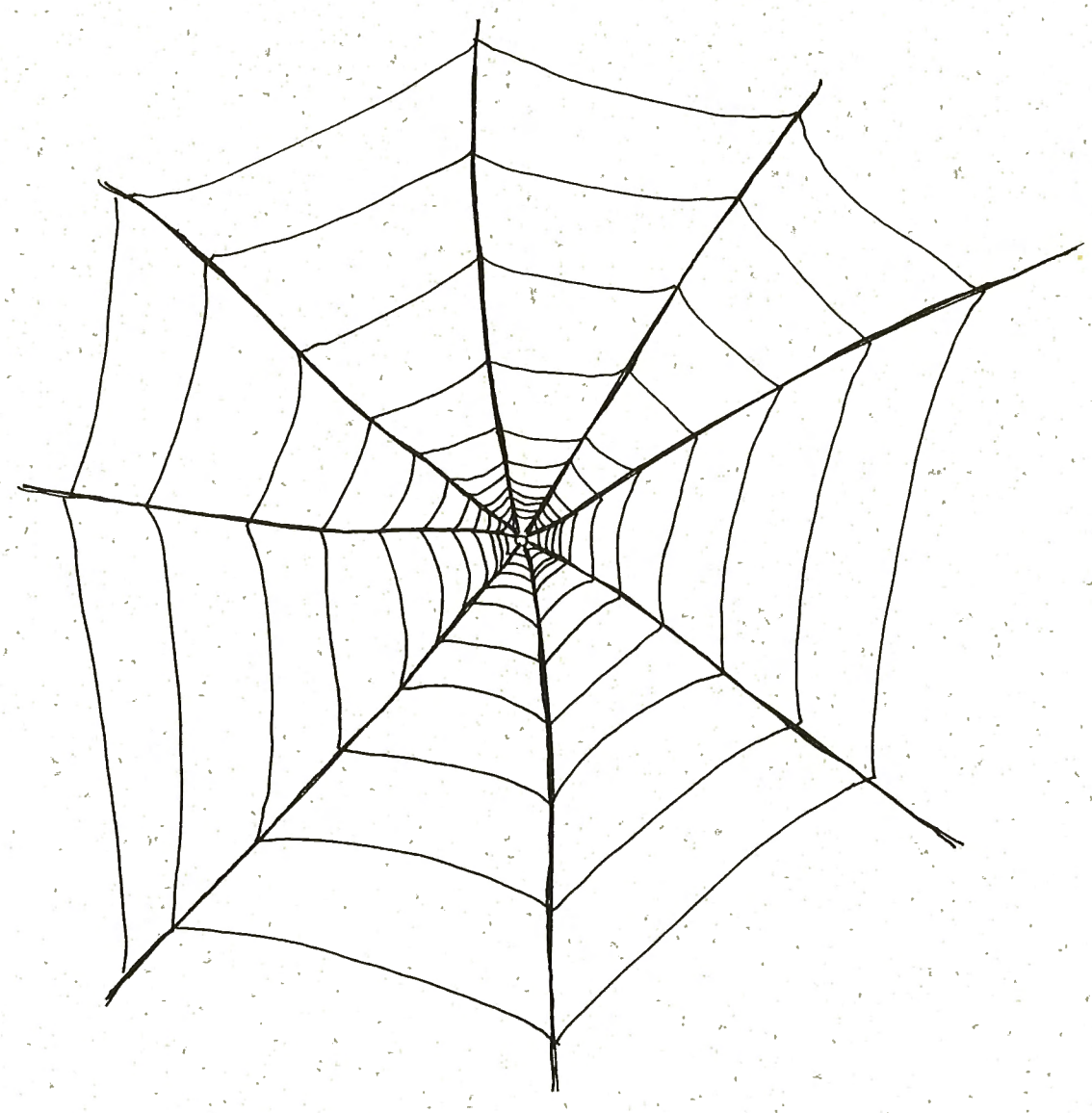
Procedures:

1. With a group size of 15 students, divide them into two groups of 6 and a group of 3 individuals. Arrange the two groups into two circles with the 3 individuals standing somewhere between the circles.
2. With the activity cards and the two multi-colored balls of string, weave the two webs (one in each circle) by giving each student in the circle a card identifying their role. Starting with the producers in the group, hand the string to them and instruct them to give the leading end of the string to anyone in the circle that would use or need them. This should continue through and across the circle as many times as needed to visually connect all of the species that are connected and dependent on each other.
3. Next give the three students standing between the webs the roles of the ele ments: sun, water and soil.
4. Give each element student a ball of string (sun - red, water - blue, soil - brown).
5. Instruct these students to lead each of their strings through the Webs of Life connecting themselves to any species that use them for energy. Have them follow their energy path with the string through the webs as the species with their energy are used (eaten) by others throughout the webs.

6. Many visual demonstrations can follow. Draw out discussions on species inter-relatedness and resource dependency by manipulating the strings. For example:
   - Eliminate a species in a web
   - Cut off the water supply to one of the webs and divert all of it to the other web.
   - Introduce a new species like a Snapping Turtle into the different webs and observe the changes if any.

Further Discussion Questions:

- What are the common roles played in every ecosystem?
- What are the common resources used in every ecosystem?
- What are some human practices that effect ecosystems?
- How do global environmental concerns like the Greenhouse Effect affect different ecosystems? Land Degradation? Water Pollution?



The Biodiversity Quiz Show!

Grades: 7 - 12
Topics: Social Studies, Earth and Life Sciences
Classes: Ecology, Evening Program

"Just the facts, Maam." Unfortunately, we are presented with so many "facts" that we often can't be sure which ones are true. Two things students need in order to decipher this information is knowledge of the subjects and practice identifying false or exaggerated data.

The following is a fun activity that can be done with a small group of students or an entire visiting grade.

Materials: Paper and pencils

Procedures:

1. Seat the group in 5 - 10 equal groups or teams for this game show. Have each group choose a writer for their group. Supply the writers with paper and pencil.
2. Choose three individuals (staff, visiting teachers or students) to be the guest stars of the game show and seat them in front of the teams. Give the stars freedom to create characters for themselves (i.e. an avid environmentalist, a corrupt politician, an absent-minded professor and a movie star that has starred in a Tarzan film). The lead staff person of the activity will be the host of the game.
3. The rules of the game are as follows:
   - The Host will state one of the "facts" on biodiversity for the teams.
   - Team #1 will pick one of the guests to answer (in character) whether the statement is true or false including an explanation.
   - Team #2 will pick one of the other guests to also answer the statement with their explanation (also in character). The Guest Stars need not hold back on their characters or explanations, but for each statement, one of the answers should be correct.
   - The teams then discuss among their members the answer they believe to be correct and write down either true of false on a piece of paper.
   - The Host, after collecting the papers, will provide the correct answer and explanation to everyone giving a point to every team with the correct answer.
   - The game continues with a new statement and teams #3 and #4 choosing their Guest Stars to determine its validity.
4. The game would not be complete without a discussion on the reasoning behind human actions that may lead to the decrease of species diversity. Don't forget the other side of the situation!

The Biodiversity Quiz Show "Facts"

1. About 10 million species have been identified by scientists.
   Answer: False. It is estimated that fewer than 1.4 million of the world's species have been named. Most of the unidentified species live in the tropics. As we begin to explore other habitats, surprising discoveries are made. Scientists believe the deep sea floor could contain as many as a million undescribed species.

2. The Earth has many more species than it needs.
   Answer: False. Species evolve to fill particular niches or habitats that exist on Earth. Many species depend on each other in intricate ways for survival. Destroying one species can lead to further extinctions or changes.

3. Most species are of no direct benefit to humans.
   Answer: True or False. We don't know. Scientists are often delighted to find a cure for a dreaded human disease in a lowly mold or obscure plant. It seems foolish to destroy our genetic storehouse before we have even taken inventory. Also, extinction of a species can upset the balance of a complex ecosystem.

4. Biological diversity is more threatened now than at any time in the past 65 million years.
   Answer: True. Tropical deforestation is the main force behind this crisis. The destruction of wetlands, coral reefs and temperate forests is also important.

