

Lesson Overview:

How did the Spindletop discovery change Texas?

In this hands-on, technology-rich lesson, students will investigate the rise of Texas's oil industry, focusing on the Spindletop oil discovery and the rapid industrialization that followed. Through interactive games, collaborative infographics, and exploration of key inventions and individuals, students will understand how the oil boom changed city life, business, and science in Texas. Students will simulate an oil economy, build digital timelines, and explore the connections between scientific discovery and social change.

Objectives

SWBAT (Students Will Be Able To):

- Explain how the discovery at Spindletop led to growth in Texas.
- Identify one invention or innovation that supported industrialization.
- Describe how cities in Texas were impacted by the oil boom.

Social Studies TEKS

- **4.5(A)** Explain the impact of various events on life in Texas such as the Great Depression, the Dust Bowl, and World War II and notable individuals such as Audie Murphy, Cleto Rodríguez, and Bessie Coleman.
- **4.5(B)** Explain the development and impact of the oil and gas industry on industrialization and urbanization in Texas, including Spindletop and important people such as Pattillo Higgins.
- **4.18(A)** Identify famous inventors and scientists such as Gail Borden, Joseph Glidden, Michael DeBakey, and Millie HughesFulford.
- **4.18(B)** Describe how scientific discoveries and innovations such as in aerospace, agriculture, energy, and technology have benefited individuals, businesses, and society in Texas.

Materials

- Projector or screen
- YouTube videos covering the Oil Boom
- Timeline template (print or digital)
- Pre-cut timeline event cards with images and dates
- Vocabulary word cards (Spindletop, Industrialization, Innovation)
- Exit ticket slips or Google Form

Vocabulary

1. **Industrialization** (*noun*): the growth of factories and machine-based jobs.
2. **Spindletop** (*noun*): the Texas oil field that started the oil boom in 1901.
3. **Innovation** (*noun*): a new idea, method, or device that solves something.
4. **Entrepreneur** (*noun*): a person who starts a new business.
5. **Energy** (*noun*): the resources needed to produce power.

Pacing Guide

Activity	Time	Purpose
1. Hook: Oil Changes Everything	10 min	Build curiosity and background
2. Explore: What Happened at Spindletop?	20 min	Understand Spindletop's impact
3. Main Activity: Build a Timeline	25 min	Connect oil, inventions, and city growth
4. Exit Ticket	5 min	Assess understanding

Hook – “What Happens When Oil Changes a Town?”

Time: 10 minutes

Instructions:

1. Project 2–3 historical photos (e.g., Spindletop gusher, early 1900s Texas city).
 - o Show a short video: [Texas History for Teachers - Preview of Age of Oil](#)
2. Lead a [Think-Pair-Share](#) discussion:
 - o “What do you see?”
 - o “Why might oil discoveries change a town?”
 - o “What do you think would happen next?”

Accommodations:

- **ESL/ELL:** Provide photo labels and sentence stems (e.g., “I see ____.” “I think oil might ____.”)
- **SPED:** Limit number of photos; offer sentence starters and repeat key ideas aloud.
- **GT:** Ask for deeper connections: “What might happen to other towns nearby?”

Explore – “What Happened When Oil Boomed?”

Time: 15 minutes

Instructions:

1. Watch a short video about the beginnings of the oil industry influence in Texas.
 - o [The Historic Bankhead Highway](#)
2. Ask guiding questions to class:
 - o “How did oil change the town?”
 - o “What new opportunities or problems came with oil?”

3. Introduce these 3 vocabulary words (write on board or display):
 - **Industrialization** (*noun*): the growth of factories and machine-based jobs.
 - **Spindletop** (*noun*): the Texas oil field that started the oil boom in 1901.
 - **Innovation** (*noun*): a new idea, method, or device that solves something.

Accommodations:

- **ESL/ELL:** Provide bilingual vocabulary cards with visuals; offer glossary.
- **SPED:** Use shortened, leveled text; highlight key sentences; read aloud in small groups.
- **GT:** Ask for connections to other major discoveries in history (e.g., gold rush, railroad).

