

TEKS Cluster: Age of Oil

7.7 History. The student understands how individuals, events, and issues shaped the history of Texas during the late 19th, 20th, and early 21st centuries.

Connected Knowledge and Skills 7.1, 7.10, 7.11, 7.12, 7.19

Boom and Bust: Oil

- ❖ 7.7(A) explain how the oil industry led to the industrialization of Texas
- 7.12(B)* explain the impact of economic concepts within the free enterprise system such as supply and demand, profit, and world competition on the economy of Texas
Readiness Spiral Standards: 7.1(A), 7.9(A), 7.11(A)
- 7.1(B) explain the significance of the following dates: ... 1901, discovery of oil at Spindletop *Spiral Standard*
- 7.7(B) 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
- 7.12(A) explain the impact of national and international markets on the production of goods and services in Texas, including ... oil and gas
- 7.19(B) identify Texas leaders in science and technology such as ... Howard Hughes Sr.
Supporting Spiral Standard: 7.19(D)

Urbanization

- ❖ 7.11(A)* explain economic factors and the development of major industries that led to the urbanization of Texas such as transportation, oil and gas, and manufacturing *Spiral Standard*
- 7.10(D) analyze the effects of the changing population distribution and growth in Texas and the additional need for education, health care, and transportation
- 7.11(B) explain the changes in the types of jobs and occupations that have resulted from the urbanization of Texas
Supporting Spiral Standards: 7.8(A), 7.9(B)

Progressivism and Populism

- ❖ 7.7(C)* describe and compare the impact of reform movements in Texas in the 19th and 20th centuries such as progressivism, populism, women’s suffrage, agrarianism, labor reform ...
Readiness Spiral Standard: 7.16(A)

World War I

- ❖ 7.7(E)* analyze the political, economic, and social impact of major events, including World War I, ... on the history of Texas
Supporting Spiral Standards: 7.19(A), 7.19(D)

Student Expectations

- ❖ 7.7(A) explain how the oil industry led to the industrialization of Texas (R)
- 7.12(B)* explain the impact of economic concepts within the free enterprise system such as supply and demand, profit, and world competition on the economy of Texas (R)
- 7.1(B) explain the significance of the following dates: ... 1901, discovery of oil at Spindletop *Spiral Standard* (S)
- 7.7(B) 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, ... (S)
- 7.12(A) explain the impact of national and international markets on the production of goods and services in Texas, including ... oil and gas (S)
- 7.19(B) identify Texas leaders in science and technology such as ... Howard Hughes Sr. (S)

Connected Spiral Standards

- identify the major eras in Texas history, describe their defining characteristics, and explain the purpose of dividing the past into eras, including ... Age of Oil ... 7.1(A)
- identify ways in which Texans have adapted to and modified the environment and explain the positive and negative consequences of the modifications 7.9(A)*
- explain economic factors and the development of major industries that led to the urbanization of Texas such as transportation, oil and gas, and manufacturing 7.11(A)*
- evaluate the effects of scientific discoveries and technological innovations on the use of resources such as fossil fuels, water, and land 7.19(D)*

Academic Vocabulary

Vocabulary			Terms
boom-and-bust cycle	inflation	profit	1901 Howard Hughes Sr. Lucas Gusher Spindletop
Boomtown	interdependence	prosperity	
competition	markets (local, state, national, international)	recession	
deflation		recovery	
depression		regulation	
fossil fuels	production of goods and services	supply and demand	
historical turning point			
industry			

Stimulus

Speech/Journal/ Diary	Letter/ Newspaper Article	Government Document	Secondary Source Text
Photograph/ Painting	Political Cartoon/ Advert./Other	Map	Chart/Table
Graph	Graphic Organizer	Bulleted List of Facts	Timeline

Learning from Mistakes

Students may make the following mistakes:

- Not understanding that, in some ways, the technology of drilling for petroleum outpaced the technology for the use of fossil fuels in the early years
- Confusing key economic terms such as goods, services, supply and demand, profit, competition, markets, etc. (examples in the Content Builder section)

