



Title: The History of Arkansas's Oil and Natural Gas Industry	
Author: Cissy Dowdy Southside High School Batesville	
Course: Arkansas History Economics Math	Duration: 30 to 40 minutes
Grade Level: 7-12	
Objective: To learn about the history of the oil industry in Arkansas.	
Summary of Lesson: Students will use current and historical information to examine the role of oil and natural gas exploration and discovery in the economic and social development of Union County. To extend the lesson students may compare and contrast the early discovery of oil and natural gas in Union County with the more recent discovery in the area known as the Fayetteville Shale and Brown dense deposits. Current economic and social impact may be examined using the most recent data in <i>Economic Impact of Arkansas's Oil and Gas Industry</i> by Kathy Deck of the Sam M. Walton College of Business, University of Arkansas/Fayetteville.	
Standards: Common Core State Standards, Arkansas State Frameworks	
CODE	STANDARD
Arkansas History	
G.1.AH.7-8.5	Examine the economic effect of Arkansas's natural resources: <ul style="list-style-type: none"> • diamonds • bauxite • forestry products • oil
W.7.AH.7-8.2	Explore the effects of tourism on the economy: <ul style="list-style-type: none"> • Hot Springs • Ozarks • Murfreesboro diamond mines
G.1.AH.9-12.5	Examine the economic effect of Arkansas's natural resources: <ul style="list-style-type: none"> • diamonds • bauxite • forestry products



	<ul style="list-style-type: none"> • oil • lignite • novaculite
W.7.AH.9-12.3	Examine the economic effects of the oil boom on southern Arkansas
EF.2.E.1	Analyze the four <i>factors of production</i> <ul style="list-style-type: none"> • natural resources • human resources • capital resources • <i>entrepreneurship</i>
Teacher Excellence Support System (TESS): 1d: demonstrating knowledge of resources 1e: designing coherent instruction	
Instructional Strategies and Practices: Compare and Contrast, Independent reading and writing, Technology	
Bloom's Level: Highest Level Only Analyze	
Materials and Resources: – <ul style="list-style-type: none"> • Student Handout 1 History of Arkansas's Oil and Natural Gas Industry Vocabulary • Student Handout 2 History of Arkansas's Oil and Natural Gas Industry -- Oil Discovery in Arkansas • Student Handout 3 History of Arkansas's Oil and Natural Gas Industry -- Smackover Oil Strike • Student Handout 4 History of Arkansas's Oil and Natural Gas Industry --Find Your Place • Student Handout 5 History of Arkansas's Oil and Natural Gas Industry -- "Monument to the Oil Boom of Union County, Arkansas - El Dorado" • History of Oil and Gas Presentation PDF • "Monument to the Oil Boom of Union County, Arkansas - El Dorado" http://www.youtube.com/watch?v=Ym3QqL_s0uw <p>References: Some information used to write this lesson was taken from the following internet sources:</p> <p>Rex Nelson's Southern Fried "Oil in Arkansas' Golden Triangle" http://www.rexnelsonsouthernfried.com/?p=4016</p> <p>American Oil and Gas Historical Society "Arkansas Oil and Gas Boomtowns" http://aoghs.org/petroleum-industry-pioneers/arkansas-oil-andgas-boomtowns/</p>	

**Formative Assessment:**

Vocabulary flashcards, Bar graph, Journal entry

Notes to Teacher:

For a speaker on the history and economic impact of petroleum, contact Arkansas Independent Producers and Royalty Owners at: www.aipro.org or www.arkansasenergyrocks.com.

Student Activity

1. Introduce the history of Arkansas's oil and natural gas industry including information on the brine resources in south Arkansas. Go to:
<https://arkansasenergyrocks.com/educators/lesson-plans-9-12/>
A script for the presentation is included with the handouts on the Arkansas Energy Rocks website at <https://arkansasenergyrocks.com/educators/lesson-plans-9-12/>
2. Use Student Handout 1 –Vocabulary to help students become familiar with oil and natural gas industry terminology.
3. Using Student Handouts 2-5 guide students to make observations about the role Union County had in the oil and natural gas boom of the early 1900s. Students will compare the El Dorado and Smackover oil strikes and examine the effects these had on the two small towns
4. Show Monument to the Oil Boom of Union County, Arkansas - El Dorado”
http://www.youtube.com/watch?v=Ym3QqL_s0uw. Ask students to identify some of the economic impacts the discovery of petroleum had on Union County.
5. Use Student Handout 6 to summarize the social issues faced by Union County residents during the oil and natural boom.

