

# THE DUST BOWL

A FILM BY KEN BURNS

## The Great Plow Up: The Economics of the Dust Bowl

### Lesson Overview:

The Dust Bowl was a decade-long catastrophe that swept up 100 million acres of topsoil in Oklahoma, Texas, Kansas, Colorado and New Mexico. It was caused by several concurrent factors—rising wheat prices, a series of unusually rainy years, and generous federal farm policies prompting a land boom. Encouraged by improved cultivation methods and cheap land, thousands of Americans flooded the southern Plains to raise grain and cattle, chasing the American dream of owning land and securing their future.

This lesson explores the history and economics of the Dust Bowl years. Students will examine the history of settlement in the Great Plains and analyze the farm practices that turned grasslands and wilderness into cropland. Students will analyze supply-demand-price charts matching their rise and fall to major events and examine the impact on farmers and the U.S. economy. In a culminating activity, students will compile their data into a documentary presentation.

### Grade Level:

7–12

### Related Academic Subjects:

U.S. History, Economics, Geography

### Time Needed to Complete the Lesson:

- One class period to review and analyze video segments (this could be completed as homework with discussion held in class)
- One class period to analyze wheat production charts
- One to three class periods to produce documentary

### Materials Needed to Complete the Lesson:

- Computers with Internet access for research
- Video editing software (iMovie, Premier Elements, Movie Maker, etc.)
- Copies of student handouts
  - Video Notes/Graphic Organizer
  - Wheat Production Charts 1910–1940
  - Producing Your Documentary

### Lesson Objectives:

The student will:

- Understand the importance of the southern Plains in the early 20th century.

- Analyze the effects of mechanized agriculture on wheat production in the 1910s, 1920s, and 1930s.
- Analyze the effects of the Dust Bowl on wheat production in the early 20th century.
- Develop research skills for locating and analyzing information.
- Formulate a podcast documentary examining the effects of the Dust Bowl on wheat production and farmers' livelihoods in the 1930s.

### **Video Segments Used in the Lesson:**

All clips are from Episode 1: “The Great Plow Up.”

#### **Video Segment 1: “Recollections on the Southern Plains”**

**Description:** Caroline Henderson, the series’ principal historic voice from the era, is introduced. Several other characters from the series weigh in on their description of the southern Plains.

#### **Video Segment 2: “Mechanized Agriculture”**

**Description:** Modern machinery makes farming wheat in the grasslands of the southern Plains more efficient and profitable, even at low per-bushel prices. In the 1910s and 1920s, there is a concerted effort to turn American agriculture into an industrial enterprise and a big push by government to turn the southern Plains into farming country. New plowing methods pulverize the soil rather than turning it over, allowing land to be put into production more quickly, but exposing it to the elements.

#### **Video Segment 3: “The Wheat Bubble Bursts”**

**Description:** The stock market crashes on what came to be called Black Tuesday. By the end of 1929, financial panic has spread throughout the United States, throwing 1.5 million Americans out of work. But people living on the southern Plains are still prosperous. Many farmers believe the economic problems back east will not affect them. Wheat prices continue their downward trend and more wheat is planted in response. In 1931, the pain is felt as a bumper crop is met by depressed demand and prices drop even further. Farmers hope the tough financial times are only a temporary setback.

#### **Video Segment 4: “The Depression Comes to the Southern Plains”**

**Description:** The wheat harvest of 1932 is a double disaster as prices continue to drop and a drought begins. Banks and other businesses fail throughout the nation. As the Depression deepens, farmers break tradition by electing a Democrat, Franklin Delano Roosevelt, for president.

### **Lesson Procedure**

#### **Opening Activity—THE DUST BOWL: An Introduction:**

Provide a brief introduction to the lesson and this activity by telling students that they will explore the history and economics of the Dust Bowl. They will be viewing key segments from THE DUST BOWL that describe the boom and bust years from 1910–1937. This information will help them produce their documentaries.

