

NAFTA: Connecting Economies

OVERVIEW & OBJECTIVES	GRADE	REQUIRED MATERIALS
<p>Students explain NAFTA's role in producing an integrated North America economy and Minnesota's trade with Canada and Mexico by answering questions and completing graphs. Students perform a skit or create a concept map to demonstrate understanding.</p> <p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> • Explain Minnesota's trade with Canada and Mexico • Explain NAFTA and its potential benefits and costs • Identify absolute and comparative advantage 	<p>8</p> <p>TIME</p> <p>2-4 days depending on number of activities and extensions selected</p>	<ul style="list-style-type: none"> ✓ Blank outline map of North America with U.S. states ✓ Colored pencils ✓ Computer Internet with projector ✓ Computer Internet access for students ✓ Handout: "NAFTA: Benefits and Costs"

MINNESOTA SOCIAL STUDIES STANDARDS & BENCHMARKS

Standard 10. The meaning, use, distribution and importance of resources change over time.
8.3.3.10.1 Explain how the changing patterns of industrialization and trade between the United States, and Canada or Mexico, have resulted in close connections between the countries in terms of manufacturing, energy and finance.

For example: Trade patterns between Minnesota and Mexico, North American Free Trade Agreement, trade patterns between Minnesota and Canada, the building of the Great Lakes Seaway, the manufacturing of automobiles and other products in the Great Lakes Industrial Region, the development of the Canadian oil and gas fields and the pipelines connecting them to markets in the United States.

Economics Standard 12. International trade, exchange rates and international institutions affect individuals, organizations and governments throughout the world.
8.2.5.12.1 Explain why trade is mutually beneficial to countries; define and apply absolute and comparative advantage with respect to international trade.

For example: Absolute advantage—using fewer resources to produce a good (based on differences in productivity). Comparative advantage—giving up fewer other goods to produce a good (based on differences in opportunity costs). A worker in Country A can produce two rugs or four pizzas in one day, while a worker in Country B can only produce one rug or one half of a pizza. Country A has an absolute advantage in producing both rugs and pizzas (workers can produce more of both). However, Country B has a comparative advantage in producing rugs (one rug costs one half of a pizza in Country B, while in Country A one rug costs two pizzas). Both countries would be better off if Country A specialized in producing pizzas and Country B specialized in producing rugs and they traded at a rate of one rug for one pizza.

SUGGESTED PROCEDURE

Introduction

Introduce the lesson asking if trade with other countries is important for Minnesota and what country Minnesota trades with the most. Then provide facts including:

- Minnesota exported \$32 billion worth of goods in 2012 to other countries.
- Minnesota exported over \$7 billion to Canada and Mexico, which is 35% of our export trade.
- Minnesota's trade with Canada makes Canada its #1 trading partner:
 - Minnesota sells more goods to Canada than to any other country in the world, which is more than the next four largest foreign markets combined
 - 179,600 Minnesota jobs depend on trade and investment in Canada
 - 105 Canadian-owned companies in Minnesota employ 38,485 people

Instruct students to: Go to “Export and Trade Statistics” at the Minnesota Department of Employment and Economic Development and download both annual reports (Infographic and Annual Report Statistics) for the year at: <http://mn.gov/deed/data/>. Examine the Infographic: The bar graph, except for the 2009 recession, shows continued growth in exports. The pie graph shows that over half of Minnesota's exports are manufactured goods.

Ask: According to the second pie graph, what are the top three products of export sales?
machinery, optical/medical instruments, and electrical machinery

Instruct students to: Make a bar graph showing the percentage of trade with each of the eight top countries. Then have students read the summary of exports to Canada and exports to Mexico (page 4 of the Export Annual Report for 2012) and answer the questions:

- What are the 3 major export industries to Canada? Vehicles, machinery, mineral oil & fuel
- Minnesota is the second largest U.S. source for what mineral to Canada? Iron ore
- What are the 3 major export industries to Mexico? Machinery, vehicles, electrical machinery
- Looking at the line graph, Minnesota exports to Mexico from 2002-2012 increased how much? 3
- What are Minnesota's major export products? Machinery 20%, optic/medical instruments 15%, electrical machinery 12%, vehicles 9%, plastic 5%, ores, slag, ash 3%, food waste 3%, mineral fuel & oil 2%, other 31%
- Minnesota's exports continue to increase. What changes to Minnesota's trading policy would you propose for Canada and Mexico? Perhaps more ore and fertilizer to Canada; perhaps more vehicle parts & less agriculture products to Mexico.