5. Large plants, birds and mammals make up about half the world's species.
   Answer: False. Large, visible species of mammals, birds and plants make up fewer than 5% of the world's species.

6. The countries with the most species of vascular plants are located in Central and South America and in Southeast Asia.
   Answer: True. The world's rain forests are located in these countries.

7. Coral reefs are as rich in biodiversity as tropical forests.
   Answer: True. Coral reefs are habitats of massive biotic richness.

8. Fewer than 100 species currently provide most of the world's food supply.
   Answer: True. Fewer species are grown today than in the past. Genetic diversity is declining.

9. Crop breeders need a diversity of crop varieties in order to breed new varieties that resist insect pests and diseases.
   Answer: True. Many crops have been "rescued" with genetic material from wild relatives or traditional varieties.

10. Two major causes of biodiversity loss are population growth and the increasing consumption of natural resources.
    Answer: True. Other root causes are ignorance of species and ecosystems, poorly conceived policies (for example, those that favor deforestation), inequity in resource distribution and the failure of economic systems to account for the value of biological resources.

11. Once a species becomes endangered, it is doomed to extinction.
    Answer: False. Species can be protected by preserving habitat and by breeding and propagating programs in zoos and botanic gardens.

12. Human societies can not develop without destroying species biodiversity.
    Answer: False. There are many examples of successful sustainable practices that encourage human growth and development without the cost to the environment. With proper management of our development, we can provide for our needs in the present without detriment to our future.

Further Discussion Questions:

- What are some ways of using a natural resource without destroying it over time? Example: a tropical forest
- What is sustainable development?
- Why do people destroy habitats that are valuable to themselves and other species?
- Taking into account all of the sides to the situation, what are some possible solutions to a global environmental concern like Deforestation? Land Degradation? Water Pollution?

Source:

Adapted from "Test Yourself: How Much Do You Know About Biodiversity" from the Teacher's Guide to World Resources

No More Room!

Grades: 5 - 12
Topics: Economics, Government, Earth Sciences
Classes: Resource Management, Ecology, Cooperation, Leadership

"The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers and sea with dangerous and even lethal materials."
(Rachel Carson, Silent Spring)

As we hear about landfills closing and our waste problems piling with the garbage, it is often difficult for students to feel their contribution to the situation. How do they fit into this picture? Realizing that the solution to this concern will have to involve many people working together is their first step.

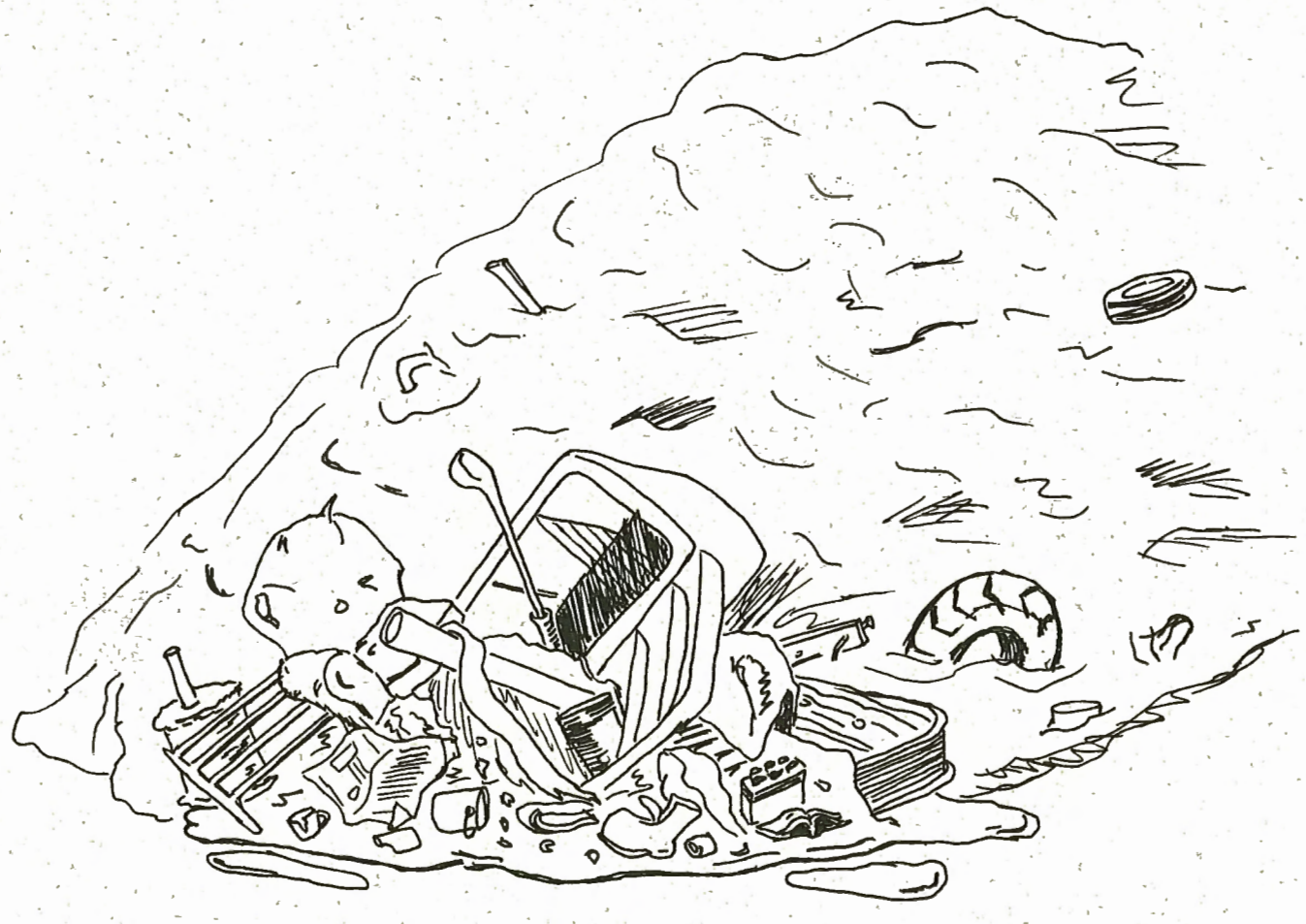
Materials: Two bicycle inner tubes

Procedures:

1. Begin by placing the two inner tubes on the ground in front of a group of about 15 students. These tubes represent the landfills that they as a community use to dispose of their waste.
2. In order to illustrate that they are all using these landfills, have the students fit themselves into the center of the tubes. (Be patient if the cooperation needed is not present at first.)
3. After they have tried to fit into their landfills, relax and talk about how they worked together and how this demonstration works the same as the real-life situation with landfills.
4. Next, close one of the landfills by removing one of the tubes. Have the students try to complete the task with less area to dispose of the waste. (This is when the stretch of the inner tube will be tested.)
5. After they have tried to fit into the remaining landfill, relax and talk about how they worked together differently on that situation.
6. Some interesting additions to this activity are:
   - Have the students name an alternative disposal method for every foot they need to leave outside of the circle.
   - Have one student stand in the center of the circle using more of the space just as a strong company or developed nation may do in the world today.
   - Have the students try this without speaking, demonstrating the difficulties of communicating this issue between nations with different languages and customs.
   - Have one student represent a toxic waste disposal and instruct the other students to not touch him/her while sharing the landfill.

Further Discussion Questions:

- What are the ways in which we dispose of our waste?
- What are the advantages and disadvantages to these methods?
- How does a community choose the right method for their situation?
- Some large companies in developed nations are paying developing nations to take their toxic wastes for them. Why is this happening?



The Decisions Are Yours

Grades: 6 - 12
Topics: Social Studies, Economics, Government, Earth and Life Sciences
Classes: Town Planning, Ecology, Resource Management, Water Studies, Leadership

"To appreciate the beauty, diversity, and interdependence of all forms of life and all resources which God has provided in this world, and to develop an ethical basis for guiding the relationships of humankind with the rest of God's natural community."
- Preamble from the Constitution of the YMCA of the USA

That's quite a task! Though, as societies grow and develop through time, this is one of the many tasks leaders and peoples are striving for locally and globally. Combined with this complex task are the equally daunting goals of simultaneously providing for quality human and economic development.

