

Minnesota's Role in North American Trade:

A research project for middle school social science classes.

Learning Area: Inquiry & Research

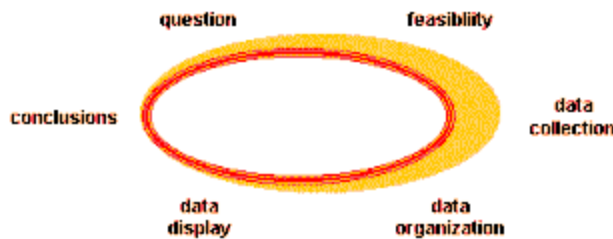
Educational Level: Middle School

Content Standard: Accessing Information

Standard: A student shall access information and use a variety of sources to answer a question or support a position by:

1. generating a question to be answered or a position to be supported through investigation;
2. using electronic media or other available means to access relevant information;
3. determining how to record and organize information;
4. gathering information from multiple sources;
5. evaluating the relevance of the information; and
6. answering the question or supporting a position by synthesizing information.

Large Processes/Concepts:



This package includes practice in:

1. analyzing sources
2. reflection upon the process of analyzing information and prediction of future usefulness of typical sources used in projects in the social studies, esp. geography and economics
3. brainstorming questions regarding North America trade and choosing one question
4. brainstorming potential resources and evaluating their effectiveness after use
5. notetaking in research resources to answer questions
6. making a map of North American trade and transportation
7. making a poster that shows the research and the answer to the question
8. reflecting on the project process and the worth of various resources for future investigation

Next step: Assessment Task---

Minnesota's Role in North America Trade:

A research project for middle school social science classes continued---

Assessment Task---

Description:

Students will investigate the relationship between Minnesota (or the U.S.A.) and Canada and Mexico with regard to products and services that are exchanged in the North American import-export trade and what modes of transportation enable this trade.

Evidence of Learning:

Students produce a brainstorm list, a question to research and a brainstorm of resources, a set of notes, a bibliography, a map of North America trade (based on the research), a poster that shows the question, answer, and supporting data, and an evaluation of the process.

Overview:

Suggested time length: 10 class periods plus homework time that includes two weekends for motivated students' out-of-school research.

1. Listen to a background presentation by your teacher regarding North American trade and some general economic principles. **OR** Read about North American trade in a textbook or other classroom resource.

Topics and vocabulary should include:

- North America, Canada, Mexico, U.S.A., Atlantic Ocean, Pacific Ocean, Gulf of Mexico
- import vs. export; international trade, tariff
- goods vs. services, cargo, freight, producer vs. consumer, "middleman," transshipment
- transportation modes (rail, river shipping esp. barge, truck, Great Lakes shipping, Gulf of Mexico shipping, container/intermodal freight)
- major US geographic sites related to this project: Duluth-Superior, Minneapolis-St. Paul, Lake Superior and four other Great Lakes, Mississippi-Ohio-Missouri river system, Powder River Coal Mining district in Montana and Wyoming, Appalachian coal district, Great Plains farmlands, Chicago, Detroit
- major Canadian geographic sites related to this project: cities along Canada-U.S. border, St. Lawrence Seaway, Alaska Highway, Maritime Provinces, Quebec Province, Ontario, Prairie Provinces, British Columbia, Canadian oil and gas producing region
- major Mexican geographic sites related to this project: cities along Mexico-U.S. border, Gulf of Campeche, Mexican oil producing region, Mexico City, Guadalajara, Monterrey, Rio Grande, American tourist resort cities in Yucatan and along Gulf of California
- trade agreements, North American Free Trade Agreement (NAFTA) and the proposed FTAA Free Trade Area of the Americas for the entire Western Hemisphere except Cuba.

Assessment Task continued---

Minnesota's Role in North America Trade:

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Assessment Task continued---

2. In a group or individually, brainstorm a list of questions about North American trade that could be answered by research. (**Note:** although an emphasis on Minnesota is important for this activity, students should be allowed to brainstorm questions regarding all of North American trade)

Examples:

- Which nation is more involved with Minnesota's economy, Canada or Mexico?
- What transportation modes are mostly used for shipping between Canada, Mexico, and Minnesota?
- What are common products that Minnesota ships to Canada and Mexico?
- What is Minnesota's role in international shipping?
- What changes have occurred in trade between the three nations of North America since NAFTA was signed?
- What products are still not legal to import or export between the nations in North America?

3. Each student should choose a question regarding Minnesota and North American trade. Register your topic or question by listing it at the top of **Worksheet #1**.

4. Brainstorm resources that might help you answer your question. Be creative-envision the resources even if you are not sure that they exist. **Record your list of possible resources on Worksheet #1 Resources Brainstorm.**

5. Use the library vertical file, library reference books, library nonfiction books, periodicals, Internet web sites, classroom materials (geography materials, teacher pamphlet collection, National Geographic magazines), and CD ROMs to locate information about your topic and to take notes about it. You are welcome to do additional research outside of school. Feel free to seek out expert information.

