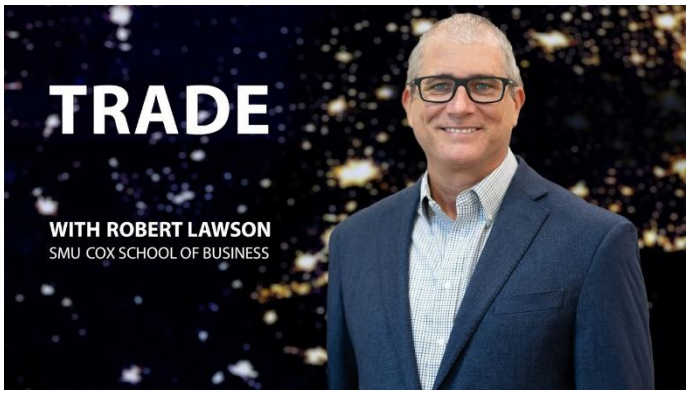
SMU Cox

Bridwell Institute
for Economic Freedom

LESSON PLAN TO ACCOMPANY
THE BRIDWELL INSTITUTE ECONOMIC
FREEDOM VIDEO SERIES

TRADE AND HUMAN FREEDOM



Watch Series
https://www.youtube.com/playlist?list=PL97qxLfk4droZMsRog_8vHp4Uh9yS04gG

FAQs FOR TEACHERS

How should this curriculum be used?
The modules can be taught individually or in sequence in whatever order the educator prefers. The educator can always use this guide and the materials that are available on: https://www.smu.edu/cox/centers-institutes/bridwell-institute/video-series

What grade level?
The modules are designed for 8-12 grade implementation.

Do I need written permission to use the lessons?
The use of these lessons and materials in a classroom setting for any educational purpose is allowed.

How do I get started?
We recommend giving a complete read through this manual first, then watch the referenced video series.

Technology Requirements?
If you are planning to project the videos to students, we recommend a large screen set up with a projector or a large monitor for students to be able to see from any portion of the room.

How much time per lesson?
Each unit is designed for 90 minutes of classroom interaction with students. It can be taught over 90 minutes with a small break (block schedule) or over two consecutive days with 45 minutes of instruction each (traditional schedule).

Does the lesson align with state curriculum standards?
These lesson plans, materials and activities should align with any state's standards. Please contact us for assistance if required.

How can we contact you?
Contact us directly at the Bridwell Institute for Economic Freedom at bridwell-institute@smu.edu

TRADE AND HUMAN FREEDOM

SUGGESTED CLASSROOM PROCEDURES

- Use videos as time allows
- Review summary below
- Conduct active learning exercises, as appropriate
    - TRADE GAME
    - TAG CHECK
    - TASTE OF PROTECTIONISM

For additional classroom-specific materials like quizzes, tests, classroom exercises, and other ancillaries, please email bridwell-institute@smu.edu.

IMPORTANT QUESTIONS TO ANSWER

- Why is trade mutually beneficial in general?
- When is trade not mutually beneficial?
- What is the concept of Comparative Advantage and why does it enhance our productivity?

SUMMARY OF TRADE AND HUMAN FREEDOM LESSON

People have been trading with each other since the dawn of time. People living near the sea would trade fish with people living inland in exchange for their cattle for example. This continues to the present when Floridians sell oranges and buy salmon from Alaskans. People can also specialize in certain things to enhance their ability to trade. One person can study to become an architect while another studies to become a dentist. The architect sells his building designs and buys his dentistry services. If the architect was a country, we could even say the architect exports building plans and imports dental services. Thanks to developing transportation technologies, we have been able to shorten travel times. This has brought about the ever-expanding development of trade around the globe. This unit focuses on the advantages of trade and on how trade increases our quality of life and overall happiness.

BACKGROUND READING

WHY DO PEOPLE TRADE WITH OTHER PEOPLE?