Last, students identify facts about Minnesota's trade with Canada using the “Minnesota State Fact Sheet” located on the Canadian Consulate of Minnesota website at:
http://canam.gc.ca/relations/commercial_relations_commerciales.aspx?lang=eng

1. Name three Canada-owned companies in Minnesota and their products: 1) Thomson Reuters: leading provider of information, software and services for legal professionals, 2) Mosaic: leading producer of concentrated potash and phosphates used for fertilizer and feed, and 3) New Flyer: leading manufacturer of heavy-duty transit buses
2. What is Minnesota's major import from Canada? oil and natural gas
3. Name an export product you find interesting that Minnesota sells to Canada
4. Name an import product you find interesting that Minnesota buys from Canada

NAFTA

The North America Free Trade Association links the United States, Canada, and Mexico in trade and encourages exports and imports between countries, states, and provinces.

Instruct students to: Read a brief summary of NAFTA and examine the chart at the website supported by the U.S., Canada, and Mexico governments <http://www.naftanow.org/facts/> and answer the following questions:

1. What is the value of goods traded among the NAFTA countries? *Almost a trillion dollars*
2. Trade among the three countries is greatest in what country? Least in what country? *U.S.; Mexico*
3. Investment is greatest in what country? Least in what country? *Canada; Mexico*
4. Jobs created are greatest in what country? Least in what country? *U.S.; Canada*

Next, students use a blank North America map and Tables 5 and 8 of the Bureau of Transportation Statistics, U.S. Department of Transportation http://www.rita.dot.gov/bts/press_releases/bts014_13, to shade the Top Ten states that export to Canada and the Top Ten states that export to Mexico by surface transportation (road, rail, pipeline). Use three different colors to show the Top Ten states that export to Canada, the Top Ten states that export to Mexico, and the states among the Top Ten that export to both Canada and Mexico.

Next, students use Tables 6 and 9 to complete the chart to identify the products that are sent to Canada and Mexico via the transportation modes of Truck, Rail, Pipeline, Vessel (Ship), and Air.

Absolute and Comparative Advantage

Mode of Transportation	Canada	Mexico
Truck		
Rail		
Pipeline		
Vessel		
Air		

Ask: Why are the products similar for Canada and Mexico? Explain absolute and comparative advantage, providing definitions and examples. (Consider referencing the article, “Why You Shouldn’t Ask Economists About Nafta” from The Donella Meadows Archive: Voice of a Global Citizen, http://www.sustainer.org/dhm_archive/index.php?display_article=vn505nafta-ied or related articles for clear definitions and examples as needed.)

Instruct students to: Identify possible examples of absolute and comparative advantage using Minnesota and Canada, then Canada and the United States, and Canada and Mexico.

Instruct students to: Examine the two transportation maps of Trans-border Truck Flow and U.S. Ports of Entry:

1) “The Geography of Transport Systems” at

http://people.hofstra.edu/geotrans/eng/ch5en/conc5en/map_uslandportsofentry.html

(or use the central website at <http://people.hofstra.edu/geotrans> and go to Chapter 5,

Transborder/Crossborder Transportation), and 2) Figure 6: “Share of U.S.-NAFTA Trade Value for Land Modes by Gateway, 2007” at the Bureau of Transportation Statistics:

http://apps.bts.gov/publications/special_reports_and_issue_briefs/special_report/2009_02_11/html/figure_06.html

and answer the following questions:

