

Instructional Recipe

How Did Railroads Change Cities in Texas Forever?

4th Grade, Social Studies

Step 1 – Ask

Objectives:

Students will identify the impact of railroads on life in Texas.
Students will describe how railroads changed cities and industries in Texas.

Introduction: Show students a photograph of an old railroad, such as the one below.



“Train engine” Online Photograph. TIDES image collection. 29 June 2009 <http://tides.sfasu.edu:2006/u/?EastTexRC.76>

Ask:

- ★ Which Texas industries do you see in the picture?
- ★ Why do you think a railroad would have been built in this area?
- ★ Do you think this railroad had an impact on the land? Why or why not?

Vocabulary:

- ★ **depot** – a railroad station
- ★ **industry** – a making or producing of goods on a large scale by businesses and factories
- ★ **urbanization** – process by which cities grow or by which societies become more urban

TEKS:

(4.4C) identify the impact of railroads on life in Texas, including changes to cities and major industries.

(4.9C) analyze the consequences of human modification of the environment in Texas, past and present.

Technology Application TEKS:

4A Apply appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies

6A Apply critical analysis to resolve information conflicts and validate information

6B Determine the success of strategies used to acquire electronic information

6C Determine usefulness and appropriateness of digital information.

7A Use software programs with audio, video, and graphics to enhance learning experiences

7B Use appropriate software to express ideas and solve problems including the use of word processing, graphics, databases, spreadsheets, simulations, and multimedia

7C Use a variety of data types including text, graphics, digital audio, and video

10A Use font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience

10B Use font attributes, color, white space, and graphics to ensure that products are appropriate for the communication media including multimedia screen displays, Internet documents, and printed material

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

11B Use presentation software to communicate with specific audiences

Step 2 – Investigate

Search the K-12 databases, the Handbook of Texas Online, and the Texas Heritage Online databases for more information about railroads in Texas.

Texas Heritage Online

- ★ *[Grand Central Station in Houston, Texas]*. The Portal to Texas History. <http://texashistory.unt.edu/ark:/67531/metaph789/>. Accessed June 29, 2009.
- ★ *The City of Houston from Wilderness to Wonder*. The Portal to Texas History. <http://texashistory.unt.edu/ark:/67531/metaph46823/>. Accessed June 29, 2009.
- ★ *"Bremond, Paul."* *Biographical Encyclopedia of Texas*. New York. The Portal to Texas History. <http://texashistory.unt.edu/ark:/67531/metaph5827/>. Accessed June 29, 2009.
- ★ *Gulf and Brazos Valley Railroad Depot*. The Portal to Texas History. <http://texashistory.unt.edu/ark:/67531/metaph16246/>. Accessed June 30, 2009.

K12 Databases Search:

- ★ **"Texas and Pacific Railway Company."** Encyclopædia Britannica. 2009. Encyclopædia Britannica Online School Edition. 30 June 2009 <<http://school.eb.com/eb/article-9071880>>.
- ★ **"Southern Pacific Railroad."** Encyclopædia Britannica. 2009. Encyclopædia Britannica Online School Edition. 30 June 2009 <<http://school.eb.com/eb/article-9068923>>.
- ★ **"railroad."** Compton's by Britannica. 2009. Encyclopædia Britannica Online School Edition. 30 June 2009 <<http://school.eb.com/all/comptons/article-207163>>.