Adam Smith described the essence of trade as follows: “Give me that which I want, and you shall have this which you want.” In modern parlance, we say trade is mutually beneficial in that each party to a trade expects to benefit from the trade. The reason for this is belief is fairly obvious. If a person didn’t expect to be made better off, why would they have made the trade in the first place? Because both parties to a trade can gain from the trade; i.e., trade is a win-win proposition, new value is created when people trade. On the other hand, if people are prevented from trading, then value may be destroyed.

There are a couple of important caveats to the general assertion that trade creates value. First, the trade needs to be voluntary for us to be confident that trading creates value for the participants. When a mugger offers you the deal, “your money or your life” and consequently steals your money, he is certainly better off, but you, the victim, are clearly worse off than before the mugger arrived.

Thus, involuntary trades, almost by definition, are examples of win-lose exchanges. Second, although people expect that trades will make them better off in an *ex ante* sense, they need not make people better off in an *ex post* sense. Who hasn’t purchased something only to discover they didn’t like the item as much as they thought? The notion that sometimes people express regret doesn’t negate the fact that trade is still a dominant method used by people to satisfy their wants and desires.

The idea that trade is win-win is alone a powerful argument in favor of allowing people to trade with each other freely. There is another more powerful, though subtler, argument in favor of free trade. When people are free to trade, they will face incentives to specialize in producing things that they are particular good at producing, i.e., the things in which they have a “comparative advantage”.

The principle of comparative advantage states that a group of people will produce more goods and services if they individuals specialize in producing those things they can produce at the lowest opportunity cost. This idea is often best illustrated with a simple numerical example. As long as relative production costs of two goods differ between two countries; for example, U.S. & Japan; gains from trade will be possible.

COUNTRY	OUTPUT PER WORKER DAY FOOD(1)	CLOTHING(2)	POTENTIAL CHANGE IN OUTPUT* FOOD(3)	CLOTHING(4)
	2	1	+6	-3
	3	9	-3	+9
CHANGES IN			+3	+6

* Change in outputs if US shifts 3 workers from clothing to food industry and if Japan shifts one from food to the clothing.

Columns (1) and (2) indicate the daily per worker output of the food & clothing industry in the U.S. and Japan. If the U.S. moves 3 workers from clothing to food, it produces 6 more units of food and only 3 fewer of clothing. If Japan Moves 1 worker from food to clothing, it produces 9 more units of clothing and only 2 fewer of food. With such a reallocation of labor, the U.S. and Japan are able to increase their aggregate output of both food and clothing.

In this example, consider the cost of producing 6 units of food in each country. In the U.S. producing 6 units of food requires 3 worker-days and in Japan it requires 2 worker-days. It looks like Japan is "better" at producing food, but consider the cost. In the U.S., three worker-days require the sacrifice of 3 units of clothing, but in Japan, two worker-days require the sacrifice of 18 units of clothing! Thus, in terms of lost clothing production, food is 6 times more expensive to produce in Japan than in the U.S.! The U.S. has a comparative advantage in producing food (and, by the same logic in reverse, Japan has a comparative advantage in producing clothing).

At the end of the day, if Japan specializes in clothing and the U.S. specializes in food, we can end up with increased production of both food and clothing in the world. We will be richer! The obvious problem is that unless Japan can sell its excess clothing to the U.S. for its excess food, there isn't much point in specializing. Unless people are **free to trade**, they will not specialize as much, and we will not enjoy the benefits associated with comparative advantage.

EXPORTS AND IMPORTS ARE LINKED

The above example highlights the fact that exports and imports are inexorably linked. The reason Japan specializes in producing food (and exporting some to the U.S). is because the U.S.

is specializing in producing clothing (and exporting some to Japan). One country's export is another country's import and vice versa. In a very real sense, we pay for our imports with our exports.

A second point is that trade doesn't create or destroy jobs, per se. Specialization and trade does reallocate jobs from producing items we don't have a comparative advantage and to those other areas in which we do.