1. Is Minnesota a greater trade partner with Canada or Mexico? Why? *Canada; proximity and products*
2. What pattern do you observe for the relative location of Canada's transportation routes to the U.S.? The relative location of Mexico's transportation routes to the U.S.? *Canada north, northeast, and west coast while Mexico south and southeast—proximity and products.*
3. Where do Canada and Mexico transportation routes seem to overlap? *Southern California, route to Chicago, Detroit, Cincinnati*
4. Although Minnesota has several ports of entry, which port of entry dominates? *International Falls and it's a railway transportation center (Pembina is in North Dakota)*
5. Most products from Mexico enter the U.S. via what transportation mode? *Truck*
6. Most products from Canada enter via what transportation mode? *Truck*

Next, students complete a T-chart of the benefits and costs of NAFTA trade. Note: Students will work in nine small groups with a different reference to complete part of the T-chart. Groups will jigsaw to share information to finalize the chart.

Benefits:

- Two groups read #1-4 or #5-7 of "Myths & Reality" from NAFTA NOW at: http://www.naftanow.org/myths/default_en.asp
- Two groups read "Bombardier" and "Mabe" of "Success Stories" from NAFTA NOW at: http://www.naftanow.org/success/default_en.asp
- One group reads "NAFTA Good for Farmers, Good for America" from the Office of the United States Trade Representative at: <http://www.ustr.gov/about-us/press-office/fact-sheets/archives/2001/june/nafta-good-farmers-good-america>

Concerns:

- One group reads "Sherry Klein" story of losing her job to Mexico from MN Fair Trade Coalition: <http://mnfairtradecoalition.org/the-trade-stories-project/interviews-with-mn-workers/sherry-klein>
- One group reads "North America Free Trade Agreement", which is a challenging reading that claims NAFTA was not a trade agreement, but an investment agreement from Public Citizen: <http://www.citizen.org/Page.aspx?pid=531>
- One group reads harm to agriculture, "Failures for Mexico", from Council on Hemispheric Affairs at: <http://www.coha.org/the-failures-of-nafta/>
- Another group examines several on-line political cartoons by searching for "NAFTA images"

NAFTA: Benefits and Costs

Benefits	Costs
<ul style="list-style-type: none"> ▪ Increase in jobs ▪ Each country specializes in producing products ▪ Mexico trade & investment increase & diversify making it one of the world's largest exporters ▪ Profits lead to more research & development of new products & ideas ▪ Eliminate trade barriers ▪ Increase investment opportunities ▪ Consumer prices stable across the countries ▪ Establish procedures to settle trade disputes ▪ Support positive environment, health, & food safety conditions ▪ Consolidate companies into large corporations ▪ Increase globalization of economies & policies 	<ul style="list-style-type: none"> ▪ Loss of manufacturing jobs for labor union workers in Canada & U.S. when jobs moved to Mexico ▪ Threat of job movement to Mexico reduce wages/work conditions in U.S. jobs ▪ Low wages & poor work conditions in Mexico ▪ Decline of family-run small businesses & farms to larger corporations ▪ Competition from other countries reduce or eliminate businesses & jobs ▪ Tariff elimination means less tax money for governments ▪ Increase environment degradation through disposal of waste and pollution of air & water ▪ Increase unsafe health & food conditions ▪ Consolidate companies into large corporations ▪ Increase globalization whereby rich become richer & poor become poorer and countries lose national control

Students identify groups of people's responses to NAFTA by completing the chart as well.

Closing

Option #1: Students will be able to explain why countries make trade agreements by creating and performing a skit about NAFTA. Students in small groups will produce a skit that demonstrates their perspective of NAFTA. Each student in a small group will select a Canada, Mexico, or U.S. perspective from the list of groups on the chart or another appropriate group to role-play. A narrator and props may be included as well. Students will submit their dialogue for the skit to meet the rubric characteristics.

Option #2: Students will be able to explain why countries make trade agreements by creating a concept map with the definition of NAFTA and its costs and benefits.

Extensions

Maquiladoras

Students explain maquiladoras by reading a paragraph summary, watching a video, examining a map, and answering questions.

