

A Yen to Trade

Lesson 7: Trading Hurdles

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Standards and Benchmarks (see page 7.14)

Lesson Description

In this very active lesson, students represent goods being traded among countries. As the students move in trade, they encounter physical barriers (long-jump, hurdle, and limbo bar) that represent natural and government-imposed trade barriers. Through the activities, students see that trade barriers reduce the flow of goods and services among countries and, as a result, reduce the gains from trade. Because of the activities in this lesson, it might be good to work with the physical education teacher.

Grade Level

6-8

Concepts

Embargo
Opportunity cost
Quota
Standard
Tariff
Trade barriers

Objectives

Students will be able to

- define embargo, opportunity cost, quota, standard, tariff, and trade barriers;
 - distinguish between natural and government-imposed trade barriers;
 - describe how trade barriers raise the cost of goods from other countries; and
 - explain why trade barriers result in fewer goods being traded.
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Compelling Question

How do natural and government-imposed trade barriers affect trade?

Time Required

45-60 minutes

Materials

- Visuals 7-1 and 7-2, one copy of each for the teacher to display
 - Handouts 7-1 and 7-2, one copy of each for each student
 - Two yardsticks, broom handles, or small jump ropes
 - Gymnastics mats
 - Optional: Sticky dots in two colors—enough of each color to give one color dot to students in one-half of the class and the other color dot to students in the other half of the class
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Procedure

1. Tell the students that today's activity requires a lot of open space in the center of the classroom. Ask them to move their desks (or tables and chairs) toward the classroom walls. Explain the following:
 - **Trade** is the exchange of resources, goods, or services for other resources, goods, or services, or for money. When voluntary trade occurs, both traders expect to gain—they expect to get more satisfaction or value from the good received than from the good they traded. If they don't expect to gain from the trade, then they won't trade.
 - Trading involves both benefits and costs. When people trade, they receive something they want more than what they have; this is a benefit. At the same time, they give up what they trade; this is a cost. For example, if Jason trades one of his popular action figures for one of Tim's baseball cards, then the cost to Jason is the fun he would have had playing with the action figure. The benefit of the trade is the satisfaction Jason receives from owning the baseball card. For Tim, the cost is the satisfaction he had from owning the baseball card; the benefit is the fun he will have playing with the action figure.
 - If Jason pays his friend \$10 for the baseball card, Jason gives up something, and it is not just the \$10. Jason gives up the opportunity to have the next most-valued item on which he could have spent \$10. This item that Jason gives up is called his opportunity cost. **Opportunity cost** is the value of the next-best alternative when a decision is made; it's what is given up.
 - Point out that whether Jason trades using money or another item, he will only trade as long as he thinks the benefit of owning the baseball card is greater than the cost. This is true for all traders.
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2. Tell the students that they will now participate in a trading activity. Select one or two students to act as helpers so that an even number of students remain after the helpers have been selected. Divide the rest of the class in half. Ask half the students to stand in front of the open area of the room and the other half to stand in the back of the open area of the room.
3. Tell the students in the front of the room that each of them is a “tubble.” A tubble is a good that people in their country, Frontier, specialize in producing. Give each tubble student the same colored sticky dot and ask them to place the dots on their shirts. Tell the students in the back of the room that each of them is a “krone.” A krone is a good that people in their country, Outback, specialize in producing. Give each krone student the other color sticky dot and ask them to place the dots on their shirts.
4. Explain that people in both countries have determined that trading one tubble for one krone makes everyone better off. (That is, the benefit of an extra krone to a citizen of Frontier is greater than the benefit of a tubble to them. The benefit of an extra tubble to an Outback citizen is greater than the benefit of a krone to them.)
5. Have the helpers place two yardsticks (or small jump ropes) on the mats next to each other no more than six inches apart. (See diagram below.)