Main Activity – Build a Timeline

Time: 20 minutes

Instructions:

1. Group students in pairs or trios.
2. Give each group:
 - 1 timeline template (printed or in Google Slides)
 - 3 event cards (each with a year, image, and short caption), including:
 - 1901 – Spindletop
 - Invention (e.g., barbed wire or drilling equipment)
 - Growth of a Texas city (e.g., Houston)
3. Students will:
 - Place events in chronological order on their timeline
 - For each card, students will discuss and answer the following question in their groups: *“How do you think this helped Texas grow?”*
4. Share 1 timeline highlight your group discussed with the class.

Accommodations:

- **ESL/ELL:** Use picture-supported event cards; provide sentence frames: *“In [year], _____ happened. It helped Texas by _____.”*
- **SPED:** Offer fewer event cards; assign peer buddy to assist; use large-print templates.
- **GT:** Add a “bonus card” about a lesser-known inventor or city and explain their contribution.

Exit Ticket – Wrap-Up Reflection

Time: 5 minutes

Instructions:

Distribute the following question (on paper or digital):

“How did Spindletop help change Texas in the early 1900s?”

- Students respond using 2–3 sentences, on specific example, and at least one vocabulary word.

Accommodations:

- **ESL/ELL:** Provide sentence starter: *“Spindletop changed Texas because _____. One example is _____.”*
- **SPED:** Allow verbal response or draw a picture with a caption.
- **GT:** Ask them to predict how Texas might look *without* the oil boom.

Accommodations:

ESL/ELL	<ul style="list-style-type: none">• Photo labels• Sentence stems for discussions and timeline responses• Bilingual vocabulary cards with visuals• Sentence starter for exit ticket
SPED	<ul style="list-style-type: none">• Sentence starters• Shortened or leveled reading text with highlighted key sentences• Fewer event cards for the timeline activity• Peer buddy support or Small-group read-aloud support• Option for verbal response or drawing with caption on exit ticket
GT	<ul style="list-style-type: none">• Deeper discussion questions about impacts on nearby towns• Connections to other historical discoveries (e.g., gold rush, railroad)• Prediction question about how Texas might look without the oil boom
Visual Learners	<ul style="list-style-type: none">• Historical photos and videos about the topic• Picture-supported event cards for the timeline activity• Visual vocabulary cards for key terms
Kinesthetic Learners	<ul style="list-style-type: none">• Hands-on timeline building with physical event cards• Interactive mapping and design activities in extension tasks

Additional Activity Ideas

Critical Thinking Activities

- **“Boom or Bust” Reflection Journal:** After participating in the oil economy simulation, students will write a first-person journal entry imagining life during the Texas oil boom. They’ll reflect on the experience of discovering oil, the rapid changes in their town, and the economic risks involved. Using historical vocabulary and at least three factual references from the lesson (e.g., Spindletop, city growth, inventions), students will bring the oil boom to life from a personal perspective. This creative writing task deepens understanding through empathy and narrative thinking and may be submitted via Google Docs or on paper.
- **“What If Spindletop Never Happened?” Group Discussion:** In small discussion groups, students will explore a counterfactual scenario: *What if oil had never been discovered at Spindletop?* They’ll brainstorm how this might have changed Texas’s economy, transportation, and city development. Each group will create a short “alternate history”

presentation slide using Microsoft PowerPoint or Google Slides, summarizing their conclusions. This activity challenges students to evaluate the oil industry's real impact by imagining its absence and encourages collaboration and higher-level reasoning.

Problem-Based Learning Activities

- **“Invent the Next Big Thing” Simulation:** Students will take on the role of Texas inventors living in the early 1900s and identify real problems boomtowns faced, such as traffic congestion, pollution, or unsafe working conditions. In teams, they will brainstorm and “invent” a tool, product, or process that could have solved that problem at the time. Teams will create a promotional pitch using Canva or poster boards, explaining how their invention would benefit the town, its workers, or the oil industry. This real-world problem-solving task encourages innovation and practical thinking.
- **“Design a Boomtown” Mapping Challenge:** Working in groups, students will receive a blank Texas map and a set of moveable icons (oil rigs, homes, schools, roads, factories, etc.). Their challenge is to design a balanced, functional boomtown during the oil rush. Using Google Slides or a printed map, students will make key placement decisions and justify their city plan in a short presentation to the class. This hands-on activity reinforces geography, urban planning concepts, and the economic and social consequences of industrial growth.