Paragraph summary or select an article below:

What are maquiladoras? They tend to be U.S. factories located in Mexico near the border with the United States. The vast majority of goods are exported to the U.S. Maquiladoras receive investment and special tax treatment to produce products; thus, they are labeled an Economic Free Trade Zone. Although originally begun in the 1960s, they were established through the 1989 Maquiladora Decree. The U.S. companies increase their profit and expand their companies

because wages are lower and they receive tax breaks. Over one million Mexican workers are employed in 3000 maquiladoras, but working conditions are poor. In fact, maquiladoras have been labeled “sweat shops”. Yet the maquiladoras are the second largest producer of money for Mexico (after the petroleum industry; tourism is third).

Watch the brief video (7:45) that shows working conditions in a maquiladora. “Working in a Maquiladora” (clip 1 of 1) from PBS: POV at <http://www.pbs.org/pov/maquilapolis/additional-video.php> or http://www.pbs.org/pov/maquilapolis/video_classroom1.php#.Ufhcw47R1FI

Access the Map of Production of Maquiladora Plants, 2010 with a brief summary, “The Impact of NAFTA on Urban Growth in Mexico” from Geo-Mexico at <http://geo-mexico.com/?p=1617>

Ask:

1. Why are U.S. corporations establishing factories in Mexico?
2. Why do Mexican workers continue to work in the factories despite the conditions?
3. How has NAFTA affected Mexicans and Mexico?

Additional Readings:

A summary article with photos of housing, data on wages, and a map of deprivation updated in 2013. “Maquiladoras” by Ingolf Vogeler from University of Wisconsin, Eau Claire <http://www.uwec.edu/geography/ivogeler/w188/border/maquil.htm>

A brief article has questions for discussion from 2009. “NAFTA: Does the North American Free Trade Agreement Really Promote Free Trade” from World Savvy http://worldsavvy.org/monitor/index.php?option=com_content&id=682&Itemid=1147

A 2011 article on maquiladoras provides basic information and current status. “Border Business: Mexico’s Maquiladoras Strong in Tough Economy” from Fronteras: The Changing America Desk <http://www.fronterasdesk.org/content/border-business-mexicos-maquiladoras-strong-tough-economy>

Two links that describe how California companies facilitate the establishment of maquiladoras in Mexico can be used to explain the promotion of U.S. businesses moving to Mexico:

“The Maquiladora Industry” and “FAQ” from Made in Mexico, Inc.

<http://www.madeinmexicoinc.com/maquiladora-industry/>

“Manufacturing in Tijuana,” “Mexico Manufacturing Services,” “Made n Mexico,” “Maquiladora Case Studies,” and “Frequently Asked Questions” from Border Assembly: San Diego.

<http://borderassembly.com/border-assembly-sitemap.html>

A brief article from 2011 highlights the establishment and current status of maquiladoras, and their response to violence. “Border Business: Mexico’s Maquiladoras Strong in Tough Economy” from Fronteras: The Changing America Desk. <http://www.fronterasdesk.org/content/border-business-mexicos-maquiladoras-strong-tough-economy>

Additional Maps:

Maps of maquiladora locations, proprietorship and products shown on a 2010 blog, “Border Economies: The Maquiladora Export Landscape” from Infrastructure Network Laboratory
<http://infranetlab.org/blog/border-economies-maquiladora-export-landscape>

This blog contains a series of maps of maquiladora locations, agriculture industries, mining production, textiles, manufacturing, and logistics created by plotting points.

“Where are the IMMEX (Maquiladoras) in Mexico?” from Fabian Santana’s blog

<http://santanafabian.wordpress.com/2013/09/03/where-are-the-immex-maquiladoras-in-mexico/>

Extension

Border Crossings

Students examine several images of border crossings to Canada and Mexico and complete a T-chart to compare and contrast the border with Canada and the border with Mexico.