6. Display *Visual 7-1: Outback and Frontier Trading* and explain that for goods (tubbles and kronen) to move from Outback to Frontier and from Frontier to Outback, students must jump over the yardsticks. Students will execute standing jumps, not running jumps. Each time one tubble and one krone make it over the yardsticks, a trade has been completed.
7. Have one student demonstrate a standing jump over the yardsticks. Then, have students from each country alternate jumping over the yardsticks. Count the number of completed trades (one krone and one tubble) and record this information in the table on *Visual 7-1* under “Round 1.”
8. Instruct the students to walk back to their original countries. Explain that each student in Frontier is once again a unit of tubble and that each student in Outback is once again a unit of krone. Tell the helpers to place the yardsticks one foot apart. Explain that the rules are the same. In order for a trade to occur, both a tubble student and a krone student must make it over the yardsticks into the other country. If not, both the tubble and the krone must remain in their original countries. Count the number of completed trades and record that information in the table on *Visual 7-1* under “Round 2.” Have students return to their respective countries. Make sure, based on the color of their sticky dots, that all students are in the correct place.

9. Repeat steps 7 and 8. In Round 3, move the yardsticks apart another foot. If necessary, add additional rounds so that in the final round, no trades can be completed. Refer students to the information recorded on Visual 7-1 and discuss the following:
 - What happened to the number of completed trades as the distance between the two yardsticks increased? (*The number of completed trades decreased.*)
 - Would you expect the people of Frontier to be more or less happy as the distance between the yardsticks increased? (*Less happy*) Why? (*They acquire fewer kronas.*)
 - Would you expect the people of Outback to be more or less happy as the distance between the yardsticks increased? (*Less happy*) Why? (*They acquire fewer tubbles.*)
10. Explain that the jump represents transporting goods and services from one country to another. If the distance isn't great, it is less costly to transport goods by air, ship, or truck. However, as the distance increases, the transportation costs are greater. As a result, fewer trades are likely to be made because the costs of the trades are greater than the benefits received from the trades. Explain that the cost of trading with someone who lives nearby is less than the cost of trading with someone who lives far away.
11. Tell the students that they have some more jumps to make. Refer to "Hurdles" in the first column of the table on Visual 7-1. Ask helpers to hold one of the yardsticks about one foot from the ground. Explain that students from each country will alternate jumping over the yardstick. Each pair of students (one from Outback and one from Frontier) that completes the jump represents a trade. After the first round of jumps, record the number of completed trades under Round 1 in the table.
12. Instruct the helpers to raise the yardstick another foot. Have students from each country alternate jumping over the yardstick. After the jumps are completed, record the number of completed trades under Round 2 in the table. Repeat until no trades can be completed. Discuss the following:
 - What happened to the number of completed trades as the distance of the yardstick from the floor increased? (*The number of completed trades decreased.*)
 - Would you expect the people of Frontier and Outback to be more or less happy as the distance of the yardstick from the floor increased? (*Less happy*) Why? (*The people from Frontier acquire fewer kronas, and the people from Outback acquire fewer tubbles.*)
13. Explain that the height of the yardstick represents high mountains, "high" seas, or high temperatures. As demonstrated in the activity, these all make trading more difficult or expensive so that less trading occurs. These factors, along with distance, are called trade barriers. A **trade barrier** is anything that makes trading less desirable or more difficult to do. Explain that distance, mountains, rough terrain, high temperatures, or rough seas are natural barriers to trade; that is, barriers imposed by nature. Explain that sometimes the government of a country may

impose trade barriers. This means that the government of the country does something that makes trade more difficult. For example, a government may charge a tariff. A **tariff** is a tax that must be paid before a good may be brought into a country.