WHAT ABOUT PROTECTIONISM?

If trade is so beneficial (both because it is mutually beneficial and because is unleashes the power of comparative advantage), why are so many people and politicians opposed to it? The answer should be obvious. In the example above, if you are an American textile firm or worker for that firm, how do you feel about free trade with Japan? Free trade with Japan means lower cost clothing will be imported into the United States and over time textile firms (and jobs) in the U.S. probably will not survive. It is understandable that people in those import-competing industries will dislike trade, but it is worth remembering that the ultimate result of trade is more goods and services for the world as a whole, and in contrast, restrictions in trade make us all poorer.

TRADE GAME (20 MINUTES)

The Trade Game (TG) is a classroom exercise that illustrates the concept of gains from trade. While most students have little difficulty with the notion that trade is mutually beneficial in some vague sense, the concrete notion that trade "creates value" is too abstract for many to grasp. This exercise allows students to see and measure the creation of value through trade.

STEP 1: COLLECT ITEMS

The instructor needs to acquire a wide array of small inexpensive trinkets that will be distributed to the students at the beginning of the exercise. Purchasing items at a dollar store is usually the most cost-effective approach. Ideally, the collection will include a diverse set of items that are more likely to be desired by students differently. It is also acceptable if some items are likely to be superior to other items in the eyes of most everyone.

Here is a list of possible items: Playing cards, cosmetics (e.g., lip gloss, lipstick, nail polish…), hair clips and bows, food (e.g., chips, candy, gum, can of tuna…), trading cards, small toys (e.g., jacks, balls, squirt guns, toy soldiers…), clothing items (e.g., socks, caps…), sunglasses, seasonal decorations, stationary items (e.g., pens, pencils, notepads…), key chains, lip balm, stickers, trial size toiletries (e.g., toothpaste, lotions, shampoos...), coupons good for certain classroom privileges…

STEP 2: DISTRIBUTE THE ITEMS TO THE CLASS

Randomly distribute one item to each student as they are seated at their desks. It some-times works better to "cheat" a little by intentionally giving lip gloss to male students and baseball cards to female students, so that at least some students are likely to be unhappy with their initial allocation. Instruct them that the item is theirs to keep but for now they should not open its packaging, eat it, or anything like that.

STEP 3: RATE THE ITEMS

Using a small scrap of paper or 3x5 index card, have each student rate on a scale of 1-10 (or 1-5) the item they have been given, with a 10 meaning they "really, really like it" and a 1 meaning they "really, really hate it." Collect the ratings and average the results. It can also be a good learning exercise to have the students collect the ratings and calculate the average. If time is particularly scarce, this process can be done more quickly by having the students raise their hands for each rating with the instructor keeping track of the counts. Begin a bar chart on the board that reports this average (e.g., 4.5).

STEP 4: LIMITED TRADE

Next, instruct the students that they can trade their item with any one of their immediate neighbors (e.g., the students at their table or in their row, or in groups you assign) but not with anyone else in the room. Give them a few minutes to do this. Repeat Step 3 and add another bar to your chart indicating the average of the class (e.g. 6.3).