If students do not practice the skills needed to take on such complex situations now, when will they? The following case studies enable the students to make critical decisions on the course of an area's development and learn from the outcomes of their actions.

Materials:

Case Studies #1 & #2, area maps, Option Shapes, tape, paper and pencils

Procedures:

1. After discussions and activities exploring the interconnectedness of nature and development of societies, separate the students into smaller groups of 3 - 5.
2. Present the case studies to the students, telling the groups that they are going to have an opportunity to make plans for the area's development that can repair, limit or decrease environmental damage. The choices will be up to them.
3. Distribute the case studies, maps, option shapes, tape, paper and pencil to each group. Each group can be given a different or identical case study.
4. Give each group the opportunity to read about their situation, identify the task and develop the community.
5. The facilitator can move from group to group offering help, answering questions or asking questions to get the groups started on their task.
   Note: Each group gets only five Option Shapes. The Shapes are to be taped to the map to indicate where choices would take place in the community.
   Example: In the Resettlement Area the group may decide to cut down some of the trees. They would tape one of the shapes on the map covering the trees in the area they wish to make the change.

6. Give each group the opportunity to present their case study to the large group, reading the "Present Situation" and explaining what options they chose and why. Encourage the other students to ask questions and to consider the consequences of the options the group chose.
7. Wrap-up with a discussion about the complexity of land-use issues throughout the world and our need to be informed in order to make appropriate choices.
   ** Suggestion: For grades 7 and younger, try working on one study with everyone together.

Source:

Adapted from "Think Globally: Environmental Case Studies" from the YMCA Canada: One Earth Resource Kit

Case Study #1
Utopia

Area: Utopia, an unspoiled, unsettled natural area.

Present Situation:

- An abundant area of arable land for agriculture
- Five major rivers ... 2 of them are suitable for dam construction for hydro-electricity
- Mineral and fossil fuel reserves
- Large forested areas
- Abundant fish stocks in the rivers
- Temperate climate
- Well situated for world trade

Task:

An area of unclaimed, unsettled land has been discovered. The United Nations has declared that it will be settled by refugees presently living in UN Refugee Camps around the world. You have been appointed as the governing council for a 10 year period to get the country started. Develop this country!

Options:

Begin logging industry
- Pro: Earn foreign exchange
- Con: Soil erosion

Begin mining industry
- Pro: Provide raw materials for other industries
- Con: Pollution of two rivers

Dam/hydro power
- Pro: Cheap source of power
- Con: Flooding agriculture land

Other options are up to you!

Control:

You have total control. You are coming to this untouched land to begin a new society. You decide who (and how many) can settle the land and the type of settlement.

Case Study #2
Resettlement Area

Area: Tierra Nueva (New Land) on the outskirts of Guatemala City, Guatemala

Present Situation:

- Following an earthquake, more than 1,000 families have come to this area to build new homes because their towns and villages have been destroyed.
- People have few resources or belongings. Most were lost in the earthquake.
- The area is a plateau with sandy, easily eroded soil, surrounded by steep ravines lined with trees.
- Demand for building materials is high - outstripping supply
- No services ... no water, no electricity, no sanitation
- Few people have transportation (i.e. cars, trucks).
- Some families have animals - cows, goats, horses - brought from their villages.

Task:

Develop a community in Tierra Nueva. Try to meet the needs of the people without damaging the environment. Is it possible?

Options:

Build homes for 300 families with cement blocks and building material available
- Pro: The homes will be sturdy and well built.
- Con: 700 families will be lacking materials to build homes.

Harvest trees on sides of ravine to build homes
- Pro: Inexpensive, readily available
- Con: Deforestation, erosion

Harvest trees for fuel
- Pro: Inexpensive, easy
- Con: Deforestation, erosion

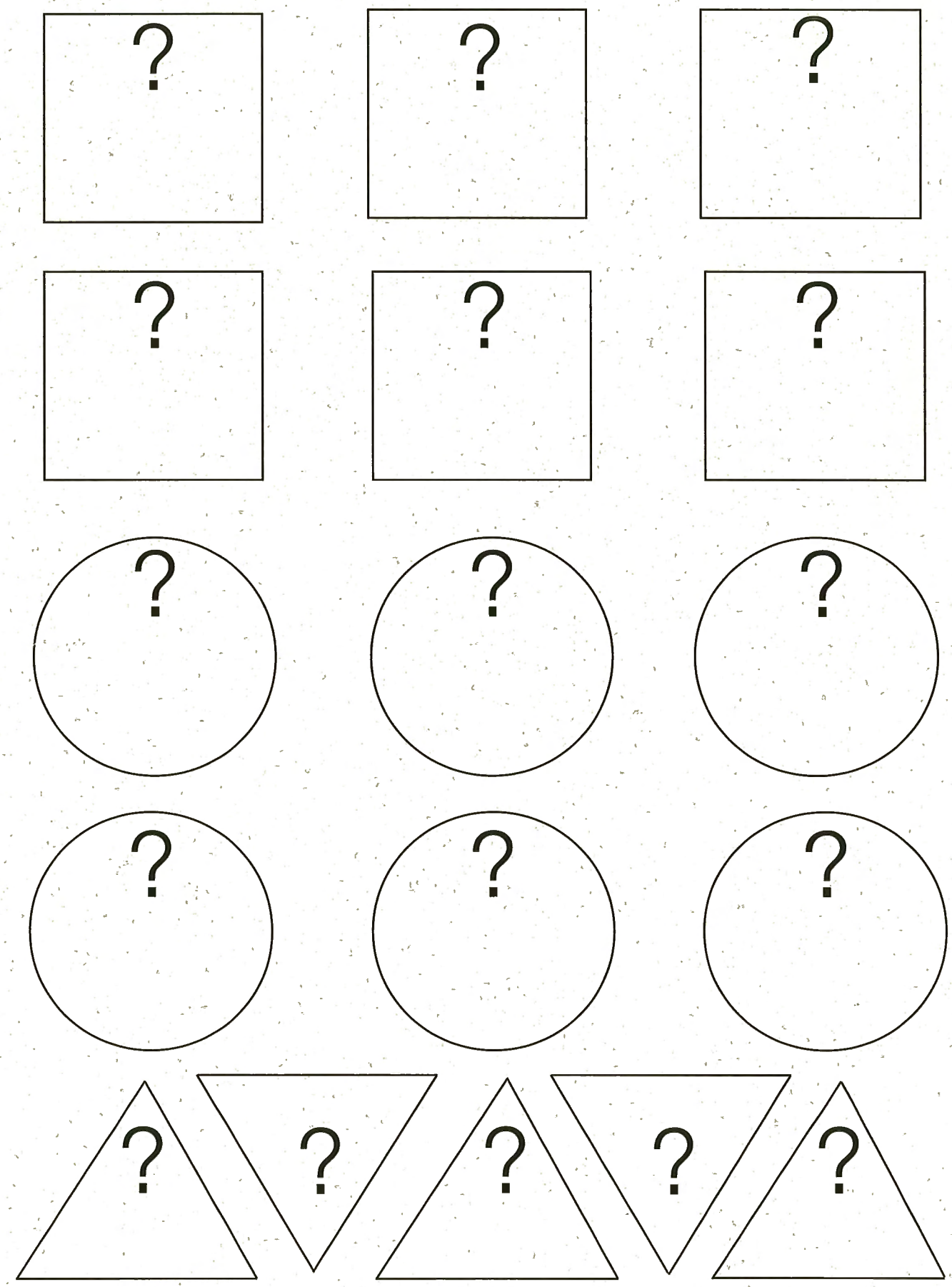
Each family responsible for building own latrine/septic system
- Pro: No cost to the government
- Con: No quality control, poorest families may lack resources to build

Other Options are up to you!