1. Distribute the “Video Notes/Graphic Organizer” handout to all students.
2. Have students review all the video segments and take notes on the organizer either in class or as homework.
3. Review the following discussion questions with the class:
  - Describe the character of southern Plains from the accounts you heard in the first video segment. What aspects about these descriptions seem consistent? What aspects seem to be contradictory?
  - How was agriculture in the United States changing in the early part of the 20th century?
  - Describe the overall effects of the Great Depression on people of the southern Plains. How did government and farmers try to address the problems?
  - How did the drought of the 1930s compound the problems for southern Plains farmers?

### **Main Activity Part I—Chart Analysis:**

In this activity, students will graphically track the supply, demand, and price of wheat for the years 1910–1940.

1. Divide students into groups of 3 or 4.
2. Distribute the “Wheat Production Charts” to all students.
3. Have them review the charts and answer the discussion questions on the last page.
4. Review all discussion questions with the entire class.

### **Main Activity Part II—Producing the Documentary:**

In this activity, students will combine the information they’ve gathered from the video segments and their chart analysis on wheat production and develop a small documentary of the event. Teachers can decide whether to have students present their documentaries in outline form, as a slide presentation, a webpage, podcast, or video documentary.

1. Divide the class into small groups or keep the same groups as before.
2. Distribute the “Producing Your Documentary” handout to each group.
3. Review the instructions and address any questions students might have.
4. Provide time for students to complete their documentaries.

### **Presentation Suggestions:**

- Present in class.
- Post on webpage or social media page.
- Have a community night for presentations to parents and community members.

### **Assessment Strategies:**

- “Video Notes” and “Chart Analysis” handouts
- Evaluate students’ documentaries on their construction, including historical accuracy, spelling and grammar, aesthetic aspects of the presentation, etc. A sample rubric that can be used as is or adapted to meet the teacher’s needs is included at the end of the lesson.
- Have students write a reflective essay at the conclusion of the project on the creation of their documentary and the experience of presenting it to an audience.

**Extensions/Adaptations:**

- Have students use a similar method of research to document other “boom and bust” periods in the past. Examples might be the 17th century Tulipmania, U.S. Roaring 20s/Great Depression (1920–1939), Asian financial crisis (1997), U.S. technology boom/bust (1991–2001) or U.S. housing collapse (2007). Have students research news articles that discuss the boom and bust periods and find corresponding economic charts to support their findings. Analysis can be adopted from the discussion questions included in this lesson.

**Resources:**

- THE DUST BOWL: <http://www.pbs.org/dustbowl>
- America from the Great Depression to World War II: Photographs from the FSA-OWI, 1935-1945: <http://memory.loc.gov/ammem/fsowhome.html>
- EH.net (Economic History Association) Dust Bowl page: <http://eh.net/encyclopedia/article/cunfer.dustbowl>
- “How Stuff Works” Video Podcasting: <http://computer.howstuffworks.com/internet/basics/podcasting4.htm>
- Library of Congress “Voices From the Dust Bowl”: The Charles L. Todd and Robert Sonkin Migrant Worker Collection: <http://memory.loc.gov/ammem/afctshhtml/tshome.html>
- The New Deal Network: <http://newdeal.feri.org/index.htm>
- U.S. Department of Agriculture Data and Statistics [http://www.nass.usda.gov/Data\\_and\\_Statistics/Quick\\_Stats\\_1.0/index.asp](http://www.nass.usda.gov/Data_and_Statistics/Quick_Stats_1.0/index.asp)
- Wessel’s “Living History Farm” (York, Nebraska) Dust Bowl page: [http://www.livinghistoryfarm.org/farminginthe30s/water\\_02.html](http://www.livinghistoryfarm.org/farminginthe30s/water_02.html)

**Related Academic Standards:**

This lesson meets the following standards set by the Mid-Continent Research for Education and Learning (McRel) (<http://www.mcrel.org/compendium/browse.asp>).