Content Builder

- The Texas Oil Boom:
 - In January 1901, Spindletop (near Beaumont) became the site of the first major oil discovery in Texas. The subsequent oil boom that followed shaped economic, social, and political life in Texas and the United States well into the 21st century. After Spindletop, oil became one of the defining elements of Texas. Its importance surpassed cattle and cotton and moved Texas into a position of leadership in the United States and the world. This discovery helped fuel the shift to urbanization as industries grew and large urban centers, such as Houston and Dallas, developed.
 - Boomtowns sprung up across Texas as oil was discovered in East Texas, the Permian Basin, the Panhandle, and later in offshore drilling. Additionally, refineries, pipelines, wildcatters (e.g., “Dad” Joiner in East Texas), and the image of Texas as an oil state defined Texas during this economic boom.
 - Howard Hughes Sr. developed oil field technology, including improved drill bits.
 - The oil industry directly affected industrialization across the United States as oil was used for everything from lubricating machinery to fueling automobiles, planes, and homes. As the supply of oil increased, so did the demand as innovative uses for oil in industries were rapidly developing and improving.
- Free Enterprise Economics:
 - Students need to understand the concepts of interdependence, supply and demand, profit, and competition and how they affect the economy.
 - In a free enterprise system, individuals have the right to choose jobs/professions, ownership of private property, limited government involvement (free markets), competition, profit motive, and consumer freedom of choice.
 - The Texas economy is linked (interdependent) with the economy of the United States and the world. Students analyze the impact of national and international markets on the production of goods and services specifically in Texas agriculture, oil/gas, and computer technology industries.
 - The business cycle is a continuous expansion and contraction of the economy (also known as the boom-and-bust cycle) and affects production, consumption, prices, employment, and growth.
 - “Boom” (peak) – high employment, high production, stable prices, prosperity
 - Recession (contraction) – declining employment, declining prices, decreasing production
 - Depression (trough)
 - “Bust” – a period of low employment, low prices, low production
 - Recovery (expansion) – increasing production, rising employment, general optimism about the future
 - Inflation – a period of generally rising prices during which the value of the dollar is declining and therefore buys less
 - Deflation – a period of generally declining prices during which the value of the dollar increases and buys more

Instructional Implications

When you teach Boom and Bust: Oil, remember to:

- Provide a real-world connection to introduce this cluster. Brainstorm a list of the ways students use various petroleum products including oil, gasoline, natural gas, plastics, and medicines.
- Use primary source photos of Spindletop and the ensuing oil boom in East Texas to allow students to interpret and draw conclusions regarding PEGS connections and the importance of the oil boom in Texas history.
- Use a concept web detailing the PEGS effects on the rise of businesses, industries, and people affected by the discovery and production of oil in Texas so students expand their thinking beyond the initial discovery of oil to the impact of oil on industrialization in both Texas and the United States. Include effects such as refineries, pipelines, new oil fields, oil field technology (e.g., drilling rigs), critical role of oil in cities such as Houston or Midland and other parts of West Texas, oil and gas companies such as Texaco, rise of new oil millionaires, etc. Film clips from the movie *Giant* illustrate the shift in economic power from cattle to oil and the social effects of that transition on life in Texas.
- Apply and analyze how the characteristics of the free enterprise system impact the types of industries and goods and services that form the basis of the Texas economy. Analyze the economic impact of key Texas industries using economic statistics from the Census Bureau. Discuss how Texas industries are linked to the United States and world markets.
- By providing specific dates, students can use absolute chronology to associate the dates of significant events in Texas history as defining points of the various eras. Explain orally and/or in writing the significance of the date and how that event supports the era in which it occurred.
- Apply the boom-and-bust cycle to the major Texas industries cited in the cluster. Beginning with the critical date of the discovery of oil at Spindletop in 1901, determine how the stages of the business cycle affected the oil and gas industry. Using this industry as a model, have students trace the bust that originally occurred when there was a glut of oil and no real use for the commodity, followed by a boom in the industry as automobiles, planes, and other industry-related machinery increased the need for petroleum products. Discuss the impact of international events, including World War I and World War II, on consumers and increased demand. Students may research further tracing the 1980s downturn and subsequent 21st century boom.
- Note how the role of government regulations and increased restrictions on environmental standards affect the business cycle.

