

Instructional Recipe

Did Nature Help or Hinder the Building of Railroads in Texas?

Grade 7, Texas History



Step 1 – Ask

Objectives:

Students will identify the effects of the growth of railroads in Texas. Students will identify how Texans modified the environment to build railroads and explain the positive and negative consequences of those modifications.

Introduction:



Undated photo, W.D. Hornaday Collection, Prints and Photographs Collection, Texas State Library and Archives Commission. #1975/70-5589.

<http://www.tsl.state.tx.us/exhibits/railroad/beginnings/muletrain.html>

Ask:

- ★ Which natural landforms & bodies of water helped or hindered the building of railroads?
- ★ How did Texans modify the environment to create railroad routes?
- ★ What were the positive and negative consequences of building the railroads across Texas?

Vocabulary:

- ★ **modification** - change or adjustment to the natural environment
- ★ **railroad route** – a rail line path

TEKS:

(7.6 C) identify significant individuals, events, and issues from Reconstruction through the beginning of the 20th century, including the effects of the growth of railroads and the contributions of James Hogg.

(7.9 A) locate the Mountains and Basins, Great Plains, North Central Plains, and Coastal Plains regions and places of importance in Texas during the 19th, 20th, and 21st centuries such as major cities, rivers, natural and historic landmarks, political and cultural regions, and local points of interest.

(7.10 A) identify ways in which Texans have adapted to and modified the environment and analyze the positive and negative consequences of the modifications.

(7.21 A) differentiate between, locate, and use primary and secondary sources such as computer software, databases, media and news services, biographies, interviews, and artifacts to acquire information about Texas.

(7.21B) analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions.

(7.21C) organize and interpret information from outlines, reports, databases, and visuals including graphs, charts, timelines, and maps.

(7.21D) identify points of view from the historical context surrounding an event and the frame of reference that influenced the participants.

(7.21E) support a point of view on a social studies issue or event.

Step 2 – Investigate

Texas State Library and Archives Resources:

- ★ Undated photo, W.D. Hornaday Collection, Prints and Photographs Collection, Texas State Library and Archives Commission. #1975/70-5589.
<http://www.tsl.state.tx.us/exhibits/railroad/beginnings/muletrain.html>
- ★ Illustration, *A Pictorial History of Texas*, by Homer S. Thrall, page 63. N.D. Thompson & Co., 1879. Archives and Information Services Division, Texas State Library and Archives Commission.
<http://www.tsl.state.tx.us/exhibits/railroad/beginnings/ferry.html>
- ★ "The Railroads Come to Texas":
<http://www.tsl.state.tx.us/exhibits/railroad/beginnings/page1.html>
- ★ "Texas New Yorker's" Railroad Map of Texas / 1874. Texas State Archives Map Number 0945. Texas State Archives Map Collection, Texas State Library and Archives Commission.
<http://www.tsl.state.tx.us/exhibits/railroad/beginnings/map0945-display.html>
- ★ Natural Regions of Texas:
http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwdmp_e0100_1070u_08.pdf

EBSCO Resources:

- ★ "Land Regions of Texas." *Monkeyshines on America* (2003): 29. *Primary Search*. EBSCO. Web. 25 Nov. 2010.
<http://search.ebscohost.com/login.aspx?direct=true&db=prh&AN=12723812&site=srck5-live>

Additional Websites:

- ★ George C. Werner, "RAILROADS," *Handbook of Texas Online* (<http://www.tshaonline.org/handbook/online/articles/eqr01>), accessed November 23, 2010.

Use the above resources to record information on the concept map on the next page. Think about the following when using the primary sources above:

- ★ What message is the source trying to communicate?
- ★ Who is the intended audience for this source?
- ★ What parts of the source informs you about the topic of the lesson?
- ★ Which sources support or refute your original thoughts about the topic?

Technology Application TEKS:

(6A) Determine and employ methods to evaluate the electronic information for accuracy and validity
(6B) Resolve information conflicts and validate information through accessing, researching, and comparing data

(6C) Demonstrate the ability to identify the source, location, media type, relevancy, and content validity of available information

(7A) Plan, create, and edit documents created with a word processor using readable fonts, alignment, page setup, tabs, and ruler settings

(7D) Demonstrate proficiency in use of multimedia authoring programs by creating linear or nonlinear projects incorporating text, audio, video, and graphics
(10A) Use productivity tools to create effective document files for defined audiences such as slide shows, posters, multimedia presentations, newsletters, brochures, or reports

(10D) Demonstrate appropriate use of fonts, styles, and sizes, as well as effective use of graphics and page design to effectively communicate

(11A) Publish information in a variety of ways including, but not limited to, printed copy, monitor display, Internet documents, and video

Step 3 – Create

Students can work individually or with partners to create a concept map that organizes the information they learned about Texas. Here are some suggested topics that could be included:

🔗 Technology Link – Students may use graphic organizer software such as Inspiration, draw a table in a word processor, or create a spreadsheet using Microsoft Excel to map out their ideas.

