Instructional Recipe Did the oil "boom" bust the environment in Texas? Grade 7, Texas History



Online research and information resources available through a partnership between the Texas State Library and Archives Commission, the Texas Education Agency and Education Service Center, Region 20 http://web.esc20.net/k12databases

Step 1 – Ask

Objectives:

Students will trace the impact of the "boom-and-bust" cycles of Texas oil production on the environment in the early 20th century.

Introduction:



http://www.tsl.state.tx.us/exhibits/railroad/oil/rangergusher.html

Ask:

- ★ How did the "boom-and-bust" cycle of oil production impact the environment?
- ★ What does the picture above reveal about the technological limitations of dealing with oil production (or oil waste) in the early days of the oil industry in Texas?
- ★ Can you think of some positive and negative consequences of oil production on the environment in Texas?

Vocabulary:

- ★ "boom-and-bust" cycle economic cycle of rapid growth in production ("boom") and rapid decreases in production ("bust") in the Texas oil industry
- gusher when petroleum bursts through an oil drilling rig

TEKS:

(7.7A) define and trace the impact of "boom-and-bust" cycles of leading Texas industries throughout the 20th and early 21st centuries such as farming, oil and gas production, cotton, ranching, real estate, banking, and computer technology.

(7.10A) 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.

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 2 – Investigate

Texas State Library and Archives Resources:

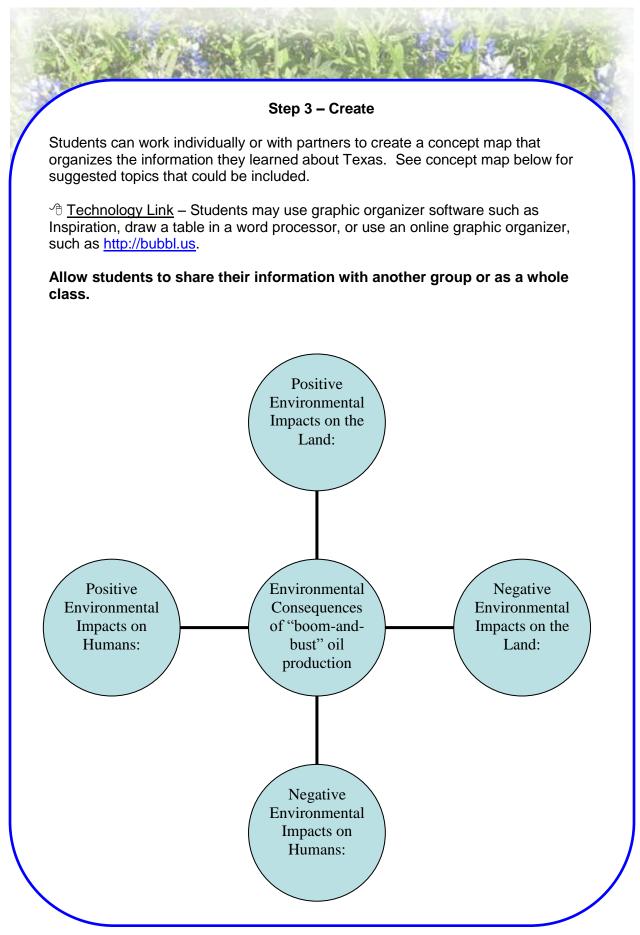
- * "The Oil Wars": http://www.tsl.state.tx.us/exhibits/railroad/oil/page2.html
- ★ W.D. Hornaday Collection, Prints and Photographs Collection, Archives and Information Services Division, Texas State Library and Archives Commission. 1975/70-3617. "Ranger Going Over the Top": <u>http://www.tsl.state.tx.us/exhibits/railroad/oil/ranger-gusher.html</u>
- ★ W.D. Hornaday Collection, Prints and Photographs Collection, Archives and Information Services Division, Texas State Library and Archives Commission. 1975/70-3660. "Flow Tank On Fire Near Eastland": <u>http://www.tsl.state.tx.us/exhibits/railroad/oil/eastlandfire.html</u>
- Prints and Photographs Collection, Archives and Information Services Division, Texas State Library and Archives Commission. 1990/101-2. "Waste Oil Ditch and Oil-Soaked Ground": http://www.tsl.state.tx.us/exhibits/railroad/oil/westcolumbia.html

EBSCO Resources:

- ★ Stone, Ron. "JUNE 21, 1917." Book of Texas Days (1984): 109. Texas Reference Center. EBSCO. Web. 22 Nov. 2010. <u>http://search.ebscohost.com/login.aspx?direct=true&db=tih&AN=21474711&si</u> <u>te=src-live</u>
- ★ Moore, Sarah. "Officials say oil, marshes didn't mix; booms placed along McFaddin to keep it that way." *Beaumont Enterprise, The (TX)* 14 July 2010: *Newspaper Source*. EBSCO. Web. 22 Nov. 2010. <u>http://search.ebscohost.com/login.aspx?direct=true&db=nfh&AN=2W6357533</u> <u>2489&site=src-live</u>

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? (how the boom-and-bust cycle of oil production impacts the environment)
- ★ Which sources support your original thoughts about the topic?



Created by Ravae Villafranca Shaeffer, Education Service Center, Region 20

Step 4 – Discuss

Students may choose one of the following projects to complete:

- ★ Oil was recently discovered near your land. As a landowner, you are concerned that your source of water will be affected by the oil drilling in your area. Develop and deliver a story board for a presentation of your case to a judge who has to decide how the oil company will make amends for the consequences of drilling near your water source. Be sure to explain the positive and negative environmental consequences of oil production on the community during the boom-and-bust cycle. Be sure to include images in your presentation that will help support your main points in the presentation.
- ★ Pretend you are the lawyer for the oil company who is drilling near a water source for local landowners. Write and present an oral report to the local landowners to explain the positive impacts of drilling on the city as well as how the company plans to deal with the negative impacts of drilling in the area. Be sure to include images that will help to show a community what happens to the environment over time when a drilling rig begins pumping oil from the ground. In addition, explain how the company will deal with these negative impacts.

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.

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

Teacher Name:_____

Student(s) Name(s): _____

CATEGORY 4 3 2 1 Content Shows a full Shows a good Shows a good Does not seem understanding of understanding of understanding of to understand the topic. the topic. parts of the topic. the topic very well. Stays on Topic Stays on topic all Stays on topic It was hard to Stays on topic (100%) of the most (99-90%) of some (89%-75%) tell what the the time. of the time. time. topic was. Vocabulary Uses vocabulary Uses vocabulary Uses vocabulary Uses several (5 appropriate for appropriate for appropriate for or more) words the audience. the audience. the audience. or phrases that Extends audience Includes 1-2 Does not include are not vocabulary by words that might any vocabulary understood by defining words be new to most of that might be new the audience. that might be new the audience, but to the audience. to most of the does not define audience. them. Comprehension Student is able to Student is able to Student is able to Student is accurately answer accurately answer accurately answer unable to a few questions almost all most questions accurately posed by questions posed posed by answer by classmates classmates about classmates about questions posed by classmates about the topic. the topic. the topic. about the topic. Preparedness Student is Student seems The student is Student does not completely somewhat seem at all pretty prepared prepared and has but might have prepared, but it is prepared to obviously needed a couple clear that present. rehearsed. more rehearsals. rehearsal was lacking.

Oral Presentation Rubric: Oil Company Address to the Local Landowners

Teacher Name:_____

Student(s) Name(s): _____

CATEGORY	4	3	2	1
Environmental Impacts	Storyboard included several positive and negative impacts of oil production on the environment.	Storyboard included some positive and negative impacts of oil production on the environment.	Storyboard included several positive and negative impacts of oil production on the environment.	Storyboard included few positive and negative impacts of oil production on the environment.
Required Elements	Storyboard included all required elements as well as a few additional elements.	Storyboard included all required elements and one additional element.	Storyboard included all required elements.	One or more required elements was missing from the storyboard.
Clarity and Neatness	Storyboard is easy to read and all elements are so clearly written, labeled, or drawn that another student could create the presentation if necessary.	Storyboard is easy to read and most elements are clearly written, labeled, or drawn. Another person might be able to create the presentation after asking one or two questions.	Storyboard is hard to read with rough drawings and labels. It would be hard for another person to create this presentation without asking lots of questions.	Storyboard is hard to read and one cannot tell what goes where. It would be impossible for another person to create this presentation without asking lots of questions.
Content	All content is in the students' own words and is accurate.	Almost all content is in the students' own words and is accurate.	At least half of the content is in the students' own words and is accurate.	Less than half of the content is in the students' own words and/or is accurate.

Storyboard Rubric: Case for a Landowner Impacted by Drilling