State Historic Site Connection

- **[The Varner-Hogg Plantation \(1824\)](#):** Students will research existing historical markers related to the Texas oil boom (e.g., Spindletop, Pattillo Higgins) and summarize the information found on those markers. Using reliable sources, students will identify the location, key details included in the marker inscriptions, and any accompanying visuals such as maps or archival images. This activity emphasizes research skills, summarization, and an understanding of how public history is currently commemorated.

Texas Historical Commission Activity

- **Historical Markers:** Students will research existing historical markers related to the Texas oil boom (e.g., Spindletop, Pattillo Higgins) and summarize the information found on those markers. Using reliable sources, students will identify the location, key details included in the marker inscriptions, and any accompanying visuals such as maps or archival images. This activity emphasizes research skills, summarization, and an understanding of how public history is currently commemorated.

Resources

University of North Texas Libraries. "Texas History for Teachers - Preview of Age of Oil." *YouTube*, 30 Apr. 2025, www.youtube.com/watch?v=XleoHxPy5dQ&list=PLjdZcAp5Ay1vL38gh9BlqN8LYslNZ2wIK&index=4.

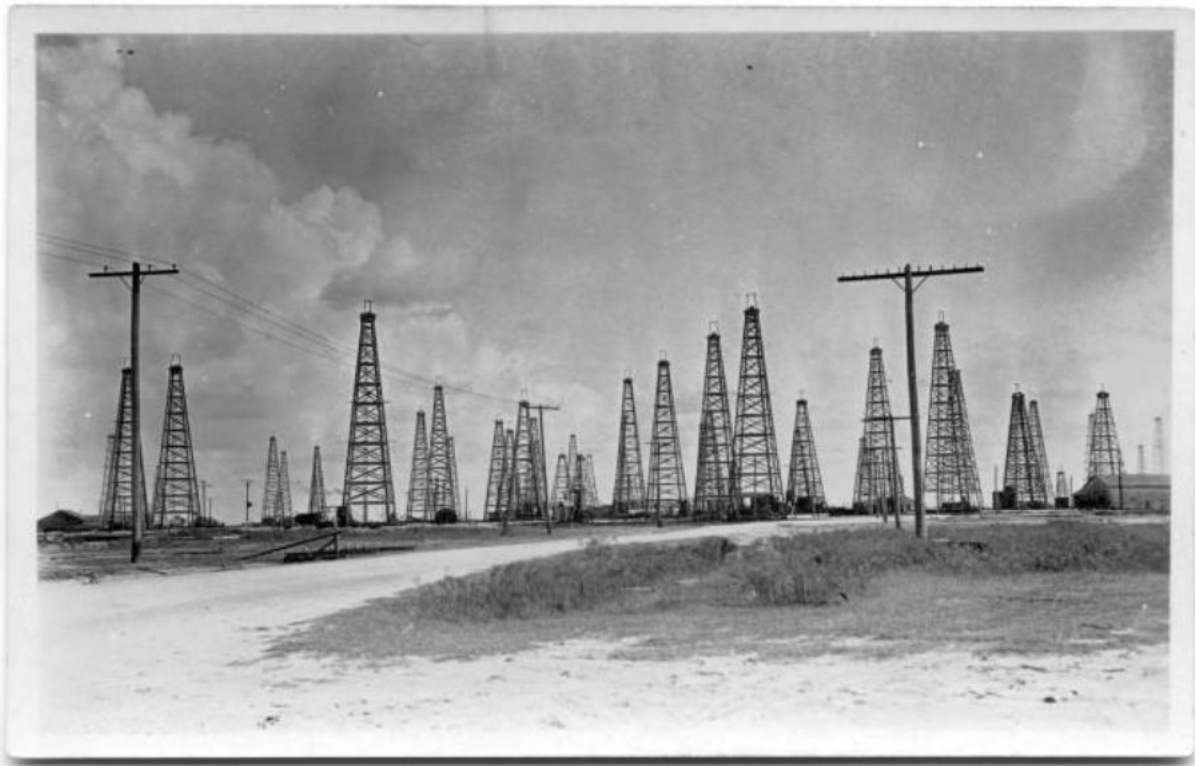
---. "The Historic Bankhead Highway." *YouTube*, 7 Oct. 2015, www.youtube.com/watch?v=QsOHlOu7NNQ.