**U.S. History:**

- Standard 16: Understands how the rise of corporations, heavy industry, and mechanized farming transformed American society
- Standard 22: Understands how the United States changed between the post-World War I years and the eve of the Great Depression

**Historical Understanding:**

- Standard 1: Understands and knows how to analyze chronological relationships and patterns
- Standard 2: Understands the historical perspective

**Economics:**

- Standard 3: Understands the concept of prices and the interaction of supply and demand in a market economy

**Geography:**

- Standard 1: Understands the characteristics and uses of maps, globes, and other geographic tools and technologies
- Standard 2: Knows the location of places, geographic features, and patterns of the environment
- Standard 4: Understands the physical and human characteristics of place
- Standard 5: Understands the concept of regions
- Standard 12: Understands the patterns of human settlement and their causes
- Standard 14: Understands how human actions modify the physical environment

**About the Author:** Greg Timmons has been a social studies teacher for more than 30 years. He has written lessons for several PBS productions including THE NEWSHOUR, FRONTLINE, and various Ken Burns' productions including THE WAR, THE NATIONAL PARKS: AMERICA'S BEST IDEA, BASEBALL, and PROHIBITION. He resides in Washington state and Montana.

## Student Handout: Video Notes/Graphic Organizer

**Instructions:** View the four video segments following the steps in the lesson and take notes on the graphic organizer below. After you've complete your notes, review the discussion questions included for each segment and be ready to discuss those in class. (The four video clips are from Episode 1: "The Great Plow Up.") You may wish to view the segments more than once in order to more completely answer the discussion questions and take notes on the segment.

### Video Clip 1: "Recollections on the Great Plains" (For Opening Activity)

1. Review the five accounts from speakers in the first clip and summarize their comments on the southern Plains.

Speaker	Summarize the Description of the Southern Plains
Caroline Boa Henderson	
Charles Shaw	
Robert "Boots" McCoy	
Calvin Crabill	
Donald Worster	

2. Identify and label the 10 states that are part of the southern Plains and describe the climate there.



---

---

---

---

3. Create a timeline for the periods of human occupation of the southern Plains listed below and provide a brief description of those times.

<b>Time Period</b>	<b>Description</b>
<b>Early Explorers 1500–1600</b>	
<b>Plains Indians 1600–1800</b>	
<b>Cattlemen 1860–1890</b>	
<b>Homesteaders 1880–1900</b>	
<b>Farmers Early 1900s</b>	

### **Video Segment 2: “Mechanized Agriculture”**

1. Explain how modern machinery changed the way farmers planted and produced wheat on the southern Plains.

---

---

---

2. Compare and contrast the effects of the lister and the one-way plow on the soil. Explain the advantages and disadvantages of each plow.

<b>The Lister Plow</b>		<b>The One-way Plow</b>	
<b>Advantages</b>	<b>Disadvantages</b>	<b>Advantages</b>	<b>Disadvantages</b>

3. Who were “suitcase farmers” and how did they operate their farms?

<b>Define “Suitcase” Farmer</b>	<b>Describe How They Operated Their Farms</b>

**Video Segment 3: “The Wheat Bubble Bursts”**

1. Summarize the effects of Black Tuesday and the stock market crash on the American economy. What were the effects on the farmers of the southern Plains?

<b>Effects on American Economy</b>	<b>Effects on Southern Plains Farmer</b>

2. What was the government concern about wheat production in 1930? What did farmers do in response to this concern?

<b>Government’s Concern</b>	<b>Attempts to Address the Concern</b>

3. Describe the positive and negative aspects of the bumper crop of 1931.

---

---

---

---

**Video Segment 4: “The Depression Comes to the Southern Plains”**

1. What were the two factors that made the harvest of 1932 a double disaster for southern Plains farmers?

---

---

2. Describe the attitudes of farmers and the adjustments they made to survive the drought and depressed wheat prices after 1932.

