



Globalization Day 6: Optional Research

Grade level: 9–12

Time estimate: 2–3 50- to 70-minute class periods

BY: STACI GARBER

Lesson Overview

Students will work in groups to create multimedia presentations that bring the Spheradell simulation into the real world by introducing the global chocolate-making process. The groups will research the ingredients and materials required for producing chocolate and its packaging and investigate the government interventions that complicate the trade of these ingredients. They will then present their research in a 20-slide multimedia project in which each slide is displayed and explained for 20 seconds. This makes the total presentation time 6 minutes and 20 seconds per group.

Objectives

- Apply an understanding of government interventions to trade to the global trading of chocolate ingredients and materials
- Explain how government interventions affect the global production and consumption of chocolate
- Evaluate the impact of various government interventions on international trade
- Apply research and cooperation skills to a group project on the global chocolate trade

Vocabulary

- Embargo
- Quota
- Standard
- Tariff
- Subsidy

- Government intervention
- Trade barrier

Materials

- Warm-up worksheet
- Day 1 research check-in
- Day 2 research plan and check-in (optional)
- Multimedia instructions
- Multimedia rubric
- Blank construction of printer paper (if no access to Google Slides or Microsoft PowerPoint)
- Markers (if no access to Google Slides or Microsoft PowerPoint)
- Binder rings (if no access to Google Slides or Microsoft PowerPoint)
- Positive/negative/interesting feedback forms
- Exit ticket

Pework (if applicable)

It is helpful if you and your students have completed the Spheradell Day 1–5 lessons. It may be helpful to give students chocolate to have them think about the ingredients or read them on the back of the bar. It doesn't have to be expensive! This lesson explains why chocolate is expensive. At the very least, students should be familiar with the various ways governments intervene in international trade, including tariffs, subsidies, quotas, standards, and embargoes.

If students have access to Microsoft PowerPoint, it may be helpful to create a Multimedia template (a blank 20-slide presentation with transitions set for every 20 seconds). To provide further guidance, you can copy the directions for each slide into the notes section of each slide. Students will replace these directions with citations as they work. This step can also be done in Google Slides, but the slide transitions cannot be automated.

Alternatively, if your students do not have access to PowerPoint or Slides, they may use sheets of paper for each “slide” and bind them with binder rings so they can be flipped through. These can also be placed in a binder and flipped inside out.

Warm-Up

Have students look at the photo and answer the questions on the warm-up page. If budget allows, you may provide chocolate to the class to stimulate thinking:



- What do you think chocolate is made from? Generate as many ingredients as you can. (Answers will vary, but you will probably get cocoa, sugar, and milk. For research purposes, we will add palm oil and paper pulp for packaging. If you have handed students real chocolate, they may use the ingredients list on the bar.)
- Where do you think the ingredients for chocolate are produced? Do you think they are often all produced in the same place? Why or why not? (Answers will vary. Students may have a general idea about cocoa beans being produced in Central America, sugar being produced in the Caribbean, milk being produced in many places around the globe, etc. If they have done the other Spheradell lessons, they will hopefully assert that it is unlikely for all of these to be produced in the same place. They don't necessarily grow best in the same place, but there should also be natural comparative advantages that make certain places better at producing specific things.)
- How is chocolate similar to Spheradell? (Answers will vary, but you want students to conclude that chocolate has ingredients from many places that must be brought together. Hopefully, students will even write about the capital investment in chocolate-making machinery. Students who have visited a chocolate factory may know some steps of this process.)

Have a few students report their answers and begin to compile a list on the board of ingredients and materials and their possible source countries. Write these on the board.

Lesson Activities

Set up the Multimedia research assignment.

- Put students into 5 groups. This makes 1 group per targeted ingredient or material. If students have done Spheradell Lessons 1–5, you may use the same groups. It may be helpful to jigsaw groups with 1 member from each of the previous groups since each group experienced 2 of the 5 government interventions.
- Assign each group 1 ingredient or material to focus on. We will use cocoa, palm oil, sugar, milk, and paper pulp.
- Add these to the list from the warm-up if they are not already there. Discuss briefly where students think these might be produced. Discuss how much influence the location of these resources might have on the placement of chocolate factories.
- Hand out the Multimedia instructions and rubric and discuss expectations for the Multimedia project.
 - It may be helpful for each group to divide the task by assigning different individuals different slides or by breaking the assignment into research tasks, citations, finding images, writing information, and formatting. Remind students that trade is mutually beneficial and that they should take advantage of comparative advantages.
 - Establish expectations for the project's oral presentation to the class by explaining that each slide must be explained in 20 seconds. Student groups should split the oral presentation equally among group members.
 - Introduce students to the rubric and describe how they will be graded.
 - If students are unfamiliar with MLA citations, please introduce them to such techniques or to acceptable citation generators.
 - Allow students ample time to complete research using the slide-by-slide instructions below. This works best in a 1-to-1 environment or computer lab, but a partnership with your librarian might make this possible for a paper-only classroom.
 - i. **Slide 1:** Provide a title for your presentation. Include an image for your title slide and all the names of your group members. In the notes section, provide an MLA citation for your image.
 - ii. **Slide 2:** Identify which ingredient or material (cocoa, palm oil, sugar, dairy, or pulp for paper) your group is studying, and include an image and a short description of the ingredient. In the notes section, provide an MLA citation for the image and any information you may have needed to research.