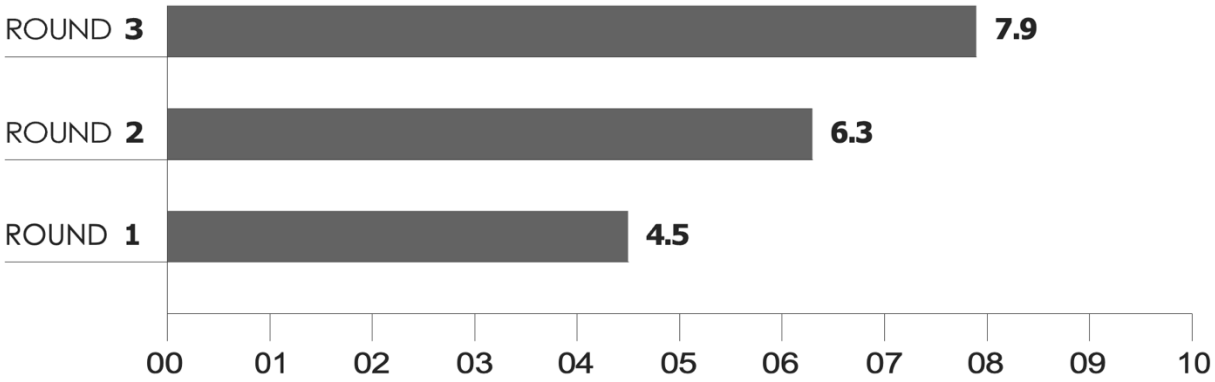
In our experience, the average will always increase. This is a good opportunity to call on individual students who made a trade to ask them why they made the trade. Interestingly, even students who did not trade often increase their rating on the item they have after having had the opportunity to trade it away.

STEP 5: EXPANDED TRADE

As Adam Smith noted, the gains from trade are limited by the extent of the market. The final round allows students to trade their items with anyone in the class (warning: This can get loud!). As in the previous round, the rating will almost certainly increase (e.g., 7.9). In many dozens of trials of this exercise, this pattern of results has never failed to appear.

This exercise helps students see that gains from trade are real and can be measured. In addition, the TG shows that these gains will be larger if we are allowed to trade with a wider set of people. This is an obvious point at which to begin a more formal discussion about inter-national trade.

Example of bar chart:



As a final question, you can ask the students how they would feel if we forcibly took the items they ended up with and returned them to their original owners. You will be greeted with howls and complaints. (Do not attempt to do this in reality lest you risk a riot!) Yet, this is exactly what tariffs and quotas do – they force us to keep our own stuff and not trade it to others, thus losing the opportunity to increase our happiness.

OPTIONAL EXTRA DISCUSSION ON GLOBAL TRADE

With younger students we have sometimes taken the time after the TG to ask them to list the number of countries responsible for manufacturing the shirts currently worn by the students in the room. In addition to being a worthwhile lesson on world geography, this discussion drives home the point that we trade with people all over the world. We then ask: Why do these people in Malaysia, Honduras, Congo, etc., make shirts for Americans? Isn't it nice of them to make shirts for us? Of course, the students will know that they make shirts for us because we pay them for the shirts. But after the TG, we now know that these Malaysians do so only because we offer them something in exchange of even more value.

CONCLUSION

The TG is a simple exercise that illustrates how trade creates value by moving goods from people who value them less to people who value them more. The game can also be used to talk about the importance of market size to the gains from trade and thus to segue to a discussion of international trade and trade restrictions.

One limitation of the TG is that it relies on barter exchange alone. Consequently, the important concepts of comparative advantage and specialization in production cannot be illustrated with the TG.

ADDITIONAL RESOURCE

Lawson, R.A., & Green, C.S. (2009). The Trade Game. *Journal of Private Enterprise, 24*, 175-180.

TAG CHECK (20 MINUTES)

Tag Check is a quick way to make students aware of the very real presence of international trade in their daily lives. They will find that most of their clothing is made overseas. In fact, it will be so rare to find any student who is wearing only American-made clothing that it's pretty safe to bet $10 that no one in the room is. As they map where their clothes were produced, they begin to see some of the patterns of specialization that exist in the global marketplace and to realize the extent to which we are tied to this interdependent network of production and trade. The group discussion questions help them to identify the costs and benefits of purchasing and wearing clothing produced in other countries – or of choosing not to purchase and wear clothing produced overseas.

INSTRUCTIONS:
Divide class into small groups (e.g., 4 students in each group) and send each group to a separate part of the room where there is space to move a little bit.

Ask the students to check the tags or labels on all items worn by members (except underwear, of course!) in the group. Record all the places your outerwear (including shoes, belts, eyeglasses, and jewelry) was made.