Student Expectations

- ❖ 7.11(A)* explain economic factors and the development of major industries that led to the urbanization of Texas such as transportation, oil and gas, and manufacturing *Spiral Standard (R)*
- 7.10(D) analyze the effects of the changing population distribution and growth in Texas and the additional need for education, health care, and transportation (R)
- 7.11(B) explain the changes in the types of jobs and occupations that have resulted from the urbanization of Texas (S)

Connected Spiral Standards

- locate and compare the Mountains and Basins, Great Plains, North Central Plains, and Coastal Plains regions 7.8(A)
- explain ways in which geographic factors such as the Galveston Hurricane of 1900, ... limited water resources, and alternative energy sources have affected the political, economic, and social development of Texas 7.9(B)

Academic Vocabulary

Vocabulary		Terms
agrarian economy	population distribution	United States as a world power
immigration	population density	
manufacturing	push and pull factors	
migration	rural	
mixed economy	urban society	
occupation	urbanization	

Stimulus

Speech/Journal/ Diary	Letter/ Newspaper Article	Government Document	Secondary Source Text
Photograph/ Painting	Political Cartoon/ Advert./Other	Map	Chart/Table
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Learning from Mistakes

Students may make the following mistakes:

- Assuming that rural families moved to the cities just for manufacturing jobs
- Interpreting actual numbers reflected in growth statistics and/or using that data to analyze/predict possible effects of population growth

Content Builder

- In this cluster, students analyze the effects of changing population distribution and population growth in Texas beginning in the 19th century and the effects that extend to the 21st century (revisited in a later cluster). Using the conceptual idea of change over time, students examine patterns, including migration, immigration, population density, population distribution, and growth. Thorough analysis should lead to predicting consequences of growth patterns, including the need for additional services such as education, health care, and transportation systems.
- It is important to unpack the relationships between a growing population and the needs that have to be met by varying industries including education, healthcare, and transportation. Make several connections to push and pull factors (6th grade) that drive urbanization.
- The Galveston Hurricane of 1900 is an excellent example of geographic factors that forced geographic and economic change in one of Texas' growing urban areas.
- At the end of the 19th and turn of the 20th centuries, Texas had a small manufacturing economy. With the rise of the United States as a world power and involvement in early 20th century wars, demand for Texas commodities increased the necessity of industrial production. By examining the economic changes in Texas, students explain factors such as increased manufacturing, changing modes of transportation, rural to urban migrations, the necessity of an increased urban population to support increased manufacturing, and the shift from a primarily agrarian economy to a mixed (industrial/agricultural) economy. Urbanization in Texas was a steady shift over time, accelerated by immigration and developments in technology. At the turn of the century, two-thirds of Texans were still living in rural areas, and less than 20 percent of the total population lived in towns greater than 10,000 residents. Only Dallas, Fort Worth, Houston, and San Antonio had more than 50,000 residents. Of those living in rural areas, almost 50 percent of the farmers were tenement or sharecroppers living in high poverty. By 1920, the population of Texas increased by 35 percent, though the number of tenement farmers and sharecroppers was slightly higher.

