

## GLOBALIZATION101.ORG

### LESSON PLAN ON THE THEORY OF COMPARATIVE ADVANTAGE

#### **Introduction**

This lesson plan explores the theory of comparative advantage. The study of comparative advantage as both an abstract economic principle as well as a factor in decision-making will challenge even the most able student. This activity takes students step by step through the theory and gives them brief exercises to build up their confidence and comprehension. The Trade Issue Brief forms the basis for the explanation, and the activity expands on the discussion found in the section “Theory of Comparative Advantage.” This activity can be structured to accommodate the skill level and experience of the students. For a guided discussion, the teacher would instruct the students to read the noted sections, and then would have the class answer the questions in a discussion, filling in the questions as they go along. More independent students might be assigned to read the section, then respond to the questions on their own.

#### **Student Objectives**

At the conclusion of this lesson, students will be able to:

1. Define opportunity cost.
2. Define comparative advantage.
3. Define absolute advantage.
4. Calculate the comparative and absolute advantage for countries engaged in trade with each other.

#### **Materials**

Section on “The Theory of Comparative Advantage” in the Trade Issue Brief, either on-line or in printed format

#### **Time Required**

1 class

#### **Procedure**

1. Read the prompts at each stage of the lesson plan to guide the students through the material. The prompts provided here are suggestions only, however.
2. Teacher prompt: “In today’s activity, we are going to explore an important theory that helps us understand why countries might want to trade with each other. As we saw in our other activities, international trade is an increasingly important part of the world’s economy. Although we can see the data and know what it says, it

doesn't explain why some countries would necessarily want to trade with each other. If a country like China can produce all the necessities it needs to keep its people happy, why would it trade with Italy? In particular, if China can make everything cheaper, faster, and better than Italy, what incentive is there for trade? But as we saw, even with countries like China and the U.S., trade continues to grow."

3. "Economists try to answer questions like these by developing theories to explain how people make choices. As you will see in today's activity, theory can't explain everything precisely, but it can help us understand why people tend to make certain decisions rather than others. One of the most important theories in international trade is the theory of comparative advantage."
4. Prompt students through the activity as outlined below. You may have students read from the Trade Issue Brief on the Globalization101.org website or from a printed copy of the Issue Brief, depending on your preference and student access to computers.
  - Teacher prompt: "To start the activity, read the first three paragraphs in the reading material."

Question 1: Define the term "opportunity cost." *Intended answer: Students should explain that opportunity cost means that making a choice means giving up something else in exchange.*

Question 2: If you had \$35 to entertain yourself, and you could either go to an amusement park or purchase a video game, which would you do? What is the opportunity cost of selecting the amusement park? What is the opportunity cost of selecting the video game? Give your answer in the context of the goal of entertaining yourself. *Intended answer: the amusement park would be a very exciting activity but only for one day, the video game would be less exciting but could be played for many days. The opportunity cost for the park would be many additional hours of entertainment with the video game; the opportunity cost for the game would be the high quality of the briefer entertainment.*

Question 3: In the example given about chocolate and cheese, what are some reasons Switzerland might choose to make either product? *Intended answer: Examples might include that the sale value of one or the other might be higher, that there may be no one to sell the product to, and that they already have a factory to make one or the other.*

- Teacher prompt: "Read the next two paragraphs."

Question 4: Define the term "comparative advantage."

Question 5: In the example given, why is the production of chocolate considered more efficient than the production of cheese? *Intended answer: Chocolate takes less time to make. Less time means lower expenses in*

*running a factory (energy, labor). Efficiency in this case is using the fewest resources to make the most money.*

Question 6: Why would a country or individual want to use their resources more efficiently? *Possible answers: save money, make more money in less time, use the fewest amount of resources possible.*

- Teacher prompt: “The following three paragraphs provide an example of comparative advantage. Read the selection carefully.”

Question 7: Why is the opportunity cost in the example of China described as “1/2 bicycle” and “2 shirts?” *Intended answer: opportunity cost is what is given up when a choice is made. To make a shirt, the Chinese give up the chance to make half of a bicycle; when choosing to make a bicycle, the Chinese give up the chance to make two shirts (based on the time it takes to make each).*

Question 8: Why would the Chinese and Italians want to trade their surpluses to each other? *Intended answer: since the Chinese are only producing shirts and the Italians are only producing bicycles, they cannot meet the demand for these goods in their own country. They will produce more than they need and trade them to each other to get what they want.*

- Teacher prompt: “Read the next two pages in the reading material.”

Question 9: “Why is the doctor said to have an absolute advantage over the clerical assistant in the example?” *Intended answer: the doctor is better at every job (product) than the clerical assistant.*

Question 10: “If the doctor has an absolute advantage over the clerical assistant, why does she need to hire the assistant at all?” *Intended answer: the clerical assistant has a comparative advantage in the clerical work, even though the doctor is more efficient. If the goal of the medical office is to see as many patients as possible, the doctor’s efficiency is best matched with her skill in seeing patients. The clerical assistant’s efficiency is best matched with his skill in clerical work. Together they accomplish more than working individually.*

Question 11: What are some factors that affect how the theory of comparative advantage works in the real world? *Possible answers: countries do not specialize in just one product, countries may produce things that others produce more efficiently anyway, there are other factors that have to fit in the equation (marketing, transportation, other costs) that affect economic decision-making.*

Question 12: List some products that the United States exports or imports that demonstrate the theory of comparative advantage. *Possible answers: exports—automobiles, entertainment, computer software; imports—oil, clothing, automobiles, electronic equipment*

## **Conclusion**

1. Encourage students to develop personal examples of comparative advantage, specialization, and opportunity cost. For example, you may discuss areas outside of economics in which these terms have meaning, such as how students spend their time or comparing two sports teams.
2. Use the Comparative Advantage quiz in the Trade Issue Brief. This quiz serves as an application activity that provides a similar level of complexity for students as the text. It may be accessed on-line or done through a printed handout.
3. Possible follow-on activities suggested by this activity include research using the data tables and charts provided in the Globalization101.org website as the starting point for reviewing the types of products with which some countries have a comparative advantage. In addition, students might develop reports analyzing the impact of a strong comparative advantage in one product, such as textiles, food, or automobiles, on a country's relationship with its trading partners. Students may explore the links to government, media, and international organizations in the Trade Issues Brief, the News Reports, CSIS projects, and the Links section of the website to research these subjects.