14. Ask a student to demonstrate jumping over the raised yardstick and point out that the height of the yardstick now represents the amount of the tariff. As the yardstick gets higher, fewer students would be able to jump over, and so fewer trades would occur. In the same way, as a tariff “gets higher,” the cost of bringing goods into the country rises, and fewer trades are desirable.
15. Tell the students that they will engage in another round of trading. (Quietly, tell the helpers to allow the first five students from each country to jump over the yardstick as it lies on the floor. Then, they should raise the yardstick as high as they can so that no one could possibly jump over it.) After the students have jumped/tried jumping, explain that this activity demonstrates what happens when the government imposes a quota. A **quota** is a limit placed on the amount of a good or service that may come into a country. In the example, five kroners could come into Frontier and five tubbles could come into Outback. Once that limit was reached, no more of the goods were allowed in.
16. Instruct the students to return to their original countries. Instruct the helpers to again hold the yardstick as high as they can. Ask students why no trade will occur. (*No one can jump over the yardstick.*) Explain that this situation represents an embargo. An **embargo** is a government order that prohibits trade with a country or group of countries. An embargo is a quota of zero.
17. Tell the students that they will participate in one more activity. Ask the students if they have ever played limbo. (*Answers will vary.*) Refer to “Limbo” in the first column of the table on Visual 7-1. Explain that this time the yardstick will be a limbo bar. Instruct the helpers to hold the limbo stick about chest high. The students must pass under the limbo bar to move into the other country. Each time a krone and a tubble pass under the bar, a trade is complete. Have students from each country alternate moving under the limbo bar. When all students have participated, record the number of completed trades under Round 1 on Visual 7-1.
18. Instruct the students to return to their home countries. Walk up to the yardstick, push it down approximately one foot, and have students from each country alternate moving under the limbo bar. When all of the students have had a turn, record the number of completed trades in the table under Round 2 on Visual 7-1. Repeat until no trades can be completed. Discuss the following:
 - What must a tubble or a krone do in order to move to the other country? (*It must pass under the limbo bar without knocking it over or falling to the ground.*)
 - As the bar was pushed lower, what happened to the number of completed trades? (*It decreased*) Why? (*It became harder and harder for students to go low enough to get under the bar.*)

19. Explain that, in this demonstration, the yardstick represents a standard or requirement that a good must meet in order to enter the country. Tubbles and kronen had to meet the requirement of passing under the limbo bar. In real-world trading, a **standard** is a health, safety, environmental, or other requirement that must be met for trade to take place. For example, medicines from other countries must meet safety and health standards before they are allowed into the United States. Milk produced in the United States must be free of certain chemicals before it is allowed into European countries. Instruct the students to return to their seats and complete the closure activity.
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Closure

20. Display *Visual 7-2: Trade Barriers* and distribute a copy of *Handout 7-1: Things to Remember About Trade Barriers* to each student. Tell students to record notes about trade barriers on Handout 7-1 as you discuss the topics on Visual 7-2. Discuss the following to emphasize the major points of the lesson:
- What is a trade barrier? (*Anything that makes trade less desirable or more difficult to do*)
 - Trade barriers imposed by nature are called natural trade barriers. Why is distance between traders a barrier? (*Traveling long distances takes more time, is more difficult, and requires more fuel. These things make it more costly to travel long distances than short distances.*)
 - What are some other geographic barriers to trade? (*Mountains, rough terrain, climate*)
 - What is another category of trade barriers? (*Government-imposed trade barriers*)
 - What are examples of government-imposed trade barriers? (*Tariffs, quotas, embargos, standards*)
 - What is a tariff? (*A tax that must be paid before a good may be brought into a country*)
 - What is a quota? (*A limit placed on the amount of goods that may come into a country*)
 - What is an embargo? (*Not allowing any of a good into a country*)
 - What is a standard? (*A health, environmental, safety, or other requirement that must be met in order for trade to take place.*)
 - People agree to trade voluntarily because both traders expect to gain. What do we mean when we say people expect to gain from trade? (*They expect to be happier and have more satisfaction from what they have after the trade than before the trade.*)
 - What is the benefit traders receive? (*They get more of something they want.*)
 - What is the cost of trading? (*Giving up something to make the trade—an opportunity cost*)
 - As the cost of trading rises, will more or less trading occur? (*Less*)
 - Do trade barriers raise or lower the cost of trading? (*They raise the cost.*)

Assessment

21. Distribute a copy of *Handout 7-2: Assessment* to each student. Allow time for the students to work and then review the answers as follows:

Multiple Choice

1. Trade barriers
 - a. increase the amount of goods that are traded.
 - b. *increase the cost of trading goods.*
 - c. make people better off.
 - d. make trading easier.
2. Which of the following is an example of a geographic trade barrier?
 - a. Tariff
 - b. Quota
 - c. Very low shipping costs
 - d. *A long distance between traders*
3. Generally, more trade occurs between two countries
 - a. with lower quotas.
 - b. *with lower tariffs.*
 - c. that are farther away from each other.
 - d. that have more standards traded goods must meet.
4. If Canada refuses to trade with the United States—if Canada won't allow any U.S. goods into Canada—then this is an example of a(n)
 - a. tariff.
 - b. quota.
 - c. standard.
 - d. *embargo.*

Short Answer

5. Canada and Mexico are two of the United States' largest trading partners. Using what you learned about trade barriers, explain why they trade a great deal with one another.
Both Mexico and Canada border the United States, so they are closer than other countries with which the United States might trade. So distance is less of a barrier to trade than

trade with other countries. In addition, there are no major geographic barriers between these countries and the United States.