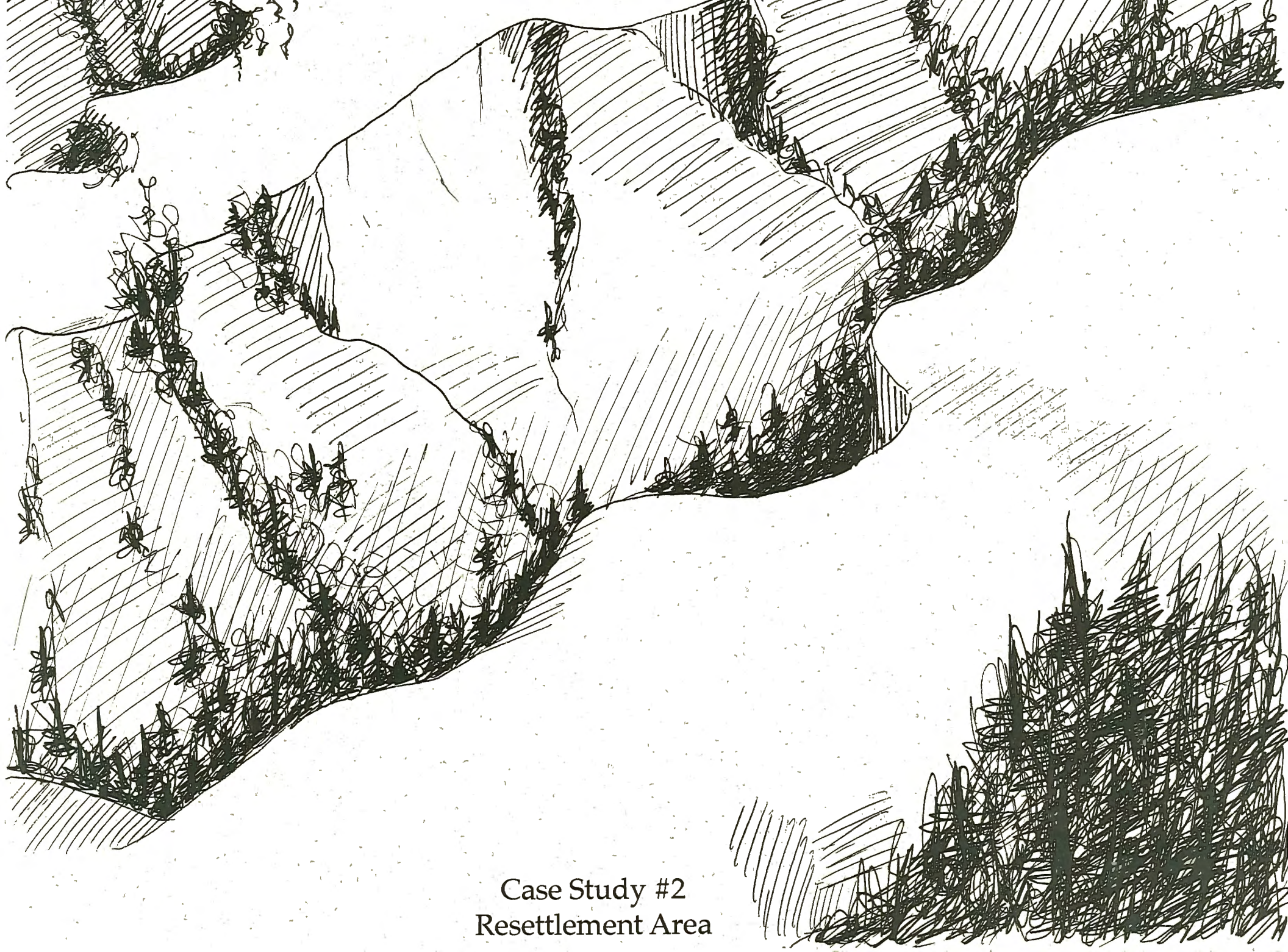
Control:

As the displaced people settling in Tierra Nueva, you have little control over the way the community develops. Can you change that?

Option Shapes Worksheet



Case Study #1
Utopia



Case Study #2
Resettlement Area

Development Issues and Human Rights

Consider this:

- About 1 billion adults cannot read or write. - *Teacher's Guide to World Resources 1992-93*
- Overall, developing countries are paying $50 billion more a year to creditor countries than they are receiving in new aid. - *Bread for the World*
- 80% of disease in developing countries is related to poor drinking water and sanitation. - *The New Internationalist*
- Well over 1 billion people are malnourished, including 150 million children under the age of five. - *Teacher's Guide to World Resources 1992-93*
- Almost every major refugee-producing conflict has been existence since 1979 or earlier. - *World Refugee Survey*

You don't have to go very far to run into statements like the above. But are these "facts" the whole story? By teaching and presenting these findings alone, we may encourage yet another injustice in the world and that is people drawing conclusions from information from only one side of a situation. Let's consider this **before** you, the instructor, go any further with your lesson plans on these subjects.

Outdoor Environmental Educators often ask the question, "How does this huge global topic fit into my center's lesson plans?" By walking through the steps in the following Thoughtsheet on Development Issues and Human Rights, you can find the place in your current curriculum that can involve global subjects such as these.

Development Issues and Human Rights

Instructor Thoughtsheet

Select one of the statements from the preceding page that interests you and examine it a little closer. Now take the line you chose and write or find a sentence that would explain one other side of the agrument or situation. In doing this, we are opening our eyes to the multiple causes in each situation as well as the cascade of ramifications that would be created if we did a "quick fix" to each of the global concerns.

Example: 80% of disease in developing countries is related to poor drinking water and sanitation. - *The New Internationalist*

Other Side: Water quantity is even more important than quality when it comes to health. Until their distance from a source is reduced to less than a five minute walk, water consumption does not rise significantly.
- *The New Internationalist*

Question: _____

_____

Answer: _____

_____

_____

Now, take your topic and list the subjects in a standard school curriculum that could address that type of information.

Example continued: Water Studies: Social Studies, Earth and Life Sciences

_____

_____

And finally, list the classes in your curriculum that involve one or more of these school subjects and you'll find the place where this information can fit into your current lesson plans.

Example continued: Water Quality and Quantity: Resource Management, Water Studies, Outdoor Living Skills and Day Hikes

_____

A Toast to Good Health

Grades: 6 and up
Topics: Health, Social Studies, Earth and Life Sciences
Classes: Hikes, Outdoor Living Skills, Water Studies

It is a fact that in many developing areas where health education and water sanitation facilities are lacking, a major source of illness and death is dehydration. "Dehydration from diarrhea has killed around one hundred and fifty million children since 1949 -- more than the combined civilian and military deaths of both world wars! It still kills almost 10,000 children daily. But 70% of these deaths could be prevented through the use of oral re-hydration therapy -- sugar, salt and water solution in the right quantities. The use of this therapy tripled between 1983 and 1985 and today saves roughly one million children a year." (Taking the World to Camp)

To illustrate how severe the problem of dehydration is in developing countries and at the same time how relatively simple the cure is, share this recipe with your students at a "thirsty" moment.

Materials:

Water, sugar honey, salt, baking soda, and optional orange juice

Procedures:

1. After discussing our bodies' needs for water and the effects of diseases that quickly dehydrate people, point out the attributes to a simple re-hydration therapy.
2. Have the students mix the following recipe.
   Since much of the water in developing countries is not safe to drink, disinfect by boiling the water for a few minutes and cool. Into one liter (approx. 35 oz.) add 2 tablespoons of sugar honey, 1/4 teaspoon salt, and 1/4 teaspoon of baking soda. To make the rehydration drink a little more tasty, try adding 1/2 cup of orange juice.
3. Toast to good health and enjoy the drink.

Further Discussion Questions:

- How much water do you drink in a day?
- Where does your drinking water come from?
- What regulations does the United States have for our drinking water?
- Why are there people in the world without clean drinking water?