- iii. **Slide 3:** Describe the ingredient or material's role in chocolate-making. How is it used? Include an image. In the notes section, provide an MLA citation for the image and any information you have used to complete your description.
- iv. **Slide 4:** Identify the top 5 countries that produce your ingredient or material. Include a chart, graph, or map that enhances your explanation. Please try to use production or exportation rankings from within the last 5 years. In the notes section, provide MLA citations for any images or information you used.
- v. **Slide 5:** Identify the top 5 countries that import your ingredient or material. Include a chart, graph, or map that enhances your explanation. Please try to use importation numbers from within the last 5 years. In the notes section of your slide, provide MLA citations for any images or information you used.
- vi. **Slide 6:** Identify at least 2 trade barriers your ingredient or material faces on the world market. These can be broad. For example, your ingredient may face tariffs, standards, or import quotas. Spend the next several slides explaining these. Include at least 1 image on this slide.
- vii. **Slide 7:** Identify 1 specific trade barrier your ingredient or material faces in 1 specific country. Describe the details of this barrier. Include an image in your slide. In the notes section, provide MLA citations for any images or information you used.
- viii. **Slide 8:** Explain why the importing country you identified in Slide 7 chose to intervene in the trade for this item. What was the goal of the policy? How can you tell? Include an image. In the notes section, provide MLA citations for any images or information you used.
- ix. **Slide 9:** Describe the impact of the trade barrier you identified in Slide 8. How has this affected the targeted market? How has it affected other markets? Include an image. In the notes section, provide MLA citations for any images or information you used.
- x. **Slide 10:** Identify a second specific trade barrier your ingredient or material faces in a different country. Describe the details of this barrier. Include an image in your slide. In the notes section, provide MLA citations for any images or information you used.
- xi. **Slide 11:** Explain why the importing country you identified in Slide 10 chose to intervene in the trade for this item. What was the goal of the policy? How can you tell? Include an image. In the notes section, provide MLA citations for any images or information you used.
- xii. **Slide 12:** Describe the impact of the trade barrier you identified in Slide 11. How has this affected the targeted market? How has it affected other markets? Include an image. In the notes section, provide MLA citations for any images or information you used.

- xiii. **Slide 13:** Identify at least 1 country that provides subsidies for your ingredient or material. Why does this country choose to subsidize this item? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- xiv. **Slide 14:** Describe the impact of subsidies for your ingredient or material on international trade. Do these subsidies help or hinder global chocolate production? Why? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- xv. **Slide 15:** Identify any substitutes that might be available for your ingredient or material. Can chocolate be made with an item different from yours? Why or why not? Include an image that enhances your slide. In the notes section, provide MLA citations for any images or information you used.
- xvi. **Slide 16:** Explain how the availability of a substitute or the lack of a substitute affects the global demand for your ingredient or material. How does this influence trade? Include an image that enhances your slide. In the notes section, provide MLA citations for any images or information you used.
- xvii. **Slide 17:** Identify at least 1 free trade agreement that protects the trade of your ingredient or material between a producing country and a consuming country. Why does this trade agreement exist? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- xviii. **Slide 18:** Draw a conclusion about how government interventions in trade affect your ingredient or material. Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- xix. **Slide 19:** Explain how you think the trade of your ingredient or material could be improved. What policy suggestions would you make? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- xx. **Slide 20:** Put any closing thoughts or thanks into this final slide and thank your audience. Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.

Exit Ticket for Day 1

Hand out the exit ticket check-in and have students answer questions. Note: This is an individual process to help students navigate their roles and responsibilities in the broader group context.

- How did you and your group decide to divide the tasks for your research project? Why? (Answers will vary here, but this will be useful information for check-ins for the next day and beyond.)
- About how much did you get done today? (Answers will vary but will give you an idea of how much guidance or extra time students might need to complete the work.)
- Were there any obstacles to completing the assignment today? If so, what were they? (Again, answers will vary, but you may need these answers to facilitate Day 2 research activities.)
- What are the next steps you will take at home or in class to complete the project in a timely manner? (Answers will vary, but this question allows the students to plan how to complete the assignment on time with their group members.)

