

Title: World War I and Wheat Farmers

Author: Jon Bauer

Course: US History

Time Frame: Up to five fifty-minute class periods

Subjects:

World War I

Grade Levels:

7, 8, 9, 10, 11

Classroom/Homework Activity to be performed:

Students will study the impact of World War I on wheat farmers, learning how a dramatic world event can impact a small sub-set of people.

Rationale:

Students will gain experience analyzing primary sources and data. Students will also make connections from World War I to present day.

Lesson objectives - the student will:

- Students will build interest by participating in a Discrepant Event Inquiry.
- Students will learn the basics about World War I by studying maps, propaganda posters, and a primary source.
- Students will analyze data regarding wheat yields and wheat prices.
- Students will watch a news clip that illustrates an issue facing farmers today.
- Students will demonstrate understanding by either writing a thematic paragraph or completing a RAFT writing assignment.

District, state, or national performance and knowledge standards/goals/skills met:

- The student will recognize and evaluate continuity and change over time and its impact on individuals, institutions, communities, states and nations.
- The student will analyze the context of continuity and change and the vehicles of reform, drawing conclusions about past change and potential future change.
- The student will investigate an example of continuity and/or change and connect that continuity and/or change to a contemporary issue.

· The student will use his/her understanding of continuity and change to construct a model for contemporary reform.

Primary materials (book, article, video documentary, etc.) needed:

Pictures of Farmers Harvesting – World War I Era:

<https://www.ksks.org/p/harvest-ales-rice-county-04/10817>

Video of a Reenactment of a 1911 Threshing Machine: <https://www.youtube.com/watch?v=QPFBok48IJU> Maps of Europe in 1914 and 1919:

<http://www.nationalarchives.gov.uk/pathways/firstworldwar/maps/europe1914.htm>

Trench Warfare – Pictures:

<https://www.iwm.org.uk/history/10-photos-of-life-in-the-trenches>

Woodrow Wilson – “War Message to Congress” – April 4, 1917:

https://www.lib.byu.edu/index.php/Wilson's_War_Message_to_Congress

USDA – Kansas Wheat History: 1866-2017:

https://www.nass.usda.gov/Statistics_by_State/Kansas/Publications/Cooperative_Projects/whthist.pdf

Kansas State College of Agriculture: Kansas Agriculture – After 100 Years:

<https://www.ksre.k-state.edu/historicpublications/pubs/sb392.pdf>

Inflation Calculator

<http://www.in2013dollars.com/1860-dollars-in-2017?amount=1>

“A Brief History of U.S. Agriculture” - Percentage of Farmers of the U.S. Population:

file:///C:/Users/bauerj/Downloads/9781441906571-c1%20(1).pdf

CBS News – “China’s New Tariffs Will Cost U.S. Farmers Millions of Dollars” – June 18, 2018

file:///C:/Users/bauerj/Downloads/9781441906571-c1%20(1).pdf

Kansas Historical Society – “Wheat Harvest Tales”

<https://www.kshs.org/p/harvest-tales-introduction/10731>

Purdue University – “Agriculture’s Boom and Bust Cycles: Is This Time Different?”

<https://ag.purdue.edu/commercialag/Pages/Resources/Farmland/Land-Prices/Agriculture-Boom-Bust.aspx>

Full description of activity or assignment:

Activity

Day One: World War I

- Discrepant Event Inquiry
 - A Discrepant Event Inquiry (DEI) is a mystery that students solve by asking questions that can be answered with either a “yes” or a “no.”
 - The goal is to solve the DEI in twenty questions or less.
 - If students have a possible answer, prompt to write their answers on a piece of paper and bring it to you to solve the DEI. If they solve the DEI, then they are locked out of the activity.
 - Continue the activity until half of the class has solved the DEI.
 - After completing the DEI, take time to explain the information imbedded in the DEI.

- Background Information on World War I
 - This is for 7th Grade – I Assume They Know Nothing Regarding World War I. The purpose of this is to provide basic background information.
 - Use maps to explain how World War I unfolds in Europe.
 - Use a picture to explain trench warfare.
 - Analyze a propaganda poster to talk about how WW I affected American civilians.

- Woodrow Wilson – “War Message” – April 2, 1917
 - Discuss the context and the information from the first part of Wilson’s speech.
 - Homework: Have students write their interpretation of what they think Wilson is saying in the most famous part of the address.

Day Two: World War I and Vocabulary

- Brief Recap of Day One
- What do we know about World War I?
 -

Woodrow Wilson – “War Message” – April 2, 1917

- o Students share their interpretations of what Wilson said.
- o Share your interpretation of what Wilson said.

Vocabulary

- o Preview and explain vocabulary
- o Complete the vocabulary worksheet in pairs

Day Three: Farming During World War I and Introducing the Data

- Farmers and Harvesting During WW I
 - o Analyze pictures of farmers harvesting during the WW I era
 - o Watch the video of a working threshing machine
- Analyze Data Regarding Wheat Production During WW I
 - o Introduce the Central Question: How did WW I affect Kansas wheat farmers?
 - o Jigsaw: Break the class into three groups, and have each group answer questions from the data.