Instructional Implications

When you teach Urbanization, remember to:

- Use a timeline to make intentional connections to previous clusters, noting the cause and effect relationships in the major industries across Texas (agriculture, oil, and railroads). For example, as the cotton and cattle industries transformed from single-family business into highly mechanized commercial industries, many families moved closer to the cities where a growing sector of industrial, retail, and banking jobs were more readily available. The oil boom not only created production-level jobs in drilling (Boomtowns) and refining, but resulted in hundreds of diverse uses in rapidly developing industries. Note the relationship between profitable industries and the general benefits of a growing economy to other industries.
- Provide access to census data, graphs, and population distribution and density maps and have students analyze changing population distributions and growth in Texas. Population data in both table and graph form is available from the U.S. Census Bureau and other sources. This is a perfect opportunity to introduce population pyramids and predict future needs in education, health care, housing, or transportation systems.
- Sketch a map of Texas showing population centers greater than 50,000 people along with icons representing major industries in each region.
- As students examine the population growth data for Texas, reinforce the shift from rural to urban at the turn of the century. Use data to analyze periods of high immigration and population migrations within the state. Place these patterns on a timeline and draw conclusions related to the development of agriculture, oil, and transportation.
- Examine primary source photos or maps of major cities such as Houston, Dallas, or San Antonio (or historical maps of your own area) and allow students to explain changes and challenges in these urban areas. Historic and contemporary photos and maps are available from multiple online sources.

Student Expectations

- ❖ 7.7(C)* describe and compare the impact of reform movements in Texas in the 19th and 20th centuries such as progressivism, populism, women's suffrage, agrarianism, labor reform ... (S)

Connected Spiral Standards

- identify different points of view of political parties and interest groups on important Texas issues, past and present 7.16(A)*

Academic Vocabulary

Vocabulary	Terms
agrarianism labor reform labor unions reform movements women's suffrage	early 20th century Populists/Populism Progressives/Progressivism

Stimulus

Speech/Journal/ Diary	Letter/ Newspaper Article	Government Document	Secondary Source Text
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Learning from Mistakes

Students may make the following mistakes:

- Confusing Progressivism with Populism
- Not understanding the urban impact in the northeastern United States was significantly different than that in Texas urban areas

Content Builder

- This cluster helps students to recognize further patterns of change that concurrently exist with other PEGS factors. While the previous clusters in this unit focused on reasons for geographic and economic change in Texas, this cluster focuses on cultural and political changes. Texas often represents a microcosm of the greater United States. In the early 20th century, as Progressivism, Populism, labor reforms, and women's suffrage took center stage in political debate in major urban areas in the United States, the developing urban areas in Texas echoed (to a lesser degree) some of the same sentiments.
- In the early 20th century, Texas was still predominantly agricultural with two-thirds of the residents living in rural areas. Almost 50 percent of farmers in Texas were tenement or sharecroppers generally living in poverty. The population increased rapidly in the early 20th century as a result of booming economic industries (cotton, cattle, oil, railroads, and early manufacturing), and urbanization brought new social and political debates.
 - Progressive reforms – Prohibition was one of the most prominent reform debates in Texas, coinciding with the national debate. Alcohol, strongly associated with immoral behavior (social ills), was already banned in dry counties primarily in North Texas. Other reforms included changes in city government structure (such as commission-form in Galveston following the Hurricane of 1901), banking, labor, and Terrell laws governing election procedures.
 - Populists – In Texas, agrarian reform movements were known as, "The People's Party," or Populism. This third party was a result of a split in the Democratic party primarily over the availability of currency (support for a sub-treasury plan where the money supply would be determined by need and not the availability of gold or silver) and commodity loans to farmers. Other issues included direct election of senators (influenced the 17th Amendment), referendum, recall, and tax reform (graduated income tax influenced the 16th Amendment). The short-lived party launched in the late 19th century appealed to the "common man," and called for public ownership of major transportation and communication industries (e.g., railroads and telegraphs). Though the influence of the Populists died out by 1900, many of the demands for reform influenced the Progressives in the early 20th century.
 - Women's suffrage – Though not the first group to seek women's suffrage in Texas, the Texas Women's Suffrage Association (Texas Equal Suffrage Association) in 1912 gained traction primarily due to the national emphasis on women's suffrage. A threatening attempt to impeach Governor Ferguson because of fierce opposition to women's suffrage gained the attention and action needed to put a women's primary suffrage bill in the Texas Legislature. When the federal amendment did not pass in Congress in 1918, increased lobbying efforts in Texas resulted in the Texas Legislature becoming the first southern state to ratify the 19th Amendment in 1919. The Texas Equal Suffrage Association became the League of Women Voters.
 - Agrarianism – Southern Farmer's Alliance and The Grange/Patrons of Husbandry were founded in the late 19th century to advance methods of agriculture. These groups resulted in political action groups such as the Greenbacks, Populism, and later, Progressivism.
 - Labor reform – Texas did not become a "right to work" state until 1947, and various labor unions were present (e.g., the Knights of Labor, divisions of the AFL-CIO, and the Texas Farmer's Union).
- It is important to help students recognize the parallels to larger Progressive, Populist, and labor reforms in the United States, but to understand that the urban impact in the northeastern United States was significantly greater than that in Texas urban areas.