Source:

Adapted from "Rehydration Drink" in the YMCA Canada curriculum guide: Taking the World to Camp

Food for Thought

Grades: 6 and up
Topics: Social Studies, Life Sciences, Health
Classes: Snacks, Hikes, Outdoor Living Skills, Leadership

"The latest U.N. Food Council report estimates that 512 million people in developing countries were hungry in 1985. But this is not because of a food shortage. Even in drought-stricken Africa, farmers produce 92% of all the food the country needs. The problem lies with the way the food is distributed. Distribution depends upon jobs, income, trade, land ownership and many other factors. The net result is that many poor people go to bed hungry." (...And My World)

The following activity will encourage students to explore how food is distributed and also to understand the emotional impact hunger has on people around the world. It can be done large scale in the form of a meal or smaller in the form of a snack time.

Materials: Apples and a knife for cutting them

Procedures:

1. Use the apples to illustrate food distribution around the world. For example, for a group of 25 people, cut the apples into quarters and distribute in the following way:
   Six people will receive nothing or slivers
   Seven people will receive one slice each
   Six people will receive three slices each
   Five people will receive ten slices each
   One person will receive twenty-five slices
2. Point out how this illustrates that around the world there are very few rich people, and many levels of middle-income and poor people.
3. As you explore the countries in the world that have people who are hungry, do not forget the United States. Investigate the conditions and factors contributing to people having to live without proper food and often shelter.

Further Discussion Questions:

- A staple food is a product that is eaten regularly and in large amounts to supply a major part of a person's energy needs, for example: rice, wheat, maize or potatoes. What is a staple food in your family?
- Where does your food come from?
- What methods does the United States use to distribute food?
- What are some ways in which countries are solving their food distribution problems?

Source:

"Food for Thought" from the National 4-H council curriculum guide: ...And My World

Aiding People

Grades: 6 and up
Topics: Social Studies, Earth and Life Sciences, Health
Classes: Water Studies, Cooperation Courses, Leadership and Ecology

"A person needs 1.3 gallons of water a day for drinking and cooking, 25 liters (6.6 gallons) more to stay clean. But two thirds of the world's households have no water inside the home and have to fetch it from elsewhere." (CWS 1992 Global Calendar/The New Internationalist)

One must consider water quantity and quality when looking at a source of drinking water. Yet in order to work well with a group of people in a developing country on their water problems, aid organizations are finding that it is equally important to consider the people's customs and culture in choosing their methods. This role play activity will put the students into that complicated situation.

Materials: Aiding People Role Play Cards

Procedures:

1. After discussing water quality and quantity issues with the students, split the students into a group of three and a group of twelve.
2. Explain to the group what a role play situation is and that they will be acting out an aid program in a developing country, Nepal.
3. Next, assign the group of three the roles of the aid people and the other group the roles of the villagers. Explain that the aid people are experts in rural development and water supply and they have been asked by the government to assist in this aid program that will bring good drinking water to a small village. The government is willing to provide the necessary materials for the water system which is most effective and the cheapest.
4. Give each group their role playing information cards and time to look them over.

Role Playing Cards
Aid People

A survey done of the area suggests that the best possible method is pumping river water into a reservoir where chemical additives can be used to purify the water. The other alternative is running a pipeline 2 miles from a spring-fed stream high in the mountains. This plan will cost twice as much as the first and would be more costly to maintain.

Though you are respectful and eager to help the villagers, you do not know anything of the people's culture and customs. You must explain to the villagers the plan you have in mind and then get the signature of each villager.

Villagers

Though the aid people are respectful and eager to help, they do not know the following about your village:

- the population size is several hundred
- the people are intelligent and proud of their culture
- the people grow corn using "primitive" or traditional techniques
- most of the people cannot read
- the area is infested with a type of worm that can cause skin problems - it is wise to cover the ground before sitting down.
- the villagers believe in magic and that objects are inhabited by spirits
- the villagers have concerns about the strange changes the aid people are proposing
- the villagers consider the river to be a sacred gift from their creator

5. After the groups have had time to think about their characters, assemble the groups together and lead them into a role play of a town meeting held at the village to discuss the aid plans. Have the aid people and the town leader (one of the villagers) facilitate the meeting.
6. Discuss the outcome of the meeting and any communication problems the group had. Were there any concerns or worries not addressed in the meet ing? How did they finally reach a consensus?

Further Discussion Questions:

- What are the advantages to getting to know another culture?
- What are the dangers in trying to help someone you know little about?
- How do we find out more information about people in other parts of the world?
- Why is it important for us to know about people in a small village on the other side of the world?

Source:

Adapted from "Canadian Aid People" in the YMCA Canada curriculum guide: Taking the World to Camp

Tough Choices and Decisions

Grades: 8 and up
Topics: Social Studies, Health, Government and Economics
Classes: Town Planning, WRAP, Cooperation Courses, Leadership

"Poverty is not a question of whether or not there is enough for everyone (or that there are too many people), but that the distribution of food, wealth and other resources is unfair." (Taking the World to Camp)

It's all in our choices and decisions. Choices in the path of a community's development for example are difficult and complicated to make. This role play activity will take a closer look at just what goes into these decisions.

Materials:

Tough Choices goal and decision cards, pencils and paper, chalk board for group work

Procedures:

1. Explain to the students that they will be acting out a role play situation in which they are a town board for their home community with full authority to make the decisions for the development of their area. Their job will be to make their community a safer, healthier, wealthier and more interesting place to live.
2. Have the committee select a leader for the meeting. Give the goal cards for the meeting to the leader. The leader should share these goals with the other students and facilitate group consensus on the projects.

Goal cards:

Goal #1

List 10 projects you would like to see carried out in your community. These can be things like providing housing for the homeless, building a new school, providing jobs for the unemployed, improving medical care or putting in a cable TV station.

Goal #2

Setting priorities: There is only enough money available for your community to complete three of the projects you have listed. Choose which three you think are the most important and should be funded.

3. Unfortunately, it is not always this simple in the real world. A community may have to cut back on one project in order to make some funds available for another project. For example, spending less money on health care may provide some funds for a new park. By making this trade-off, the community

is able to provide limited funds to each project. Present the group with each of the Decision Cards for their meeting. Encourage the leader to help them come to a decision on each trade-off situation.

Decision Cards:

Decision Card #1

Parks or providing food for the poor? Assume it costs $333,000 to develop a small neighborhood park. Assume it costs $4,000 for each poor person to be reached by a city food program. You have $1,000,000 to spend on these two programs. How many people will you feed? How many parks will you build?

Decision Card #2

Widening a street to four lanes or building a new seating area for spectators at your school's football games? Assume the new seating area will cost $1,000 for each seat. Widening the street will cost $100,000 per block. You have $2,000,000 to spend on these two programs. How large a seating area will you build? How many blocks of street will you widen?

Decision Card #3

Improving medical care for the poor or providing jobs for the unemployed? Assume that providing free medical care costs an average of $2,000 for each person included in the plan. Providing a job (doing community service work) for an unemployed person costs $20,000 a year. You have $1,000,000 to spend a year. How many jobs will you create? How many people will you make eligible for free medical care?

4. After the role play, encourage the group to share their feelings on their experience as a board member making decisions of that magnitude. How did the group reach consensus? What lead you in your decision making?

Further Discussion Questions:

- What do you believe are your real community board's priorities?
- Do you agree with the direction in which your community is developing?
- How can you make your opinions known to your community's decision-makers?
- What would it be like to be on the U.N. making decisions for the world community?

Source:

Adapted from "Development Choices" in the Population Institute's curriculum guide: Exploring the Third World

The Rights of a Child

Grades: 10 and up
Topics: Social Studies, Government, Health
Classes: Communication Courses, WRAP, Leadership

There are more than 100 million street children around the world who live in fear for their lives. According to Amnesty International, many of these children are beaten, illegally detained and confined, sexually exploited, tortured and systematically killed by agents of the State or "disappear".

As stated in the United Nations Convention on the Rights of the Child, all children have the right to:

1. Love and security
2. Food
3. Survival and development
4. Parental care
5. A decent place to live
6. Health and health services
7. Protection from abuse
8. Education
9. Rest and leisure

This U.N. Convention on the Rights of the Child addresses and defines the obligations of adults towards children. Although protection for children is contained in other international laws, this convention consolidates the existing laws on children, addresses needs not previously considered and establishes new standards.