Allow students to share their information with another group or as a whole class.

Region of Texas	How was the land modified to accommodate railroads?	Positive Consequences	Negative Consequences
Mountains and Basins			
Great Plains			
North Central Plains			
Coastal Plains			

Step 4 – Discuss

Students may choose one of the following projects to complete:

- ★ Use the map of the Natural Regions of Texas:
http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_mp_e0100_107Ou_08.pdf **Plan a railroad route** through Texas in the 1880s. **Draw the railroad route** in a location in Texas that has the best natural environment for railroads, easy access for the markets in the area (cotton, cattle, etc.), and several positive consequences for the area. Then **write a research report** to explain why you chose the route.
- ★ Choose the top 3 regions of Texas that best support railroad construction in Texas in the 1880s. Then **design and present a PowerPoint** presentation that explains the positive and negative consequences of each of the three locations for a railroad route.

🔗 Technology Link - Students can use Microsoft Word or Publisher to develop their products. Use the EBSCO image collection to help you find images of Texas.



Step 5 – Reflect

Allow students to present their projects to the rest of the class. Use the following suggested rubric to assess the students' work. Make sure that the students are familiar with the rubric *before* they begin creating their project. They should refer to the rubric repeatedly to monitor their progress in creating their project.

🔗 Technology Link: You can also create your own rubric with your students at <http://rubistar.4teachers.org/index.php>.

Teacher Name: _____

Student(s) Name(s): _____

Research Report : Choosing a Railroad Route

CATEGORY	4	3	2	1
Organization	Information is very organized with well-constructed paragraphs and subheadings.	Information is organized with well-constructed paragraphs.	Information is organized, but paragraphs are not well-constructed.	The information appears to be disorganized.
Sources	All sources (information and graphics) are accurately documented in the desired format.	All sources (information and graphics) are accurately documented, but a few are not in the desired format.	All sources (information and graphics) are accurately documented, but many are not in the desired format.	Some sources are not accurately documented.
Graphic Organizer	Graphic organizer or outline has been completed and shows clear, logical relationships between all topics and subtopics.	Graphic organizer or outline has been completed and shows clear, logical relationships between most topics and subtopics.	Graphic organizer or outline has been started and includes some topics and subtopics.	Graphic organizer or outline has not been attempted.
Quality of Information	Information clearly relates to the main topic. It includes several supporting details and/or examples.	Information clearly relates to the main topic. It provides 1-2 supporting details and/or examples.	Information clearly relates to the main topic. No details and/or examples are given.	Information has little or nothing to do with the main topic.

Teacher Name: _____

Student(s) Name(s): _____

Powerpoint : Choosing a Railroad Route

CATEGORY	4	3	2	1
Content - Accuracy	All content throughout the presentation is accurate. There are no factual errors.	Most of the content is accurate but there is one piece of information that might be inaccurate.	The content is generally accurate, but one piece of information is clearly flawed or inaccurate.	Content is typically confusing or contains more than one factual error.
Originality	Presentation shows considerable originality and inventiveness. The content and ideas are presented in a unique and interesting way.	Presentation shows some originality and inventiveness. The content and ideas are presented in an interesting way.	Presentation shows an attempt at originality and inventiveness on 1-2 cards.	Presentation is a rehash of other people's ideas and/or graphics and shows very little attempt at original thought.
Effectiveness	Project includes all material needed to gain a comfortable understanding of the topic. It is a highly effective study guide.	Project includes most material needed to gain a comfortable understanding of the material but is lacking one or two key elements. It is an adequate study guide.	Project is missing more than two key elements. It would make an incomplete study guide.	Project is lacking several key elements and has inaccuracies that make it a poor study guide.
Use of Graphics	All graphics are attractive (size and colors) and support the theme/content of the presentation.	A few graphics are not attractive but all support the theme/content of the presentation.	All graphics are attractive but a few do not seem to support the theme/content of the presentation.	Several graphics are unattractive AND detract from the content of the presentation.