New England Crossings:

<http://www.yankeemagazine.com/article/exclusives-interact-2/canadian-border-photos>

The International Falls –Fort Francis border crossing can be seen at:

<http://www.ezbordercrossing.com/list-of-border-crossings/minnesota/international-falls-fort-frances/> and

<http://minnesota.publicradio.org/display/web/2007/03/02/passportupdate>

The Detroit-Windsor crossing:

<http://www.ezbordercrossing.com/list-of-border-crossings/michigan/detroit-windsor-tunnel/>

The San Diego-Tijuana crossing:

<http://mexicoinstitute.wordpress.com/2012/11/01/busy-us-mexico-border-crossing-gets-makeover/> and

http://sanysidrochamber.org/about_us.php

The fence border between the U.S. and Mexico at:

<http://www.nydailynews.com/news/national/immigrants-buzz-words-u-s-borders-article-1.1423874> and

<http://mexicoinstitute.wordpress.com/2012/11/01/busy-us-mexico-border-crossing-gets-makeover/>

Assessment

- Bar Graph of Minnesota Percentage of Trade
- Answer questions about Minnesota’s trade
- Answer questions about NAFTA
- Map of NAFTA trade with U.S. states
- Chart of products
- Student examples of absolute and comparative advantage
- Answer questions about NAFTA transportation routes
- NAFTA: Benefits and Concerns—T-chart and chart
- NAFTA Skit or Concept Map

Skit Rubric

Expectations	Exceeds Expectations	Meets Expectations	Progressing to Expectations
Defines NAFTA, identifies countries involved, and explains why NAFTA was established			
Clearly & completely explains the benefits of NAFTA for the countries, their workers and their consumers			
Clearly & completely explains the costs of NAFTA for the countries, their workers and their consumers			

Websites Resources

Minnesota 2012 State Exports, Department of Employment and Economic Development

http://www.positivelyminnesota.com/Data_Publications/Data/Export_Statistics/index.aspx

“Minnesota State Fact Sheet”, Canadian Consulate of Minnesota

http://can-am.gc.ca/relations/commercial_relations_commerciales.aspx?lang=eng

NAFTA Summary, NAFTA NOW

<http://www.naftanow.org/facts/>

“North American Trade”, U.S. Department of Transportation, Bureau of Transportation Statistics

http://www.rita.dot.gov/bts/press_releases/bts014_13

“Share of U.S.-NAFTA Trade Value for Land Modes by Gateway, 2007” at Bureau of Transportation Statistics

http://apps.bts.gov/publications/special_reports_and_issue_briefs/special_report/2009_02_11/html/figure_06.html

“The Geography of Transport Systems” at Hofstra University, Dr. Jean-Paul Rodrigue

http://people.hofstra.edu/geotrans/eng/ch5en/conc5en/map_uslandportsofentry.html

“Myths & Reality” and “Success Stories, NAFTA NOW

http://www.naftanow.org/myths/default_en.asp

“NAFTA Good for Farmers, Good for America”, Office of the United States Trade Representative

<http://www.ustr.gov/about-us/press-office/fact-sheets/archives/2001/june/nafta-good-farmers-good-america>

“Sherry Klein”, Minnesota Fair Trade Coalition

<http://mnfairtradecoalition.org/the-trade-stories-project/interviews-with-mn-workers/sherry-klein>

“North America Free Trade Agreement”, Public Citizen

<http://www.citizen.org/Page.aspx?pid=531>

“Failures for Mexico”, Council on Hemispheric Affairs

<http://www.coha.org/the-failures-of-nafta/>

NAFTA: Benefits and Costs

Directions: Complete the T-chart by listing the benefits and costs of NAFTA based on your reading and the readings of the other groups.

Benefits	Costs

Directions: What might the following groups of people think about NAFTA? Check the column for Approve, Disapprove, or Both Approve and Disapprove.

Group of People	Approve	Disapprove	Both Approve and Disapprove
Canadian Farmers			
Canadian Automobile Workers			
Canadian Businessmen			
Mexican Family-run Farmers			
Mexican Maquiladora Workers			
Mexican Businessmen			
U.S. Consumers			
U.S. Corporations			
U.S. Truckers			
U.S. Government Officials			

N O R T H A M E R I C A