Along with the Convention, groups and agencies are forming world-wide. Some examples are The Exploited Children's Unit in Columbus, Ohio and End Child Prostitution in Asian Tourism (ECPAT).

This role play activity will encourage the students to take a closer look at the injustices to which people their age are subjected around the world today.

Materials: The Rights of the Child Role Play Cards

Procedures:

1. After discussing civil liberties and common abuses of those rights around the world, explain to the students how a role play situation can bring you closer to the subject.
2. Divide the students into groups of three or four. Give each group a role play card. Each card explains one of the key points mentioned in the U.N. Convention on the Rights of the Child and a situation their group needs to role play.
3. Give the groups some private time to work on a short skit for the class that depicts their situation and possible solutions to the problem.

4. Give each group the opportunity to present their skit to the class. Allow time for the entire group to discuss each situation and additional solutions possible after each role play.

The Rights of a Child Role Play Cards:

Discrimination: The Convention states... *All rights shall be extended to each child, irrespective of the child's, or his or her parent's race, color, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other basis.*

What if... you wanted to live in a different part or your town and you were not allowed to because of the color of your skin, or the color of your hair?

Survival and Development: The Convention states... *Every child has the inherent right to life, survival and development (growth).*

What if... you were not able or allowed to have a house, doctor's care, enough food?

Health and Health Services: The Convention states... *The child has a right to the highest attainable standard of health and to medical and rehabilitation facilities. Appropriate measures should be taken to diminish infant mortality; ensure the provision of necessary medical assistance and health care; combat disease and malnutrition; ensure health care for expectant mothers; develop preventive health care and family planning education and services.*

What if... you were not able to go to the best hospital available to get well?

... you didn't have a doctor or nurse nearby?

... you couldn't get vaccines to keep well?

Education: The Convention states... *The child has a right to free and compulsory primary education, equal access to secondary and higher education and school discipline which reflects the child's human dignity.*

What if... your parents had to pay for you to go to school?

... not everybody could go to high school?

Children with Disabilities: The Convention states... *A mentally or physically disabled child has the right to a full and decent life in conditions which ensure dignity, promote self-reliance and facilitate active participation in the community.*

What if... because you were disabled you were not allowed an education?

... there were no laws about handicapped access to buildings?

Abuse and Exploitation: The Convention states... *Children shall be protected from all forms of physical and mental abuse, neglect or exploitation, including sexual abuse, child prostitution and participation in child pornography and all other forms of exploitation prejudicial to the child's welfare.*

What if... someone could make you go to work at the age of five or six years old?

Juvenile Justice: The Convention states... *All children are to be protected from torture or other cruel, inhuman or degrading treatment; capital punishment or life imprisonment; and unlawful or arbitrary deprivation of liberty. Accused children have the right to be treated with dignity, presumed innocent until proven guilty in a prompt and fair trial and detained separately from adults.*

What if... you could be put in jail for life as a child?

... you were put in jail with adult criminals?

Child Labor: The Convention states... *The child has the right to be protected from economic exploitation and from performing any work that may interfere with the child's education or may be harmful to his or her health or physical, mental, spiritual, moral or social development.*

What if... you had to go to work and you could not go to school?

... you had to work at a job that was dangerous to your health?

Freedom of Thought, Conscience, Religion, Expression and Information: The Convention states... *Children of minority communities and/or indigenous origin have the right to enjoy their own culture, practice their own religion, and use their own language. The child has the right to express an opinion freely and have that opinion heard; seek, receive and impart information and ideas of all kinds, through any media; freedom of association and peaceful assembly.*

What if... you were not allowed to celebrate religious holidays with your family?

you were not allowed to speak the language of your family?

... you were not allowed to say what you think?

Protection of Privacy: The Convention states... *The child has a right nor to be subjected to arbitrary or unlawful interference with his or her privacy, family, home or correspondence, not to unlawful attacks on his or her honor or reputation.*

What if... all your mail was read by another person before you received it?

... the army or the police could come into your home without cause?

Leisure and Recreation: The Convention states... *Children have a right to rest and leisure, to engage in play and recreational activities and to participate freely in cultural life and the arts.*

What if... you were not allowed to play certain sports?

... you were not allowed to go to or be in plays and music programs at school?

Further Discussion Questions:

- What do you consider your civil liberties?
- How would it feel to have them taken away from you?
- Was there a time in our history in which children's rights were not considered?
- For every problem there are many sides to the situation. For example: Any effort to eradicate child labor without improving the income-generating potential of the family will end up depriving the child and its relatives of much needed money. How would you solve this problem?

Source:

Adapted from "The U.N. Convention on the Rights of the Child" in the Office on Global Education curriculum series: Children Hungering For Justice

Development Issues: Economics and Technologies

Consider this:

- The World population doubled between 1950 and 1990 and will more than double before it stabilizes. - *Teacher's Guide to World Resources 1992-93*

- 40 percent of the developing world's population is under the age of 15 and about to enter their most productive childbearing years. - *The Population Institute*

- In 1950, only one city in the developing world had a population greater than 5 million; by the year 2000, there will be 46 such cities. - *The Population Institute*

- In 1990, the World Bank estimated that more than 1.1 billion people live in poverty, with an annual per capita income of less than US$370 a year. Of these, 630 million are "extremely poor", with an average annual per capita income of less than US$275. - *Teacher's Guide to World Resources 1992-93*

- Most of the world's poor live in the developing countries of Asia, Africa and Latin America. - *Teacher's Guide to World Resources 1992-93*

You don't have to go very far to run into statements like the above. But are these "facts" the whole story? By teaching and presenting these findings alone, we may encourage yet another injustice in the world and that is people drawing conclusions from information from only one side of a situation. Let's consider this **before** you, the instructor, go any further with your lesson plans on these subjects.

Outdoor Environmental Educators often ask the question, "How does this huge global topic fit into my center's lesson plans?" By walking through the steps in the following Thoughtsheet on Development Issues: Economies and Technologies, you can find the place in your current curriculum that can involve global subjects such as these.

Development Issues: Economics and Technologies

Instructor Thoughtsheet

Select one of the statements from the preceding page that interests you and examine it a little closer. Now take the line you chose and write or find a sentence that would explain one other side of the agrument or situation. In doing this, we are opening our eyes to the multiple causes in each situation as well as the cascade of ramifications that would be created if we did a "quick fix" to each of the global concerns.

Example: The World population doubled between 1950 and 1990 and will more than double before it stabilizes. - *Teacher's Guide to World Resources 1992-93*

Other Side: Before WWII, birth and death rates were high in the developing countries. After 1945, as rapid improvements in health care and sanitation decreased death rates and cultural norms encouraged high birth rates, the populations in these countries exploded. - *Teacher's Guide to World Resources 1992-93*

Question: _____

_____

Answer: _____

_____

_____

Now, take your topic and list the subjects in a standard school curriculum that could address that type of information.

Example continued: Population Studies: Social Studies and Life Sciences

_____

_____

And finally, list the classes in <u>your</u> curriculum that involve one or more of these school subjects and you'll find the place where this information can fit into your current lesson plans.

Example continued: Population Growth: Resource Management, Town Planning, Ecology and Leadership

_____

Water Carry

Grades: 5 and up
Topics: Social Studies, Earth and Life Sciences
Classes: Water Studies, Outdoor Living Skills, Hikes

In many developing countries, women in a family are often the water carriers. It is thought that the average woman can carry about 15 liters (3.9 gallons) of water in comfort. "Water is heavy; many pots and buckets carried on the head weigh more than 25 pounds when full; 4.7 gallons of water (18 liters) in plastic cans could weigh more than 40 pounds. It is not uncommon for a woman in some parts of Africa to spend five hours a day hauling water." (The New Internationalist, May 1990)

The following activity will increase the student's awareness of the great distances women and children in many developing countries must often walk for safe drinking water.