Websites:

- ★ Texas State Historical Association Handbook of Texas Online <http://www.tshaonline.org/handbook/online/articles/RR/eqr1.html>
- ★ Lindsley, Philip. *A history of greater Dallas and vicinity, Vol. 1.* p348-351, Chicago. The Portal to Texas History. <http://texashistory.unt.edu/ark:/67531/metaph21072/>. Accessed June 28, 2009.
- ★ Texas Railroad history <http://www.depots.txrrhistory.com/index.htm#anchor-h>
- ★ Texas State Railroad video - <http://www.texasstaterr.com/press.php>

Step 3 – Create

Students can work individually or with partners to create a chart that organizes information they learned about Texas railroads. Here are some suggested topics that could be included (you may choose to replace or add a railroad line to this chart):

| Research Categories | Buffalo Bayou, Brazos and Colorado Railway | Houston and Texas Central Railway | Galveston, Houston and Henderson Railroad |
|--|--|-----------------------------------|---|
| Industries affected by this railroad | | | |
| Urbanization – changes to cities located near railroad | | | |
| Success or failure to impact Texas | | | |

 Technology Link – Use a spreadsheet program, such as Microsoft Excel, or insert a table in a word processing document to create the table.



Step 4 – Discuss

Students may choose to complete one of the following projects:

- ★ Choose one railroad and **design a brochure** that explains why your railroad was a success or failure in the late 1800s to early 1900s. The explanation should include evidence to describe how cities were improved or modified as a result of the building of railroads. Be sure to include images as evidence to explain why your chosen railroad was successful.
- ★ Choose a city such as Houston, Dallas, Fort Worth, or San Antonio. **Create a commercial** that advertises how industry was improved or harmed with the introduction of railroads in the late 1800s to early 1900s.

🔗 Technology Link – Use a word processing or desktop publishing program, such as Microsoft Publisher, to produce the brochure or script for the commercial. Use the Texas Heritage Online or EBSCO image collection to locate graphics about Texas railroads. If you have a video camera, you could videotape and edit the commercials using Windows Movie Maker, iMovie, or other editing program.



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>.

Making A Brochure : Texas Railroads Brochure

Teacher Name: _____

Student/Group Name: _____

| CATEGORY | 4 | 3 | 2 | 1 |
|-------------------------------|--|---|--|--|
| Knowledge Gained | All students in the group can accurately answer all questions related to facts in the brochure and to technical processes used to create the brochure. | All students in the group can accurately answer most questions related to facts in the brochure and to technical processes used to create the brochure. | Most students in the group can accurately answer most questions related to facts in the brochure and to technical processes used to create the brochure. | Several students in the group appear to have little knowledge about the facts or technical processes used in the brochure. |
| Content - Accuracy | All facts in the brochure are accurate. | 99-90% of the facts in the brochure are accurate. | 89-80% of the facts in the brochure are accurate. | Fewer than 80% of the facts in the brochure are accurate. |
| Attractiveness & Organization | The brochure has exceptionally attractive formatting and well-organized information. | The brochure has attractive formatting and well-organized information. | The brochure has well-organized information. | The brochure's formatting and organization of material are confusing to the reader. |
| Writing - Organization | Each section in the brochure has a clear beginning, middle, and end. | Almost all sections of the brochure have a clear beginning, middle and end. | Most sections of the brochure have a clear beginning, middle and end. | Less than half of the sections of the brochure have a clear beginning, middle and end. |

Creating a Commercial: Texas Railroads

Teacher Name: _____

Student/Group Name: _____

| CATEGORY | 4 | 3 | 2 | 1 |
|----------------|---|---|---|---|
| Preparedness | Student is completely prepared and has obviously rehearsed. | Student seems pretty prepared but might have needed a couple more rehearsals. | The student is somewhat prepared, but it is clear that rehearsal was lacking. | Student does not seem at all prepared to present. |
| Stays on Topic | Stays on topic all (100%) of the time. | Stays on topic most (99-90%) of the time. | Stays on topic some (89%-75%) of the time. | It was hard to tell what the topic was. |
| Content | Shows a full understanding of the topic. | Shows a good understanding of the topic. | Shows a good understanding of parts of the topic. | Does not seem to understand the topic very well. |
| Time-Limit | Presentation is 5-6 minutes long. | Presentation is 4 minutes long. | Presentation is 3 minutes long. | Presentation is less than 3 minutes OR more than 6 minutes. |