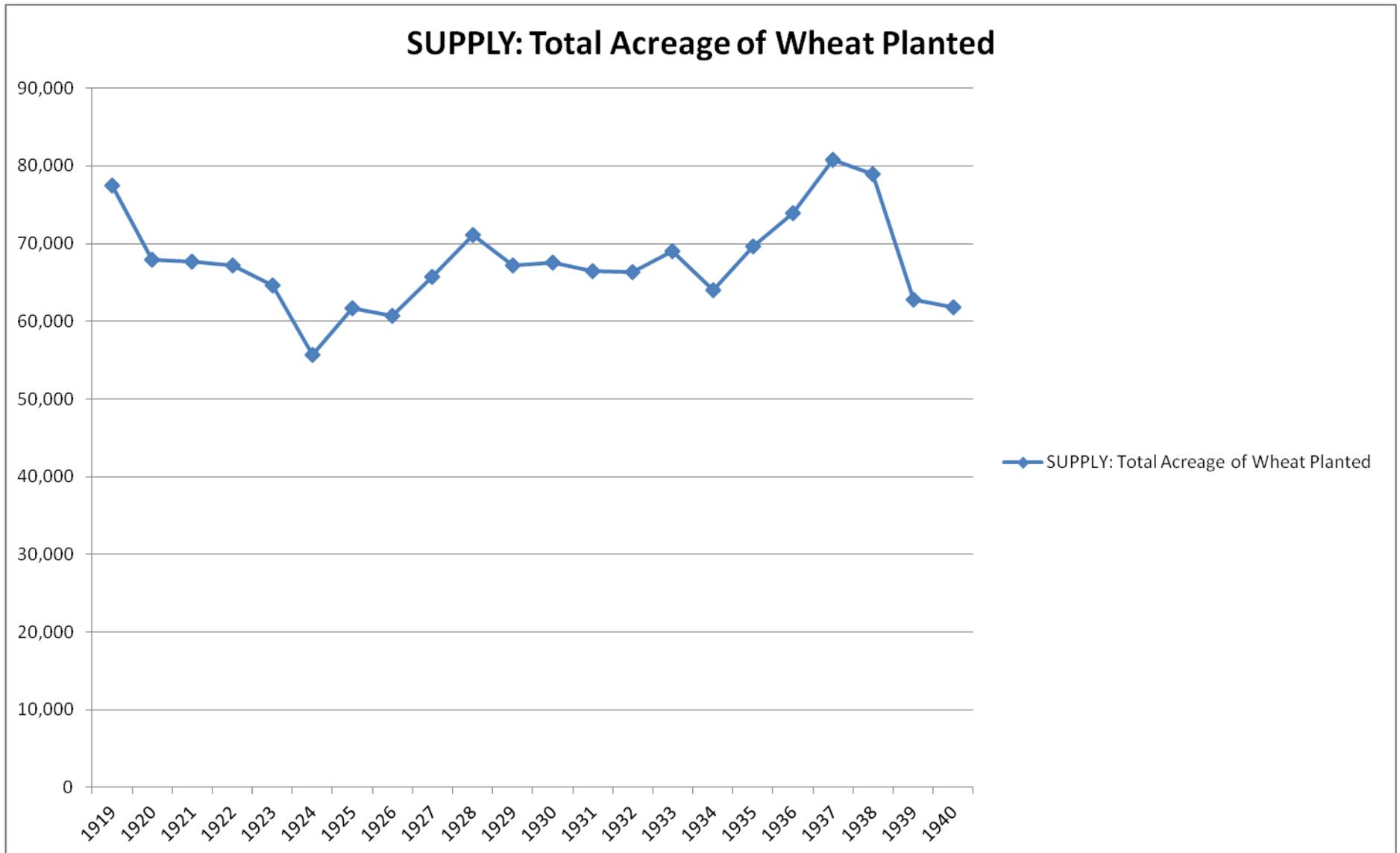
<b>Farmers’ Attitudes</b>	<b>Adjustments Farmers Made to Survive</b>