Extensions:

1. Use the internet to research the Fayetteville Shale Play in central and northern Arkansas and the Brown Dense deposit in south Arkansas. **Compare** and **contrast** the early discovery of oil and natural gas in Union County with the more recent discovery of these two resources.
2. Based on *Economic Impact of Arkansas's Oil and Gas industry*, Kathy Deck, Sam M. Walton College of Business, University of Arkansas/Fayetteville), what are the social benefits of the oil and natural gas industry in Arkansas? Find the report at:
https://cber.uark.edu/files/Executive_Summary_Revisiting_the_Economic_Impact_of_the_Fayetteville_Shale.pdf



Student Handouts: See <https://arkansasenergyrocks.com/educators/lesson-plans-9-12/> for printable copies.

Student Handout 1
History of Arkansas's Oil and Natural Gas Industry
Vocabulary

- Boom – to progress, grow, or flourish vigorously
- Boomtown – a town that has grown very quickly as a result of sudden prosperity
- Derrick – the tower like framework over an oil well
- Drill – a shaft like tool with cutting edges that uses rotation to make holes deep into the ground
- Gusher – a flowing oil well
- Speculator – a person who invests in a business, hoping to make a profit
- Wildcat – someone who works in the oil fields
- Reserve – a collection of oil that is stored until it is sold
- Pipeline – a series of pipes used to transport oil or natural gas over great distances
- Refinery – a factory that takes the impurities out of petroleum

Assignment #1 – Students will make flashcards with vocabulary terms on one side and definitions on the other. Pair up with a partner to learn the meanings of the words. Demonstrate mastery of the terms by illustrating each of the terms and using them in a sentence.

Student Handout 2
History of Arkansas's Oil and Gas Industry
Oil Discovery in Arkansas

Geologic patterns in southern Arkansas led entrepreneurs at the beginning of the twentieth century to believe that the region held a potential wealth of petroleum and natural gas, as there are certain markers within rocks that indicate the possible presence of oil.

El Dorado Oil Strike



The historic south Arkansas oil boom began on January 10, 1921, with the completion of the Busey No. 1 well. Dr. Busey, a globetrotting physician and oil speculator, heard about a large natural gas flow around El Dorado, Arkansas. Busey, who was in Homer, La., about 40 miles away, rode a horse to El Dorado to confirm the well information the next day. Unable to find a room, Busey bought the Arcade Hotel for \$2,500.

He completed the drilling, one mile southwest of El Dorado, that produced a gusher well that sprayed between 3,000 and 10,000 barrels of oil up to a mile away. The “discovery well” touched off a wave of speculators into the area seeking fame and fortune from oil.

Oil production increased tremendously in a matter of months. In March 1921, Arkansas produced 38,000 barrels of oil to sell on the open market, which increased to 325,000 barrels by April, to 578,000 barrels by May, and to 908,000 barrels by June. By 1922, 900 wells were in operation in the state.

Although Arkansas production ranked far behind such oil-producing states as Texas, Oklahoma, California, and Louisiana, El Dorado immediately became the center of the oil boom. It changed from an isolated agricultural city of approximately 4,000 residents to the oil capital of Arkansas. Twenty-two trains each day ran in and out of El Dorado to Little Rock and Shreveport, Louisiana, and regular air service from Shreveport transported workers and investors.

By 1923, El Dorado boasted fifty-nine oil companies, thirteen oil operators, and twenty-two oil production companies. The city was flooded with so many people that no bed space was available for them, leading to the building of neighborhoods of tents and hastily constructed shacks throughout the city. The city’s population reached a high of 30,000 in 1925 before dropping as the boom played out in the late 1920s.

Assignment #2

- A. **Create a bar graph that shows the increase of oil produced in El Dorado from March 1921 to June 1922.**

Student Handout 3 **History of Arkansas’s Oil and Natural Gas Industry** **Smackover Oil Strike**

In 1908 Sidney Umsted operated a large sawmill and logging venture two miles north of town. When oil was discovered in northern Louisiana in 1919, Umsted decided there was the



potential for oil in south Arkansas. After Busey struck oil in 1921, Umsted selected a drilling location one mile south of the Ouachita River on land leased from local farmer Charlie Richardson. On July 29, the drill bit spun into gear 2,000 feet below. The result was a gusher, and the Richardson No. 1 discovery created a frenzy of drilling activity. Within a year, 1,000 producing wells had been completed in the field that covered 60 square miles. By this time, Umsted owned an estimated 3,000 acres of oil leases and an additional 1,000 acres outright.

The little town's population had increased from a mere ninety to 25,000 and its uncommon name would quickly attain national attention. By 1925, the Smackover field produced more than 77 million barrels of oil, the largest oil field in the nation at the time.

Assignments #3 –

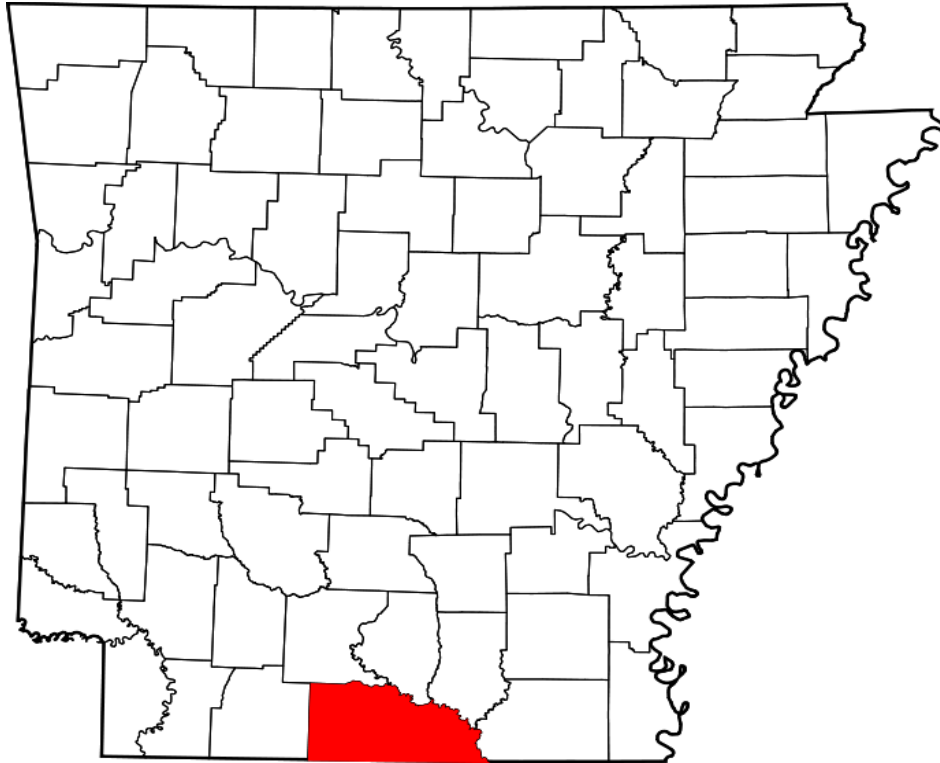
- A. Draw this chart on your own paper, and then fill it in to show how the oil strikes of El Dorado and Smackover were similar.**

City	El Dorado	Smackover
Speculator		
Year of Strike		
Population Increase		

- B. Use internet sources to learn the history of Smackover's unusual name. Give 5 additional facts you find interesting about the town's history.**



Student Handout 4
History of Arkansas's Oil and Natural Gas Industry
Find Your Place



El Dorado and Smackover are in Union County, Arkansas.

Assignment #4 – Put a dot on the map for the city in which you live. Then draw a line from your city to Union County. Using an Arkansas Highway map, determine approximately how far it is between your hometown and Union County?

Technology Extension: How might you use technology to learn the distance between your hometown and Union County?



Student Handout 5
History of Arkansas's Oil and Natural Gas Industry
"Monument to the Oil Boom of Union County, Arkansas - El Dorado"

Assignment #5 - Students will watch the YouTube video "Monument to the Oil Boom of Union County, Arkansas - El Dorado" and write 3 questions that come to mind as they watch.

http://www.youtube.com/watch?v=Ym3QqL_s0uw

Examples:

- a. What problems might the El Dorado oil boom create for the local population as well as those coming to work in the oil fields?
- b. How could the oil discovery help the city's economy?

Student Handout #6



"Gusher in Smackover"



“Workers in the Smackover Oil Fields”

Student Handout #6 con’t.



“Wooden Derrick and Oil Storage Pond”

Assignment #6 – Imagine what a typical day was like in early twentieth century Union County, Arkansas. Include all of the vocabulary words you learned from Student Handout #1 to write a journal entry from the point of view of:

- a. a person living in El Dorado or Smackover when the oil strike began.
- b. a person coming to work in the oil fields.
- c. a merchant or business owner in El Dorado or Smackover.
- d. an oil field owner.



Enrichment:

Visit the Arkansas Museum of Natural Resources

3853 Smackover Hwy.

Smackover, AR 71762

870-725-2877

www.amnr.org/