Day 2 Activities (Optional)

Warm-Up and Check-In

- What is your plan today for completing your portion of the group project so that it can be presented in the next class? (Answers will vary.)
- What assistance or resources do you need to complete your project on time? (Answers will vary, but looking at these at the beginning of class will help you target your interventions and guide group members who need assistance. It is likely that 1 or more groups may be missing a group member or may have a group member who is not doing adequate work. Knowing this at the beginning of the class period allows you to partner with the group to determine new labor divisions and provide extra support to allow for timely completion.
- Do you think you will be fully ready to present your research during the next class period? Why or why not? (Answers will vary, but you are hoping for the best here. Establish the expectation that this is the only class time students have.)

At the end of class, distribute the exit ticket:

- Are you ready to present during the next class period? Why or why not? (Answers will vary, but hopefully, these are mostly yes.)
- What do you plan to do between now and the next class period to ensure you and your group are ready to present? (Answers will vary. You want students to make an appropriate plan to be prepared.)

- Have all members of your group appropriately shared the workload? If not, why not? (Answers will vary. You may choose to modify individual grades from the group grade based on this answer. Some teachers ask group members for percentages of effort and then average them to determine individual grades.)

Day 3 Activities for Presentation Day

Establish an order in which the groups will present their research and allow all 5 teams to present their findings.

- It may be easiest to have students share or send their presentations to you to avoid connecting and disconnecting computers repeatedly throughout the class.
- If students have been working in Google Slides, it might be valuable to save their presentations to your computer as a PowerPoint and then set the transitions to 20 seconds. This will keep the students appropriately timed.
- Keep students in other groups engaged by having them record positive/negative/interesting feedback notes.
 - For each presentation, all students will record things they like, things they think can be improved, and things they find interesting.
 - For the positive feedback, this is a great opportunity to instruct kids to give high-quality compliments that contain detailed descriptions of the positive things that groups did in their presentations and why those things were effective. Model these by providing students sentence frames. ("I liked the way you included that really clear graph, because it really supported your point about trade impacts.")
 - Also, students might need a reminder to keep negative feedback gentle and phrase them as areas for improvement.
 - These are all printed on the same sheet, but they can be cut later to be distributed to the groups.
 - If time permits, you may have students share some examples after each presentation.
- After all presentations have concluded, distribute the exit ticket.

Exit Ticket

Distribute the exit ticket and have students address these questions:

- Identify 3 government interventions that have had a direct effect on the production of chocolate. (Students may identify 3 of 4 interventions: quotas, tariffs, subsidies, and standards.)

- How have these trade interventions affected chocolate production? (Students should answer that chocolate production is not as efficient as it could be. Trade agreements make countries that have them more efficient than countries that don't.)
- How is chocolate production a great example of interdependence and globalization? (Students should answer that chocolate production is dependent on international trade and connects many different parts of the world.)

Globalization Day 6: Optional Research

Day 1 Warm-Up

What do you think chocolate is made from? Generate as many ingredients as you can.

Where do you think the ingredients for chocolate are produced? Do you think they are often all produced in the same place? Why or why not?

How is chocolate similar to a Spheradell?

Globalization Day 6: Optional Research

Day 1 Multimedia slide descriptions

Directions: Create a slide presentation of 20 slides. Descriptions for each slide are below. Your group will present the slides to the class, taking 20 seconds per slide for a total presentation time of 6 minutes and 20 seconds. You will be scored according to the rubric.

- Slide 1: Provide a title for your presentation. Include an image for your title slide and all the names of your group members. In the notes section, provide an MLA citation for your image.
- Slide 2: Identify which ingredient or material (cocoa, palm oil, sugar, dairy, or pulp for paper) your group is studying, and include an image and a short description of the ingredient. In the notes section, provide an MLA citation for the image and any information you may have needed to research.
- Slide 3: Describe the ingredient or material's role in chocolate-making. How is it used? Include an image. In the notes section, provide an MLA citation for the image and any information you have used to complete your description.
- Slide 4: Identify the top 5 countries that produce your ingredient or material. Include a chart, graph, or map that enhances your explanation. Please try to use production or exportation rankings from within the last 5 years. In the notes section, provide MLA citations for any images or information you used.
- Slide 5: Identify the top 5 countries that import your ingredient or material. Include a chart, graph, or map that enhances your explanation. Please try to use importation numbers from within the last 5 years. In the notes section of your slide, provide MLA citations for any images or information you used.
- Slide 6: Identify at least 2 trade barriers your ingredient or material faces on the world market. These can be broad. For example, your ingredient may face tariffs, standards, or import quotas. Spend the next several slides explaining these. Include at least 1 image on this slide.
- Slide 7: Identify 1 specific trade barrier your ingredient or material faces in 1 specific country. Describe the details of this barrier. Include an image in your slide. In the notes section, provide MLA citations for any images or information you used.
- Slide 8: Explain why the importing country you identified in Slide 7 chose to intervene in the trade for this item. What was the goal of the policy? How can you tell? Include an image. In the notes section, provide MLA citations for any images or information you used.