Your parents may help with encouragement, rides and fees, advice on using software, and translating difficult vocabulary. They may not answer your question for you, even if they know the answer.

Record each resource on Worksheet #2 Bibliography.

--If you take notes, use plain lined paper. Next to each important piece of information, write the number of the bibliography item and also the page number. You do not have to use full sentences in your notetaking.

--Modern researchers often use photocopies and printouts. If you collect photocopies and other personal print resources during this project, be sure to write the name of the resource on the piece and on **Worksheet #2**.

--If you cannot find useful information in a research resource, do not put it away until you record it in the work-sheet bibliography. It is the purpose of this project to help you understand what kind of information is found in research resources. If you do a good job, you will know a lot more about what kinds of resources are or are not useful and this will help you will be a better researcher when you work with a new research topic in the future. In the bibliography, mark any unhelpful resource with a **large X** in the appropriate column.

Assessment Task continued---

Minnesota's Role in North America Trade:

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Assessment Task continued---

--These are some useful URLs for students, if you need some sources:

<http://199.79.179.77/transborder/> This is economic data in all kinds of forms. Look for Minnesota in the summaries. You can find data to compare changes over time also.

<http://www.uprr.com/customers/energy/ports/> This shows Union Pacific RR, a carrier of Powder River Coal from Wyoming as well as many other commodities and products.

<http://www.econedlink.org/lessons/index.cfm?lesson=EM196> Don't let this web site scare you. Scroll down to two pie charts that illustrate U.S. imports and exports. It is good background for this project. So is the bar chart of major trading partners.

<http://www.census.gov/foreign-trade/www/press.html> You will find files here that are helpful, if you look with some thought.

http://www.state.gov/www/background_notes/canada_0007_bgn.html This is a U.S. State Dept. summary about Canada, including trade relations with the U.S.A.

<http://www.state.gov/r/pa/bgn/index.cfm?docid=1838> This is a similar document about Mexico.

<http://www.state.gov/documents/organization/1663.pdf> Not an easy document to read, but you'll learn about trade problems between the U.S. and Mexico, such as the problems with telecommunications.

<http://www.state.gov/documents/organization/1652.pdf> Same here for Canada.

The Duluth Seaway Port Authority has two excellent maps; "Clure Public Marine Terminal Cargo Origins and Destinations" and "Great Lakes Ports." It also has a press release for the current shipping season listing domestic and international trade data.

Other resources: almanacs, encyclopedias, atlases, geography books, the business section of the local newspaper, adult experts.

6. Review your notes. Use a highlighter and/or other devices suggested by your teacher to focus your attention on any useful information you have collected. Reread your question. Have you found the answer yet? If not, keep looking. Even if the answer is yes, you may still want to take advantage of any research time to learn more about your topic.
7. Complete **Worksheet #3 "Consider your Sources"** on which you evaluate your sources. You may use as many copies of the worksheet as you need to complete this step.
8. Use **Worksheet #4 "Map of North American Trade Geography"** to understand the general topic of North American trade and transportation. On it you will make a map showing how goods and transportation modes connect Minnesota with Canada and Mexico. Include at least 2 cities in each of the nations of North America and use a key to show method of transportation. You may do this with a group if you like and you may share information.

Assessment Task continued---

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Assessment Task continued---

9. Make a construction paper poster that clearly shows your research question and briefly tells any information that could be important when discussing your question. You should not just rewrite your notes. Organize the information into lists, diagrams, or other easy-to-read units. In the lower right corner of the poster, clearly tell your personal answer to your question. You must do this activity by yourself.

10. Complete **Worksheet #5 "Evaluating Your Research Experience"** honestly.

11. Submit all parts of your research project for final evaluation. This includes:

Worksheet #1 Resources Brainstorm.

Research notes and/or photocopies, etc. Be sure that you have marked the most important findings with highlighter or other markings.

Worksheet #2, Bibliography.

Worksheet #3 "Consider your Sources"

Worksheet #4 "North American Trade Geography"

Poster

Worksheet #5 "Evaluating Your Research Experience"

Check that you have put your name and class period on all pieces.

Additional Note: This project is designed to generally follow the "**Big 6**" **Research Steps** as defined by **Michael B. Eisenberg and Doug Johnson**. Information about the Big 6 method is available at the following web sites:

http://www.itrc.ucf.edu/webcamp/final_projects/barney/big6.html

<http://www.kn.pacbell.com/wired/big6/>

Next step: Checklist

Minnesota's Role in North America Trade:

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Checklist:

Task 1 Worksheet #1 Resources Brainstorm Student/ Teacher

- _____ _____ Brainstorm list shows that student recognizes the variety of kinds of materials that may be used for social science research
- _____ _____ Brainstorm list represents a suitable match with the student's question.
- _____ _____ Brainstorm list shows student has thought about what kinds of materials might exist about the topic.
- _____ _____ Brainstorm was finished on time and is understandable to someone outside of class.
- _____ _____ Student's name and class period were on **Worksheet #1**.