(The data is available on pages 34-36 of “Kansas Wheat History”)

- Group 1: 1866-1910
- Group 2: 1910-1940
- Group 3: 1941-1970
- Group 4: 1971-2017

Day Four: Analyzing the Data

- Brief Recap of Days One and Two
 - o Two Minute Conversations - Arrange students in groups of two or three, and give them two minutes to discuss this question:
 - What is an important detail about WW I we should all know?
- Jigsaw
 - o Give students time to finish analyzing data (if needed.)
 - o Discuss each of the three time periods.
 - o Important details to discuss from each time period:
 - 1866-1910
 - The Civil War caused a price spike in wheat.
 - Eastern Kansas was largely subsistence agriculture while Western Kansas was largely cash crops – mainly wheat (see map on page 29-30 of “Kansas Agriculture – After 100 Years.”) Cash crops needed railroads to get grain to market. The Atchison, Topeka and Santa Fe Railroad reached Colorado by 1873, but it took time for railroads to reach many parts of Western Kansas.
 -

Before 1880 – western Kansas was essentially “free grass” – used for cattle drives from Texas. Quarantine Laws of 1885 – stopped the cattle drives

- There was a nationwide economic depression in 1892-1893
- Two things that encouraged cultivation of more land:
 - “Rain Follows the Plow” – an idea that plowing land would cause it to rain - this idea was widely accepted in the late 1800’s and early 1900’s and was justification for planting more acres
 - 1900-1910 was a time of above average rainfall in Kansas
- 1911-1940
 - Increase in the number of acres harvested in the 1910’s was largely after 1914 and because of WW I
 - 1917 was one of the worst droughts in Kansas history
 - The 1910’s was when mechanized the threshing machine became more widely used. During this time, harvesting was largely done with large crews that ran the threshing machines. In central and eastern Kansas, these crews were often made up of local people, and led to harvest being a social event. In western Kansas, it was more likely that a threshing crew was hired by the farmer.
 - The 1920’s was when combines – machines that did both reaping and threshing – became more widely used. By 1930, Kansas farmers owned one-third of all of the combines in the United States.
 - Threshing machines and combines led to more land being harvested, but did not lead to an increase in yield.
 - The 1930’s was a time of low prices and low yields.
 - The Great Depression led to low prices, because there was less demand for wheat at this time.
 - The Dust Bowl led to low yields, because the wheat growing areas in Kansas were highly affected by the drought.
 - The cause-and-effect of the wheat-boom of WW I and the Dust Bowl: the price spike during WW I caused more land to be tilled in western Kansas. Ten years later, this newly exposed land of western Kansas led to the Dust Bowl.
- 1941-1970
 - World War II had a similar affect as WW I. War causes economic opportunities.
 - The economic boost from WW II lasted longer, largely because the Marshall Plan caused a continued demand for grain in Europe after WW II.
 - The use of fertilizer increased greatly after World War II (refer to the table on page 35 of “Kansas Agriculture – After 100 Years.”) The amount of fertilizer applied in 1950 was almost 4.5 times more than 1945. This leads to a gradual rise in yield.
 - Researchers created new varieties of wheat through cross breeding. These new varieties were designed to be more drought resistant. The “Green Revolution” was spurred on by people like Norman Borlaug and researchers at universities such as Kansas State. This contributes to a gradual increase in yield after WW II and up through 1970, and beyond.
 - As time went by, more machinery with more horsepower created larger yields. More horsepower meant that farmers could plow more, and that meant that farmers could better control weeds. In addition to that, companies such as Monsanto introduced products that controlled weeds.
- 1971-2017
 - Farmers in southwest Kansas began to irrigate crops with water from the Ogallala Aquifer on a large scale in the 1950’s. Farmers could now grow corn on the arid high plains. As a result, farmers planted less wheat.
 - Agricultural exports spiked in the 1970’s because many countries began to import grain for the first time. This caused wheat prices to rise.
 - Agricultural exports decreased in the 1980’s because of a wheat embargo imposed by the United States on the Soviet Union. This caused wheat prices to fall.
 - Biofuels of the 2000’s. “Renewable Fuel Standards - 2005.” Corn used in ethanol production went from 650 million bushels in 2000 to 5 billion bushels in 2011. Increased

corn prices meant increased wheat prices as well, because more acres were planted to corn and less were planted to wheat.

- The price spike that began in 2006 coincided with the increased War on Terror. Much like WW I and WW II, conflict leads to higher prices for farmers.

Day Five: Wrapping It Up

- Why Was WW I Such a Big Deal for wheat farmers?
 - Inflation Calculator
 - Have students use the online inflation calculator and convert the “Farm Value/Dollars” column from 1919 to dollars in 2017. It would be equal to roughly \$4.45 billion in 2017.
 - Allowing for inflation, was 1919 the year when Kansas farmers earned the most money from their wheat crop? Let students play with the data and the inflation calculator to answer the question.
 - Is it likely that Kansas farmers will ever break the record from 1919?
- Percentage of the Population Who Were Farmers
 - Analyze the data from page 16 from chapter 2 of A Brief History of U.S. Agriculture
 - The fact that almost 30% of Americans were farmers during WW I increases the importance of this event. The U.S. population in 1920 was roughly 105 million. So, there were roughly 30 million farmers at that time.
 - Not all of these farmers raised wheat, but the price of all commodities rose during this time – except for one: cotton. Why didn't cotton rise in price? The U.S. was unable to ship any cotton to Germany during WW I because of the British blockade. On top of that, