Workshop 1
How Economists Think

Description

This first workshop session shows why economics is a core subject and deserves this spot in the "standing room only" curriculum. Students should understand that economics is much more than a bundle of concepts. It is a unique way of thinking that offers insight into seemingly chaotic human behavior in a world of different values, resources, and cultures. Economics is not merely the study of money. Almost every aspect of human behavior can be analyzed using an economic approach. In a good economics course, students learn the economic way of thinking, not a definite set of conclusions; they are given a new set of lenses through which to view the world.

In this workshop, teachers demonstrate some of the key ideas that constitute an economic way of thinking. Elaine Schwartz, who teaches at Kent Place School in Summit, New Jersey, begins by showing her students why there is no such thing as a free lunch. She uses personal and societal examples to illustrate opportunity cost and trade-offs. Steve Reich, from Valhalla High School in New York, uses an economic mystery to illustrate how incentives drive behavior. Finally, Jay Grenawalt engages his class at George Washington High School in Denver, Colorado, in a simple but effective trading simulation that illustrates how people and nations gain when they trade voluntarily.

Key Concepts

- Everything has a cost. This is why there is no such thing as a free lunch.
- Economists are mainly concerned with opportunity cost or the forgone benefit of the next-best alternative when resources are used for one purpose rather than another.
- People choose for good reasons. When people choose, they weigh the costs and benefits.
- Choices involve trade-offs. Economic decisions are more or less—not yes or no—choices.
- Incentives drive choices. Economics is really about incentives. Economic theory is based on the idea that changes in incentives influence behavior in predictable ways.
- People gain from voluntary trade. Trade creates wealth. When two people trade voluntarily, they give up something they value less for something else they value more.
- Economic actions create secondary effects, and, unfortunately, these secondary effects are not always good. One action can create many unintended consequences.

Voluntary National Content Standards in Economics

The activities shown in this workshop illustrate the following standards:

- Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they must choose some things and give up others. (Content Standard 1)
- Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something: few choices are "all or nothing" decisions. (Content Standard 2)
- People respond predictably to positive and negative incentives. (Content Standard 4)
- Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and usually among individuals or organizations in different nations. (Content Standard 5)

Workshop Session

Getting Ready (15 minutes)

1. Because this is the first workshop session, teachers should introduce themselves to the group and share their reasons for participating in the workshop.

2. Each teacher should give a brief definition of what economics is all about. Have one participant write each idea on a chart, transparency, or the chalkboard. Accept all answers. Don't discuss the definitions now, but wait until the final section, Closure.

Watching and Discussing the Video (90 minutes)

1. View Section One (opportunity costs) and Section Two (trade-offs). (25 minutes)
2. Discuss Section One and Section Two. (10 minutes)
   - John Maynard Keynes said, "The Theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions." (Quoted in Paul Heyne, *The Economic Way of Thinking,* Macmillan College Publishing Co., New York, 1994, p. 4.) In what ways did the discussion in Elaine Schwartz's class reinforce or disprove what Keynes said?
   - How did Elaine take economics from personal to business to government decision-making?
   - How did Elaine illustrate opportunity cost? What are some other ways to illustrate opportunity cost?
   - Elaine was teaching a small class. Would her techniques work in a large class? How would you modify her techniques for a large class?
3. Form small groups and try to solve the mystery of the Tragedy of the Commons (Lesson 1.1). Each group should determine which of the clues, which are at the bottom of the mystery, are most relevant and why. Also discuss which items in the Handy Dandy Guide are most useful in solving the mystery. Do not look at the answer key. (10 minutes)
4. View Section Three (incentives). (15 minutes)
5. Discuss Lesson 1.1, "The Tragedy of the Commons," which was taught by Steve Reich in Section Three. (6 minutes)
   - How effective did you think the lesson was?
   - How did Steve modify the lesson?
   - What modifications might you make in this lesson?
   - How were your answers different from the students' and how would your expectations differ from Steve's?
6. View Section Four (voluntary trade). (17 minutes)

Workshop Session, cont'd.

7. Discuss Lesson 1.2, "Why Do People Trade?" which was taught by Jay Grenawalt. (8 minutes)
   - Read the lesson.
   - Note the questions at the end of the lesson. Why is debriefing so important after a simulation?
   - How did Jay modify this lesson?
   - In what ways is this simulation realistic? In what ways is it unrealistic?
   - Why go to the trouble of organizing this activity when you could give your students the information in a lecture?

Closure (15 minutes)

Review the definitions of economics on the list developed at the beginning of the workshop. How would you change your perception of what economics is all about now that you have seen the video program? What shifts have you made in your thinking?

Lesson 1.1: The Tragedy of the Commons

"The Tragedy of the Commons" mystery is from *The Great Economic Mysteries Book: A Guide to Teaching Economic Reasoning, Grades 9-12,* by Mark C. Schug, National Council on Economic Education, 2001.

Directions

Read the Handy Dandy Guide and The Mystery. Read The Clues assigned to your group. Be careful; while all the clues are correct, only some are *useful* in solving the mystery. Decide which clues are most relevant to solving the mystery. Use the clues and one or more of the ideas from the Handy Dandy Guide to figure out a solution to the mystery. Write your solution.

Handy Dandy Guide

1. People *choose.*
2. People's choices involve *costs.*
3. People respond to *incentives* in predictable ways.
4. People create *economic systems* that influence individual choices and incentives.
5. People gain when they *trade* voluntarily.
6. People's choices have consequences that lie in the *future.*

The Mystery

Wildlife is in danger in many parts of the world.

- Fishing fleets catch so many wild salmon that the species is threatened.
- In some parts of Africa, elephants and other animals are hunted by poachers, despite government bans on hunting.
- The world's population of whales is in danger.

Why are so many wild animals endangered?

The Clues

1. Each problem involves an environmental issue.
2. Each problem has frustrated efforts by governments to come up with practical and effective solutions.
3. Each problem involves a lack of incentives for conservation.
4. Each problem involves something not owned by individuals—fish and wildlife.
5. Each problem is very old—the subject of long struggles.
6. Each problem is often used as an example of how people are so bad, so that their behavior must be curbed through regulation.

Record your solution and explain it briefly here: ______________________________

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Suggested Solutions—
Lesson 1.1: The Tragedy of the Commons

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Why are so many wild animals endangered?

Clues 3 and 4 are the most important for solving the mystery.

Note to the Teacher: Before you discuss solutions to this mystery, consider spending a few minutes explaining the mystery's title, "The Tragedy of the Commons." It is an expression hearkening back more than 150 years, when William Frank Lloyd, a political economist at Oxford University, commented on the devastation of common grazing pastures in England. "Why," he asked, "are the cattle on a common so puny and stunted? Why is the common itself so bare-wore, and cropped so differently from the adjoining enclosures?" The reason was that farmers using common pastures tended to *overuse* them—grazing too many cattle on them—because it cost the farmers little to do so. The lack of individual ownership of grazing pastures created the incentive for overuse. In 1968, Garrett Hardin reflected on the problem Lloyd had identified. Hardin described it as the tragedy of the commons. Since then, the term has come into general use among economists. In this lesson, we invite you to consider its applicability to problems involving species preservation.

Solution

From an economic perspective, the problem is one of insufficient or perverse incentives. The incentives in play do not encourage people to protect the environment (Clue 3). Indeed, in each case, some incentives encourage people to overuse or abuse the threatened resource: salmon, elephants, and whales.

The incentives would change for the better if a way could be found to establish private ownership rights—or something close to private ownership rights (Clue 4)—for threatened resources. When nobody owns a population of fish, for example, it is in the interest of a fisherman to catch as many fish as possible. Not to do so is to leave the fish for others to catch. In other words, fish owned by nobody—like wild salmon off the American Northwest coast—have no protectors. If ownership rights could be established, the owners of the fish could use the legal system—courts and law enforcement officers—to protect their valuable property.

But who would protect the fish from their owners? Couldn't people who owned fish simply harvest every one of them? Couldn't they take the money and run? If they did, they would destroy their own property, depriving themselves of any future use of it. The prospect of future use—to continue fishing or to resell the ownership rights to the fish—would create an incentive to protect the fish. In this respect, fishermen would resemble farmers. Farmers are not known for their tendency to wipe out their cows and chickens or to destroy their wheat fields.

Some experiments with ownership rights for fishermen have been initiated in New Zealand and in the Great Lakes area of the United States. In these experiments, a system of quotas and licenses is established, offering fishermen something like a property right in local fisheries. The participating fishermen pay for a license that allows them to catch a quota of fish legally. If there are too many fishermen working a given fishery, the fees from the license sales are used to buy out some of the fishermen until the number is reduced sufficiently to allow the fishery to recover.

In other parts of the world, similar systems provide local people with ownership rights to wildlife. African villagers holding ownership rights to an elephant population, for example, may harvest animals legally and may sell hunting permits to others. In such a system, the incentives encourage protection of the elephants. Since the villagers' future benefits depend on the elephants, they begin to act as prudent owners—refusing to cooperate with poachers and cooperating with legal authorities to protect their valuable property.

Could ownership rights be used to protect whale pods from illegal hunting? Given the expanse and the depths of the world's oceans, it is obviously an idea marked by challenging problems. But cattle once ranged widely over vast expanses of land in the American West, and ownership rights for the cattle were established by a legal system that involved cattle branding. It is possible, similarly, to imagine an ownership system involving electronic ownership tags placed on whale pods, along with an international system for trading ownership rights. In this way, once again, the incentives would favor the whales, since whale owners would have an interest in protecting their asset. Environmental groups also could purchase whale pods in such a system in order to protect their whales against all harvesting; this tactic is already in use by nature conservancy groups that purchase land to protect it from development.

Lesson 1.2: Why Do People Trade?

"Why Do People Trade?" is from *Focus: International Economics,* by Gerald J. Lynch, Michael W. Watts, and Donald R. Wentworth, National Council on Economic Education, 1998.

Introduction

Most international trade is the voluntary exchange of goods and services between individuals and businesses located in different countries. Nations do not trade. Instead, individuals representing nations, individuals representing businesses, and individuals representing themselves make trading decisions. Voluntary trades are made when both parties expect to gain from the trade. Such trades may continue in the future if both parties are pleased with the exchange. If the consequences of trading are not satisfactory, then the parties will not continue their voluntary trade.

People evaluate their satisfaction from trades by weighing the costs and the benefits they receive from the trades. How much do they value what they give up? How much do they value what they receive? When the expected benefits outweigh the expected costs, people trade. When the expected costs outweigh the expected benefits, people don't trade.

Concepts

- Trade
- Voluntary exchange
- Costs
- Benefits

Content Standards

- Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations.
- Exchange is trading goods and services with people for other goods and services or for money.
- The oldest form of exchange is barter: the direct trading of goods and services between people.
- When people buy something, they value it more than it costs them; when people sell something, they value it less than the payment they receive.

Objectives

- Identify the expected costs of a voluntary trade.
- Identify the expected benefits of a voluntary trade.
- Distinguish between voluntary and involuntary trade.
- Explain how value is created, and overall satisfaction increases, when people trade.

Lesson Description

Students participate in a trading activity. In a debriefing session, they discuss their actions and compare their behavior with trading behavior that occurs in the economy.

Time Required

One class period.

Materials

- One transparency each of Visuals 1, 2, and 3
- Pencils and paper for students
- One small paper bag per student, containing one or more tradable item(s) such as dried fruit, small boxes of raisins, pencils, stickers, library passes, shampoo, soap, etc. Make the bags very different from one another. For example, prepare some bags containing unpopular items, only a single item, many of the same items, many different items, items more popular with boys, and items more popular with girls.

Procedures

1. Explain to the students that they will investigate trading behavior today by participating in a trading activity and by using that experience to learn more about international trade.

2. Display Visual 1, “Why Do People Trade?” Ask students to answer this question and put their responses on the chalkboard. Treat these responses as a hypothesis that will be tested against the evidence developed in the rest of the activity.

3. Put students in groups of three, and tell them to take out a pencil and sheet of paper.

4. Distribute the bags containing tradable items to the students, one bag per student. Tell them not to look in the bags until you give them permission.

5. Tell the students to look into their bags without showing the contents to other students, and to rate their bag contents on a scale of 1-5. (One is the lowest rating; five is the highest.) Ask the students to write down their rating on their sheet of paper.

6. Let the students take items out of the bag and show them to other people in the group, if they choose to do so.

7. Allow the students two minutes to trade items *within their group of three,* if they can agree on a trade. No one is required to make a trade.

8. After the two-minute trading session, ask the students who have made a trade to raise their hands. Write down the total number of trades on the chalkboard. Then ask the students to give examples of trades they made, and trades they did not agree to make, so that other students get some idea of what tradable items are available in the entire class.

9. Ask the students to rate the item(s) they now have on a scale of 1-5. See how many students report a higher score after trading, how many report the same score, and how many (if any) a lower score. *(People who traded are likely to give the new item(s) a higher rating. Some people who did not trade may also change their rating, now that they see what other items are available. It is important to note that the person who traded an item may give it a 3, while the one who received it may give it a 2. This does not mean that the trade was not beneficial. What is important is that people who receive an item give it a higher score than the score of the item they traded away.)*

10. Tell the students that one more trading session will take place. This time they may trade with anyone in the class. They have five minutes to make any and all trades they wish to make. Again, no one is required to trade.

11. At the end of the five-minute trading session, call the students back to order. Ask them to display the items they now possess on their desks. Ask them to rate the item(s) on a scale of 1-5.

12. Conduct a debriefing discussion with the students, using the following questions:

    a. How many of you made trades in Round 1? In Round 2? *(Have a show of hands; more people probably traded in Round 2 than in Round 1.)*

    b. Why did more trades take place in Round 2 than in Round 1? *(More time to trade, better trading information existed as a result of Round 1, more alternative items were available to trade. Stress the idea that trade in Round 1 was similar to trading within a country, while trading in Round 2 was more like international trade. Note that the source of gains from trade are exactly the same in both rounds—i.e., in both intranational and international trade. In both rounds, people traded things when they valued what they received more than what they gave up.)*

c. What items were traded? *(Get some sample answers.)*

d. Which items were most popular, least popular? *(Get some sample answers.)*

e. Why did you trade? *(People tend to trade items they personally value less for items they value more.)*

f. What was the cost of your trade? *(The item given to the other person in the trade.)*

g. What was the benefit received from your trade? *(The item received from the other person in the exchange.)*

h. How many people rate the item they traded for higher than the item they had originally? *(Almost everyone who traded will rate the new item higher. This evidence should confirm the answers to Question E.)*

i. Did anyone make a mistake and trade badly? Did anyone fail to make a trade they now wish they had made? *(Often, someone will make a mistake. Not all trades turn out as expected, and not every trading opportunity is seized.)*

j. If students say they made a mistake, ask if they would make the same mistake next time. *(Maybe not. People tend to learn from their mistakes, and bad trades often lead people to stop making that trade or to stop trading with certain people or companies.)*

k. Which people had the most difficulty trading with others? *(People with unpopular items. To trade, you must have or produce items other people want.)*

l. Why did some people choose not to trade? *(People who preferred the items they had over the items offered to them had no incentive to trade.)*

13. Display Visual 2. Explain to the students that they must now draw some conclusions about trade in general. See if they agree with the definition of trade presented in Visual 2. Stress the *voluntary* nature of trade.

14. Display Visual 3. Ask the students if they agree with these statements about the motives for trade. Ask them for examples of their motives during the trading activity which are consistent with these statements.

15. Compare these explanations for why people trade with the students' initial statements in response to Visual 1. Revise the initial statements so they are consistent with the evidence from the activity and the statements in Visual 3.

16. Ask the students if they can identify examples of involuntary trade. *(A mugging where a thief says, "Your money or your life." When you are ordered to cut the grass for a price set by your parents, or to pay income taxes or go to jail.)* Ask students to discuss the question: Do these "trades" always increase satisfaction and wealth, or do they ever?

17. Summarize the main points of this lesson:

a. Trade is the voluntary exchange of goods and services.

b. People trade because they expect to gain from the trade.

Assessment

Provide the following information to students and ask them to respond to the question.

In 1994, Canadian businesses and individuals sold $195.8 billion of goods and services in the United States, while businesses and individuals in the United States sold $229.7 billion of goods and services in Canada. Why were these businesses and individuals trading with one another when they live in different countries? *(Suggested answer: They are trading because they gain from these exchanges. Otherwise they would not make these trades. Their national citizenship has little to do with their decision to trade.)*

Why Do People Trade?

Trade Is the Voluntary Exchange of Goods and Services Among Individuals and Businesses.

Motive for Trading

People expect to gain
by trading with other people.
They hope to receive
a good or service that is
more valuable than
whatever they trade away.

Motive for Not Trading

People do not trade when the
good or service being offered
is of less value than the good
or service they are asked
to exchange.

Notes