Instructional Implications

When you teach Progressivism and Populism, remember to:

- Create and use a graphic organizer to describe important reform movements including the Progressivism, Populism, women's suffrage, agrarianism, and labor reform. Detail significant individuals involved and summarize the impact of each movement.
- Compare various reform movements and their impact. Using sentence frames such as "___ and ___ are similar reform movements because ___" will help students know how to begin a written comparison.
- Other comparisons can be made by using forced pairs in which students are given cards with the names of two of the reform movements and asked to create a Venn diagram or summarize in a short paragraph the relationships between reform movements. Emphasize the impact or effects of the movements and the changes that resulted from the movements.

Student Expectations

- ❖ 7.7(E)* analyze the political, economic, and social impact of major events, including World War I, ... on the history of Texas (R)

Connected Spiral Standards

- compare types and uses of technology, past and present 7.19(A)
- evaluate the effects of scientific discoveries and technological innovations on the use of resources such as fossil fuels, water, and land 7.19(D)*

Academic Vocabulary

Vocabulary	Terms
armed forces aviation fields bonds patriotism rationing science and technology war effort	World War I

Stimulus

Speech/Journal/ Diary	Letter/ Newspaper Article	Government Document	Secondary Source Text
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Content Builder

- This cluster focuses on the political, social, and geographic impact of World War I on the history Texas. World War I had a significant impact on a rapidly expanding economy, helping to shape the rise of the importance of Texas in the United States as well as the United States as a world power in the 20th century.
 - Political – Even before the United States declared war on Germany in 1917, Texas, to some degree, was already connected with political circumstances of the war as Germany attempted to lure Mexico into engaging the United States into a war as a distraction from the events in Europe. Following the sinking of the Lusitania and the interception of the Zimmerman Telegram, the United States declared war on Germany. With connected railroads and plenty of land, Texas was an ideal training location. Four military training camps and later nine aviation fields were constructed across Texas.
 - Social – Almost 200,000 Texans served during World War I, approximately 50,000 were African American and 450 were women serving as nurses. With many men serving in the armed forces, women took on additional roles and responsibilities in the home and supplied labor for jobs. Rationing, patriotic advertising, and daily compulsory time in public schools devoted to patriotism characterized the wartime culture.
 - Economic – The demand for war supplies increased the demand for oil and labor, which provided a boost to the Texas economy. Many Americans bought Liberty and Victory bonds to help raise money for the war effort. Women in the workplace provided additional household income.

Instructional Implications

When you teach World War I, remember to:

- Consider starting instruction using short snippets of the geopolitical story and then focus on the impact on Texas specifically. While 7th grade does not focus on the global details of World War I, it is important for students to have a larger geopolitical story to understand the impact of World War I in Texas.
- Create a timeline to include these critical 20th century events. Sequence and analyze the cause and effect relationships between events. Emphasize the economic, social, and political impact of the events on Texas.
- Use primary source photos and World War I posters (available from the National Archives) to help students analyze the impact of these events in Texas and the United States.
- Help students identify and predict how wartime changes would impact/position the Texas economy in the future.

Learning from Mistakes

Students may make the following mistakes:

- Being unable to analyze the economic, social, and political impact of the events on developments in Texas