- Slide 9: Describe the impact of the trade barrier you identified in Slide 8. How has this affected the targeted market? How has it affected other markets? Include an image. In the notes section, provide MLA citations for any images or information you used.
- Slide 10: Identify a second specific trade barrier your ingredient or material faces in a different country. Describe the details of this barrier. Include an image in your slide. In the notes section, provide MLA citations for any images or information you used.
- Slide 11: Explain why the importing country you identified in Slide 10 chose to intervene in the trade for this item. What was the goal of the policy? How can you tell? Include an image. In the notes section, provide MLA citations for any images or information you used.
- Slide 12: Describe the impact of the trade barrier you identified in Slide 11. How has this affected the targeted market? How has it affected other markets? Include an image. In the notes section, provide MLA citations for any images or information you used.
- Slide 13: Identify at least 1 country that provides subsidies for your ingredient or material. Why does this country choose to subsidize this item? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- Slide 14: Describe the impact of subsidies for your ingredient or material on international trade. Do these subsidies help or hinder global chocolate production? Why? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- Slide 15: Identify any substitutes that might be available for your ingredient or material. Can chocolate be made with an item different from yours? Why or why not? Include an image that enhances your slide. In the notes section, provide MLA citations for any images or information you used.
- Slide 16: Explain how the availability of a substitute or the lack of a substitute affects the global demand for your ingredient or material. How does this influence trade? Include an image that enhances your slide. In the notes section, provide MLA citations for any images or information you used.
- Slide 17: Identify at least 1 free trade agreement that protects the trade of your ingredient or material between a producing country and a consuming country. Why does this trade agreement exist? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.

- Slide 18: Draw a conclusion about how government interventions into trade affect your ingredient or material. Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- Slide 19: Explain how you think the trade of your ingredient or material could be improved. What policy suggestions would you make? Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.
- Slide 20: Put any closing thoughts or thanks into this final slide and thank your audience. Include an image that enhances your description. In the notes section, provide MLA citations for any images or information you used.

Globalization Day 6: Optional Research

Day 1 Slide Rubric

Slide	Meets Standard (5)	Approaches Standard (3)	Needs Improvement (1)
Slide 1	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 2	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 3	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 4	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 5	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 6	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 7	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 8	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 9	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 10	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete

Slide 11	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 12	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 13	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 14	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 15	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 16	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 17	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 18	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 19	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete
Slide 20	Slide is complete and contains citations	Slide is complete and lacks citations	Slide is incomplete

- Qualitative feedback from teacher _____

Total score: ____/100

Globalization Day 6: Optional Research

Day 1 Exit ticket

How did you and your group decide to divide the tasks for your research project? Why?

About how much did you get done today?

Were there any obstacles to completing the assignment today? If so, what were they?

What are the next steps you will take at home or in class to complete the project in a timely manner?

Globalization Day 6: Optional Research

Day 2 Warm up and Check-In

What is your plan today for completing your portion of the group project so that it can be presented in the next class?

What assistance or resources do you need to complete your project on time?

Do you think you will be fully ready to present your research during the next class period? Why or why not?

Globalization Day 6: Optional Research

Day 2 Exit Ticket

Are you ready to present during the next class period? Why or why not?

What do you plan to do between now and the next class period to ensure that you and your group are ready to present?

Were there any obstacles to completing the assignment today? If so, what were they?

Have all members of your group appropriately shared the workload?

Globalization Day 6: Optional Research

Day 2 Positive/Negative/Interesting Group Feedback

COCOA GROUP

I really liked . . .	I think an area for growth is . . .	I thought it was interesting that . . .

SUGAR GROUP

I really liked . . .	I think an area for growth is . . .	I thought it was interesting that . . .

MILK GROUP

I really liked . . .	I think an area for growth is . . .	I thought it was interesting that . . .

PALM OIL GROUP

I really liked . . .	I think an area for growth is . . .	I thought it was interesting that . . .

PAPER PULP GROUP

I really liked . . .	I think an area for growth is . . .	I thought it was interesting that . . .

Globalization Day 6: Optional Research

Day 3 Exit Ticket

Identify 3 government interventions that have had a direct effect on the production of chocolate.

How have these trade interventions affected chocolate production?

How is chocolate production a great example of interdependence and globalization?