---. "Explore the Varner-Hogg Plantation." *YouTube*, 16 Nov. 2015, www.youtube.com/watch?v=3Jf8ltolFnc.

"Varner-Hogg Plantation | Texas Historical Commission." *Texas.gov*, 25 Oct. 2025, <https://thc.texas.gov/historic-sites/varner-hogg-plantation>.



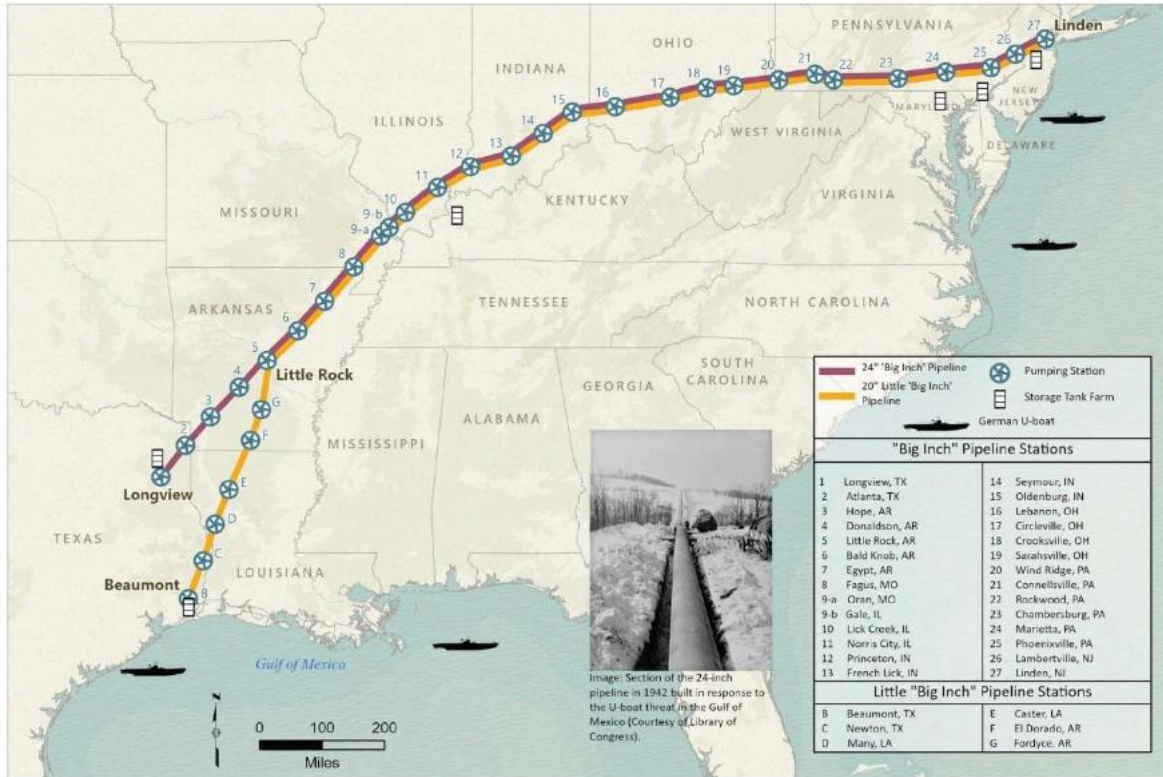
"The Lucas Gusher, 1901." The Portal to Texas History, 19 Aug. 2025, texashistory.unt.edu/ark:/67531/metapth41398/?q=lucas%20gusher, local-cont-no: AR406-5-20-8_01.



“[View of Spindletop].” *The Portal to Texas History*, 19 Aug. 2025,
texashistory.unt.edu/ark:/67531/metaph202335/?q=spindletop, local-cont-no: MGC_2009-8-10-9.



Big Inch and Little Big Inch Pipelines 1942 - 1943



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Texas, Historic. "Big Inch and Little Big Inch Pipelines." *Historic Texas Maps*, 2022, historictexasmaps.com/collection/search-results/97089-big-inch-and-little-big-inch-pipelines-gis-educational-maps.



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