6. What is a quota and how does it limit trade?

A quota is a limit placed by a government on the amount of a good that can come into the country from another country. Once the limit is reached, no more goods are allowed in a country.

7. If the United States imposes a tariff on cars produced in Mexico, what will happen to trade between the two countries?

Trade between the two countries will decrease, and the price of Mexican cars sold in the United States will increase.

8. New medications must meet certain requirements before they can be sold in Germany. What type of barrier is this? How does this affect U.S. trade with Germany?

Requirements are standards. The United States must meet the standards before trading with Germany.

Visual 7-1: Outback and Frontier Trading

Trades	Number of completed trades				
	Round 1	Round 2	Round 3	Extra rounds	
Standing long-jump					
Hurdles					
Limbo					

Visual 7-2: Trade Barriers

NATURAL TRADE BARRIERS

Distance: How far goods are shipped between countries.

Geography: Mountains, waterways, climate, or other physical factors that make the transportation of goods between countries difficult.

GOVERNMENT-IMPOSED TRADE BARRIERS

Tariff: A tax that must be paid before a good may be brought into a country.

Quota: A limit on the quantity of a good that can come into a country.

Embargo: A government order that limits or prohibits trade with a particular country or group of countries.

Standard: A requirement that must be met in order for trade to take place. For example, there may be requirements related to safety, health, or the environment.

Handout 7-1: Things to Remember About Trade Barriers

1. What is a trade barrier?

NATURAL TRADE BARRIERS

2. Why is distance between traders a barrier?

3. What are some geographic barriers to trade?

GOVERNMENT-IMPOSED TRADE BARRIERS

4. What is a tariff?

5. What is a quota?

6. What is an embargo?

7. What is a standard?

Handout 7-2: Assessment (page 1 of 2)

Multiple Choice

Directions: Choose the correct answer for each of the following questions.

1. Trade barriers
 - a. increase the amount of goods that are traded.
 - b. increase the cost of trading goods.
 - c. make people better off.
 - d. make trading easier.

2. Which of the following is an example of a geographic trade barrier?
 - a. Tariff
 - b. Quota
 - c. Very low shipping costs
 - d. A long distance between traders

3. Generally, more trade occurs between two countries
 - a. with lower quotas.
 - b. with lower tariffs.
 - c. that are farther away from each other.
 - d. that have more standards traded goods must meet.

4. If Canada refuses to trade with the United States—if Canada won't allow any U.S. goods into Canada—then this is an example of a(n)
 - a. tariff.
 - b. quota.
 - c. standard.
 - d. embargo.

Standards and Benchmarks

National Content Standards in Economics

Standard 1: Scarcity

Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

- **Benchmarks: Grade 4**

4. Whenever a choice is made, something is given up because resources are limited.
5. The opportunity cost of an activity is the value of the best alternative that would have been chosen instead. It includes what would have been done with the money spent and the time and other resources used in undertaking the activity.

Standard 5: Trade

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.

- **Benchmark: Grade 4**

3. People voluntarily exchange goods and services because they expect to be better off after the exchange. This also may include the more informal exchanges of favors and courtesies.

- **Benchmarks: Grade 8**

1. 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.
3. The gains from free trade are not distributed equally, and some individuals or groups may lose more than they gain when trade barriers are reduced.
4. Despite the mutual benefits from trade among people in different countries, many nations employ trade barriers to restrict free trade for national defense reasons, to protect key industries, or because some companies and workers are hurt by free trade.
5. Imports are foreign goods and services that are purchased from sellers in other nations.
6. Exports are domestic goods and services that are sold to buyers in other nations.
7. Voluntary exchange among people or organizations gives people a broader range of choices in buying goods and services.