Task 2 Worksheet #2 Bibliography Student/Teacher

- _____ _____ Student shows understanding of process of documenting sources.
- _____ _____ Format of documentation matches classroom examples.
- _____ _____ Bibliography is complete.
- _____ _____ Bibliography reflects sources that were unhelpful as well as those that were helpful.
- _____ _____ Bibliography was finished on time and is understandable to someone who was not in our class.
- _____ _____ Student's name and class period were on **Worksheet #2 Bibliography**.
- _____ _____ Student's name and class period were on the collection

Checklist continued---

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Checklist continued---

Task 3 Collection of Research Notes, Photocopies, Printouts

Student/Teacher

- _____ Materials in collection are in some way connected with the question.
- _____ Materials in collection indicate that they have made sense to the notetaker and were used in the later tasks of this project. (highlighting, personal notetaking style, not simple copying)
- _____ Amount of material is suitable for amount of class time, out-of-class time, and guidance given for this work.
- _____ Research was finished on time and all parts were submitted in an organized set.

Task 4 Worksheet #3 "Consider Your Sources"

Student/Teacher

- _____ Responses indicate that student has thought about the sources.
- _____ Responses indicate that student has learned about resources for social science research.
- _____ **Worksheet #3** was finished on time and is understandable to someone outside of class.
- _____ Student's name and class period were on **Worksheet #3**.

Task 5 Worksheet #4 "North American Trade Geography"

Student/Teacher

- _____ Map locations are accurate.
- _____ Map illustrates accurate knowledge about North American trade.
- _____ Map follows all directions.
- _____ **Worksheet #4** was finished on time and is understandable to someone outside of class.
- _____ Student's name and class period were on **Worksheet #4**.

Checklist continued---

Minnesota's Role in North America Trade:

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Checklist continued---

Task 6 Poster: "Question, Research, and Answer" Student/Teacher

- _____ Information listed on Poster is accurate.
- _____ Information on poster goes beyond classroom introduction given at beginning of project.
- _____ Answer to student's inquiry question is thoughtful and appropriate to the information gathered.
- _____ Poster follows all directions.
- _____ Poster is sensible and readable for any viewer.
- _____ Poster was finished on time.
- _____ Student's name and class period were on Poster.

Task 6 Worksheet #5 "Evaluating Your Research Experience" Student/Teacher

- _____ Student shows she/he understands what an evaluation is.
- _____ Answer to questions are thoughtful and suitable to the student's experience in doing the other tasks.
- _____ **Worksheet #5** was finished on time and is understandable to someone outside of class.
- _____ Student's name and class period were on **Worksheet #5**

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Final evaluation of project for Minnesota Profile of Learning:

0	1	2	3	4
undone OR incomplete OR quality of work is entirely inadequate	shows effort but not all sections completed thoroughly OR portions show command of problems in thought, relationship or process	shows understanding of the process and the research question and answer AND conclusion is based on research and good logic	strong understanding of process and research question and answer AND all portions of project show strong development of the evaluation and predictive skills	creative and thorough work on research tasks AND impressive evaluative and predictive skills

Worksheet #1 Brainstorm Sources

What is the question you have chosen to research?

Bib. #'s

What are some research resources that you have used in the past that would be useful in answering your question?

What resources on the Internet do you think might exist that would help you?

What resources in the library might exist that would help you?

What other resources do you hope to find that would be just perfect for your research?
(Be creative here!)

Continued---

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Worksheet #2 Bibliography of Resources Used

Item No.

Title of resource

Author of resource or owner of web page

Page No.

Publication date and place of publication

Where did you find this resource? SL = school library, PL = Public Library, URL = write it out, Other (explain)

U = Useful or N = Not Useful

Continued---

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Worksheet #4 "Map of North American Trade Geography"

Note to teachers: Outline map is missing on this template worksheet. In this place insert a suitable blackline outline map of U.S. and parts or all of Canada and Mexico. Geography textbooks may have an accompanying royalty-free map you should find to be suitable. It is helpful for students to record the major cities instead of being given a map with cities already marked.

To the student: Using the North American map, decide how to show how goods and services connect Mexico, Canada, and Minnesota. Include at least 2 cities in each of the nations of North America. Mark more place names if they are useful in showing what you have learned. Decide how to use symbols and colors to indicate what goods and services are exchanged as imports and exports. Show transportation modes. Design a key to explain your symbols and colors.