3. Describe the effect of the drought and depressed wheat prices on families like the Foresters.

---

---

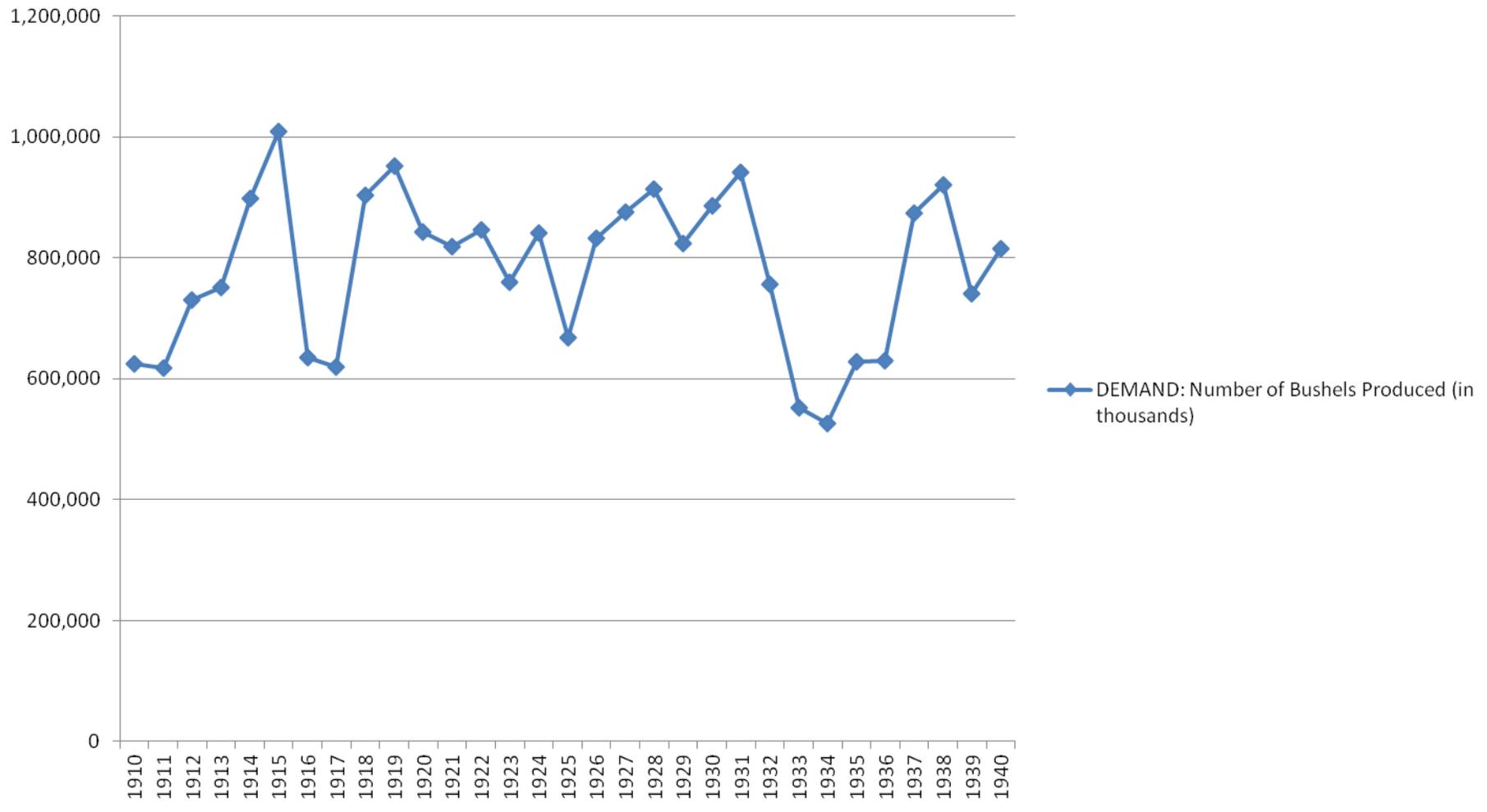
## STUDENT HANDOUT: Wheat Production Charts 1910–1940