Materials: A scarf or cloth, a bucket or pot, several gallons of water

Procedures:

1. After discussing the importance of a substantial amount of clean water to insure a family's survival, explain to the students the efforts people in developing countries have to go to for their drinking water.
2. An average family in a developing country would need approximately 40 liters (10.5 gallons) each day to survive. Encourage the students to try to carry this amount of water for a distance. Use a scarf or cloth to make a ring for supporting the bucket on their head.
3. Discuss how it feels to go through this effort for your drinking water. How many trips would you need to get enough water for your family? What if you had to travel a great distance to clean water?
4. For fun you might use this activity as part of an obstacle course or include it in a truly challenging orienteering course.

Further Discussion Questions:

- From where do you get your drinking water?
- If you didn't have water in your home, where would you have to travel for drinking water?
- If you had a choice between drinking polluted water or walking a minimum of one mile for clean water, which would you choose?
- What are some ways of making clean water available to people in dry rural areas in developing countries?

Source:

Adapted from "Carrying Water On Your Head" in the YMCA Canada curriculum guide: Taking the World to Camp

The Clean Water Girl & The Solar Water Cleaner

Grades: 4 and up
Topics: Social Studies, Health, Earth and Life Sciences
Classes: Water Studies, Outdoor Living Skills, Hikes, Ecology

"...given the fact that water is the precious resource upon which terrestrial life depends for sustenance, one might suppose that human beings would be respectful of water; that they would seek to maintain its natural reservoirs and safeguard its purity." (J.W. Maurits la Riviere, Secretary-General International Council of Scientific Unions)

The following activity should not only help students become aware of the problems of dirty water in developing countries but also of creative ways of solving the problem in small communities. For younger groups, read The Clean Water Girl story and then work together to assemble a solar water cleaner. For older groups, start off with another activity that deals with the concerns of water quality and quantity and then go on to build the water cleaner.

The Clean Water Girl Story

In the United States, most water is treated with chemicals before it comes to our homes in order to make sure it is clean and safe to drink. But in many parts of the world, water is not cleaned. It may look clean and safe to drink but it contains germs that can make people sick or even kill them.

The most common disease caused by germs in dirty water is diarrhea. Every year, millions of people die from diarrhea. Most of them are children.

Here is what one girl did to help her family and her village make sure that their water was clean and safe to drink.

Awo (Ah-woe) was an eight year old girl who lived in Ghana. Ghana is a country in Africa.

Awo was worried. Her mother was going to have a baby. Why wasn't Awo happy about this? She was! She very much wanted a baby sister or brother. But she was worried because just a year ago, her baby brother died from diarrhea. He got the diarrhea from germs in the water that he drank. Awo was afraid that the same thing would happen to this new baby.

One day a health worker came to Awo's school. She told Awo's class about a way to make water clean. It was called a solar water cleaner. The health worker said that the solar water cleaner would make the water safe to drink. She showed the children how to make one.

Awo rushed home after school and made a solar water cleaner. She showed it to her mother. Her mother smiled. She thanked Awo for helping to keep the whole family healthy.

The solar water cleaner worked. When the new baby was born, it stayed healthy. So did Awo. When other people in the village saw how Awo's solar water cleaner got rid of the germs in the water, they made cleaners too. Soon everyone in the village was drinking clean water. There were very few cases of diarrhea. The villagers called Awo "The Clean Water Girl"!

Materials:

A small amount of dirt, a half gallon of water, a large bowl, a glass, clear plastic wrap, a dozen stones, a sunny day

Procedures for making a solar water cleaner:

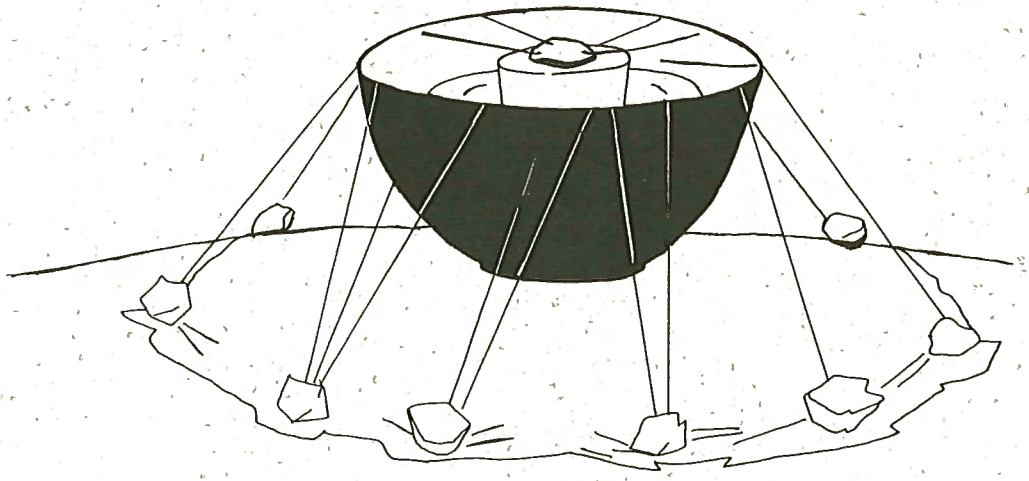
1. Mix a small amount of dirt into about a half gallon of water.
2. Pour the dirty water into a bowl.
3. Stand a glass right side up in the center of the bowl.
4. Cover the bowl with plastic wrap and hold down the edges of the plastic with stones.
5. Place a stone on the plastic cover over the center of the glass.
6. Leave the water cleaner in the sun all day.
7. Remove the plastic. Look in the glass. What do you see? (It should contain clean water.) Look in the bowl. What do you see? (It should contain the dirt.) Discuss what happened?

Further Discussion Questions:

- What are other ways people use to clean water?
- Other than germs, what sort of things could be in our drinking water?
- Where does the drinking water in your home come from?
- How does your community clean its water?

Source:

"The Clean Water Girl and the Solar Water Cleaner" in the YMCA Canada curriculum guide: Taking the World to Camp and UNICEF's, Within our Reach - Helping Students Develop an International Perspective, 1989.



The Fair Trade Banquet

Grades: 6 and up
Topics: Social Studies, Economics, Nutrition
Classes: Outdoor Living Skills, Day Hikes, Meals

The #1 Myth About Hunger: There is not enough food and not enough land in the world today to feed everyone. Untrue! "Measured globally, there is enough to feed everyone. For example, there is enough grain being produced today to provide everybody in the world with enough protein and about 3,000 calories a day, which is what the average American consumes. But the world's food supply is not evenly distributed." (Office of Global Education)

The following meal-time activity encourages the students to take a first-hand look at the world's food distribution problem. It can be done in the form of a regular meal with a large group but it is best done on a hike pack or campfire meal with a small group of students.

Materials: Food and supplies for an average meal

Procedures:

1. During a trail lunch or picnic, the usual procedure is to evenly distribute the food. But after the group has developed some cohesion, it would be worthwhile to try something a little different.
2. Give each person a different single item of the lunch. (For example: peanut-butter or crackers) Explain that the group represents the variety of countries in the world and that they must trade in an attempt to create a balanced meal for themselves. Also tell them that they cannot begin to eat until they have a balanced meal.
3. After trading is underway, the facilitator can complicate things by announcing that there is a surplus of wheat crop (therefore the crackers are worth comparatively little) and that now the facilitator is in a position to give crackers or bread away to everyone.
4. A little later, announce that one of the group members has consistently violated human rights in his country and consequently everyone else should boycott his/her product. Trading can then continue.
5. Before everyone starts getting really hungry, stop the trading. The first step in debriefing would be to see how everyone did in the trading. Was there a difference for the people with popular or unpopular items? What were the effects of the wheat surplus and boycott? Afterwards, discuss what the fairest arrangement would have been. The food should then be redistributed so that everyone has a balanced meal

Further Discussion Questions:

- Where does the food in your community come from?
- How can your actions affect a farmer in Guatemala?