Ask a representative from each group to list on the board all the countries found making the items (or mark the places on the wall map with push pins or stickers).

QUESTIONS TO CONSIDER:

- Is wearing ALL American-made clothing?
- Is wearing NO American-made clothing?
- Why are so many of you wearing foreign-made clothing? (For most students, the major incentives will be price and availability).
- If you are wearing American-made clothing, what was your incentive for purchasing it? (Expect a variety of answers: it may be a higher-quality product, a desire to support a particular company, you may even have students who believe that it's patriotic to buy American goods, or may just be that student liked the product and didn't bother to notice where it was made.)
- Did "trading" for foreign-made goods make you better or worse off?
- Did your purchase of foreign-made goods make our country better or worse off? Explain. (This will be a harder question for students. Help them understand that buying foreign clothing frees up money and resources that can be used for other things. The end result is greater wealth overall.)

- What would be the cost of our country adopting a policy of not purchasing foreign-made products? (The result of no trade would be fewer goods and services available to consumers in the United States.)
- As you look at the wall map and at your tag list, what generalizations occur to you about where different things are produced in the world? (Expect students to comment that these are poorer nations with lower labor costs than in the U.S.)

A TASTE OF PROTECTIONISM: COCA-COLA IN THE CLASSROOM (20 MINUTES)

It is easy for students to conclude that economists' ideas about international trade are abstract and apply little to their daily lives. Conducting a Coca-Cola tasting in the classroom can help drive home how international trade policy affects them in a way that they will remember beyond the final exam.

BACKGROUND

Import quotas that limit sugar imports, push the price of sugar (i.e., sucrose) in the U.S. far above the world market price. In 2006 the average world market price for raw sugar was 15.5 cents per pound, while in the U.S. the same pound of sugar cost 22.1 cents. Over the last 25 years the U.S. price of sugar has averaged more than double the world market price. Meanwhile, corn subsidies keep high fructose com syrup (HFCS) prices, a good substitute for sucrose (S), in the U.S. consistently below the comparable price of sugar in the U.S.

As a result of these price differentials, Coca-Cola alters its recipe in the U.S. Coca-Cola is made using sucrose throughout the world, but it is made with high fructose corn syrup in the U.S. The result is that Coke tastes different in the U.S. In any case, most students can easily identify a taste difference between international Coke and domestic Coke when they are tried side by side. Thus, a horizontal Coca-Cola tasting in the classroom can show a direct way that international trade policy affects their lives.

Mexican Coke, made with sucrose is now widely available. Coke also bottles kosher Coke, made with sucrose, during Passover.

You can conduct an effective tasting in a variety of ways. The tasting can be done either blind or while allowing the students to know which type of Coke is which. The only real necessity is that both domestic and international Coke are tasted side by side. If the tasting is done blind, simply pour the two versions into different colored Dixie cups from bottles wrapped in paper or pour the Coke before the students arrive for class. A blind tasting allows you to more accurately assess which type of Coke the students actually preferred.

Students mainly benefit from this exercise by coming away with a memorable demonstration of how trade policies directly affect their lives. But it also is an effective method to stress some secondary points about trade restrictions that students often miss. Trade restrictions impact the quality and composition of goods we have to choose from as well as the quantity imported and prices we pay.

Students often mistakenly think that trade restrictions are good for businesses even if bad for consumers. Yet more than 50 percent of all imports to the U.S. are either raw materials or intermediate components. This exercise reinforces the point that protection is good for particular businesses but bad for other businesses that use the protected product. In this case, the U.S. sugar industry benefits while sugar-using businesses such as Coca Cola are harmed. This can lead to a discussion of the various reasons why trade restrictions do not lead to a net increase in the number of jobs.

ADDITIONAL RESOURCE

Powell, B. (2007). A Taste of Protectionism: Coca-Cola in the Classroom. *Journal of Private Enterprise*, *23*, 154-158.