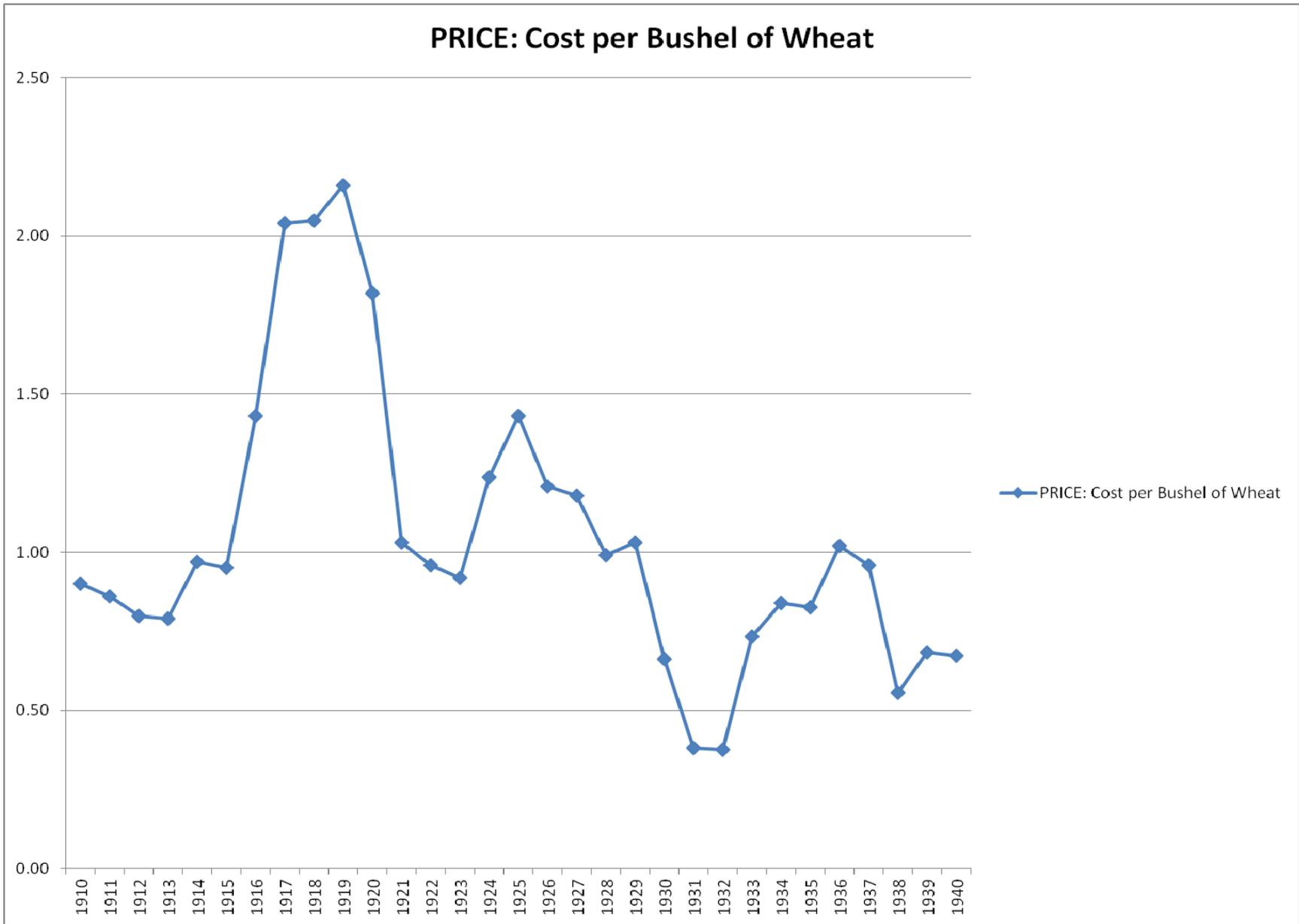
**NOTE: No records for acreage of wheat planted from 1910 to 1918**

**Source: United States Department of Agriculture**

### DEMAND: Number of Bushels Produced (in thousands)



Source: United States Department of Agriculture



Source: United States Department of Agriculture

## Chart Discussion Questions

### Background Information—Supply, Demand, and Price:

Supply and demand are fundamental concepts of economics and the backbone of a market economy.

- Supply represents the amount of goods producers are willing to supply when they receive a certain price. Farmers grow enough wheat to sell at a certain price in order to make a profit.
- Demand refers to how much a product is desired by consumers. The quantity demanded is the amount of product consumers are willing to buy at a certain price. Consumers buy wheat when the price is right.
- As consumer demand for a product increases, prices go up. Manufacturers respond to higher demand by producing a larger supply of the product. With more products in the market, competition increases and the price will go down.

### Chart Background:

A combination of mechanized farming and the onset of World War I led to a spike in wheat production from 1913 to 1915. Overproduction and depleted soil throughout North America led to a short decline in wheat production from 1916 to 1917.

### Discussion Questions:

- What happened to the price of wheat at the beginning of World War I? What happened to its price after the war ended? If you were a farmer at this time, would you have responded the same way as Great Plains farmers responded to these events? Explain your answer.
- What happened to the price of wheat in the years 1925 to 1932? If you were a farmer at this time, what might you think about the future of wheat in the Great Plains?
- The hardest years of the Dust Bowl were 1932–1937. Explain how the price of wheat during this time indicates that these were difficult years. Look at the Total Acreage of Wheat Planted chart and discuss why you think farmers responded to these price changes in the way that they did. Would you have responded in the same manner? Why or why not?