Source: Adapted from the "Fair Trade Banquet" in the YMCA Canada curriculum guide: Taking the World to Camp

The Shared-Air Conference

Grades: 8 and up
Topics: Government, Economics, Earth and Life Sciences
Classes: Resource Management, Ecology, Town Planning, Leadership

"Atmosphere concentrations of greenhouse gases are rising at unprecedented rates. Greenhouse gas emissions from developing countries are expected to increase rapidly. Large-scale climate changes may occur unless other climatic systems counteract the warming effect of the greenhouse gases." (Teacher's Guide to World Resources)

Over the next few years, developed and developing countries will attempt to reach an international agreement on the greenhouse gases problem the planet is currently facing. Issues in natural sciences, technologies as well as economies are entering the negotiations.

The following role play situation will put the students into the heart of the negotiations and all of the sides of the debate.

Materials: Shared-Air Role Play Cards

Procedures:

1. After discussing the greenhouse gases, their sources and apparent effects on the environment, bring up the topic of the Greenhouse Gases Negotiations.
2. Explain to the students that they will be taking part in a role play of those negotiations and each of them will have a role to play in the participating countries. They must stick to their roles as leaders from their assigned countries, but it is up to them what they would like to say.
3. Divide the group into four equal groups and assign each group a country.
4. Give each group their country role play card and time to discuss their opinions with members of their country.

Role Play Cards

The United States:

You are a very developed country with many industries. You have resisted these negotiations in the past because you fear that limiting energy use might slow your economy.

Canada:

You are a developed country with many industries. You have indicated a willingness to limit greenhouse gases in the past.

Thailand:

You are a rapidly developing country with a growing industrial section. In 1989, you were considered the 11th highest emitter of greenhouse gases in the world behind the United States, Europe and others. Your concern is for continuing to develop your nation.

India:

You are considered a developing country. In 1989, you were ranked the 6th highest emitter of greenhouse gases in the world. Developing countries like you insist on aid from the developed countries to help them limit deforestation and to help them transfer to more energy efficient technologies.

4. Call the negotiations to order. Have the members decide on a facilitator for the meeting. It can be any individual from any of the countries.
5. With the facilitator leading the course of the meeting, give each country the opportunity to present their argument at the meeting.
6. Encourage the facilitator and the group to come to some sort of consensus on this negotiation and action plans for the future.
7. After the meeting is adjourned, discuss how they worked together and their feelings on this complicated global subject.

Further Discussion Questions:

- How many sides to this issue are there?
- What motivates country leaders on their decisions during global negotiations?
- Do your community leaders face complicated issues such as this?
- How do you make your opinion known to leaders in your community, state or nation that represent you?

Source:

Adapted from "Role Play: International Greenhouse Gas Negotiations" in the Teacher's Guide to World Resources 1992-93

We Have The Technology!

Grades: 3 and up
Topics: Social Studies, Economics, Earth and Life Sciences
Classes: Resource Management, Ecology, Town Planning, Leadership, Campfires

"We have not inherited the earth from our parents. We are borrowing it from our children." - Lester Brown

In this world of mounting environmental crisis, youths are often discouraged by the powerlessness they are feeling. "The problems are too big!" "What could possibly solve these problems!" The first step to helping children feel empowered to take on local or global issues is encouraging them to explore the problem and discover the possible solutions that could exist. Afterall, theoretically we have the technology. Why not rewrite the situation?

Materials:

A common story with an environmental message i.e.: Dr. Seuss' The Lorax or Shel Silverstein's The Giving Tree

Procedures:

1. Share with the students Dr. Seuss' Lorax story in which the Truffula Tree forest is chopped down and the creatures of the area are driven out by industrial development. The lesson in the story is learned at large cost and the industrialist moves on leaving only a seed and warning to the next generation. Although the ending is hopeful, the Lorax and other creatures are without a home.
2. Divide the students into smaller groups and have them take that story and rewrite it from the point the Lorax and the industrialist first meet. (...or in the case of The Giving Tree, when the tree begins helping the boy.) Encourage them to write the story of the area's development in which the ecology of the area is not compromised.
3. Give each group time to express their story to the rest of the students in the form of a reading or skit.
4. Discuss the Lorax's methods for fighting for the environment. What message, tactics and media could have been used to get the industrialist to stop destroying the forest?

Further Discussion Questions:

- Why are natural areas important?
- Why are industries important?
- What are ways in which industry and the environment can coexist?
- How can you make your opinion on these subjects known to the decision-makers in your community?

Source:

Adapted from "Help the Lorax Win" in the Teacher's Guide to World Resources

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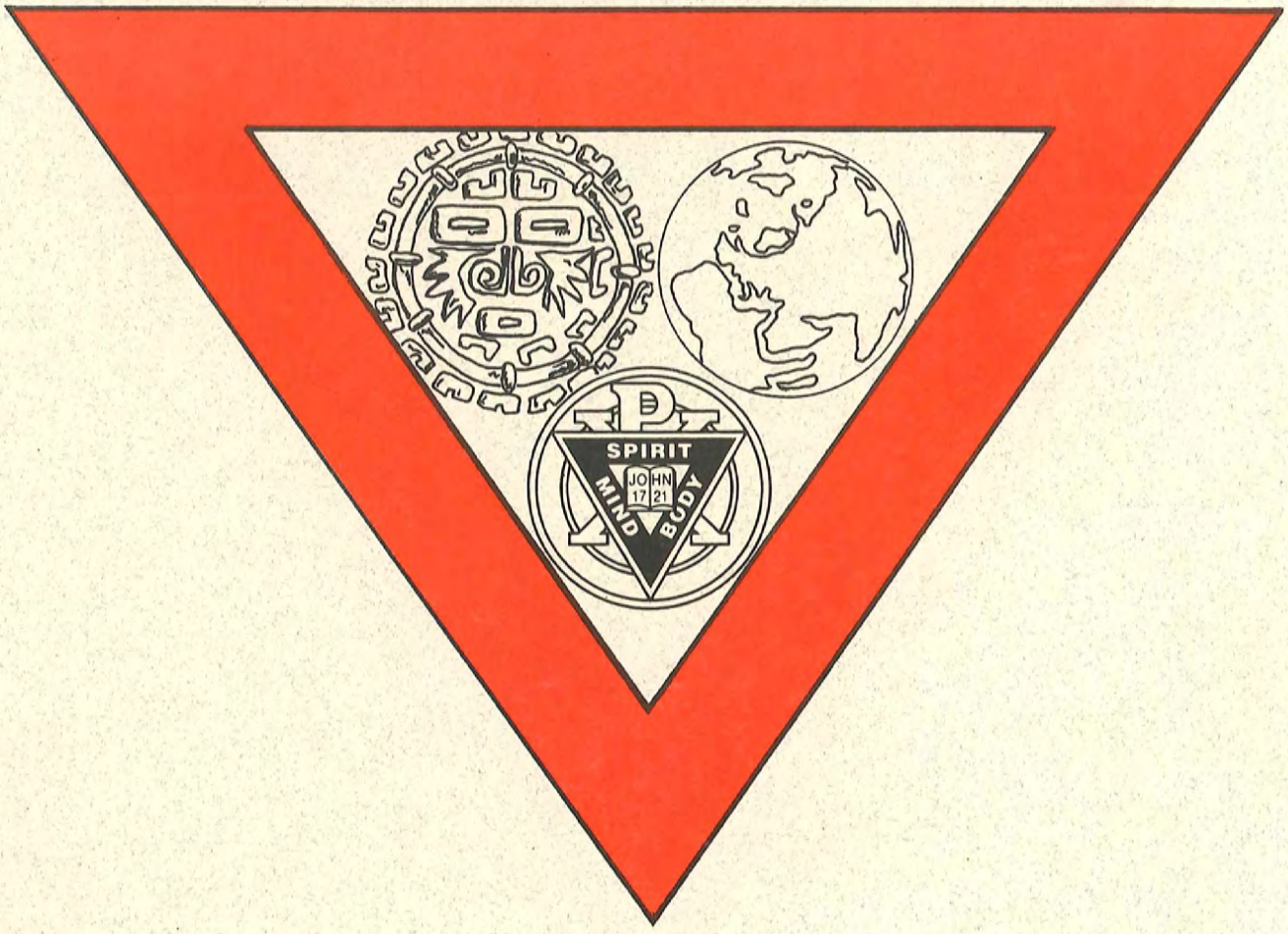

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