## **STUDENT HANDOUT: Producing Your Documentary**

Producing a documentary is an excellent method for gaining a deep understanding of history and an opportunity to provide your own perspective on an event.

Use the following guide to develop your documentary on the economics of the Dust Bowl.

In the activities you just completed—viewing segments from *THE DUST BOWL* and analyzing the supply, demand, price charts—you have compiled good information to help tell your story. You should have information gathered on the following topics:

- Personal testimonies on the mystique of the Great Plains
- Timeline history of human activity on the Great Plains
- Map of Great Plains states and the states affected by the Dust Bowl
- The lister and the one-way plow and their impact on crop production and the soil
- Black Tuesday (October 29, 1929), the stock market crash and the Great Depression
- Actions of farmers and government to get the most out of the Great Plains region
- Supply, demand, and price charts illustrating the boom and bust cycles of wheat from 1910 to 1940
- Precipitation data on the Great Plains 1930–1938
- Commentary on the actions of the farmers and government and lessons learned

### **Documentary Outline:**

Your documentary should tell a story in this case, the story of the boom and bust cycle of wheat production on the Great Plains from the early 1900s to the late 1930s.

Review the component information you've gathered from *THE DUST BOWL* video segments, the charts, and your own research. Construct an outline of how your documentary would address the following questions:

- How did people who lived on the Great Plains feel about living there?
- What is the history of human activity on the Great Plains?
- What states are considered to be in the Great Plains? What states were affected by the Dust Bowl?
- How did the stock market crash and the Great Depression affect the people of the Great Plains?
- How did farmers and the U.S. government try to address the effects of the Dust Bowl?
- How successful were their efforts and what could they have done differently?

# Documentary Production Rubric

Student Name \_\_\_\_\_

CATEGORY	4	3	2	1
Effectiveness	Project includes all material needed to gain a comfortable understanding of the topic. It is a highly effective study guide.	Project includes most material needed to gain a comfortable understanding of the material but is lacking one or two key elements. It is an adequate study guide.	Project is missing more than two key elements. It would make an incomplete study guide.	Project is lacking several key elements and has inaccuracies that make it a poor study guide.
Content - Accuracy	All content throughout the presentation is accurate. There are no factual errors.	Most of the content is accurate but there is one piece of information that might be inaccurate.	The content is generally accurate, but one piece of information is clearly flawed or inaccurate.	Content is typically confusing or contains more than one factual error.
Sequencing of Information	Information is organized in a clear, logical way. It is easy to anticipate the type of material that might be on the next card.	Most information is organized in a clear, logical way. One card or item of information seems out of place.	Some information is logically sequenced. An occasional card or item of information seems out of place.	There is no clear plan for the organization of information.
Spelling and Grammar	Presentation has no misspellings or grammatical errors.	Presentation has 1-2 misspellings, but no grammatical errors.	Presentation has 1-2 grammatical errors but no misspellings.	Presentation has more than 2 grammatical and/or spelling errors.
Originality of Production	Presentation shows considerable originality and inventiveness.	Presentation shows some originality and inventiveness. The content and	Presentation shows an attempt at originality and inventiveness on 1-2 cards.	Presentation is a rehash of other's ideas and/or graphics and shows very little

	The content and ideas are presented in a unique and interesting way.	ideas are presented in an interesting way.		attempt at original thought.
Cooperation with Group Members	Group delegates tasks and shares responsibility effectively all of the time.	Group delegates tasks and shares responsibility effectively most of the time.	Group delegates tasks and shares responsibility effectively some of the time.	Group often is not effective in delegating tasks and/or sharing responsibility.
Digital Camera Use (optional)	Picture is high quality. The main subject is in focus, centered, and of an appropriate size compared to other objects in the picture.	Picture is good quality. The main subject is not quite in focus, but it is clear what the picture is about.	The pictures are of marginal quality. The subject is in focus but it is not clear what the picture is about.	No picture taken OR picture of poor quality.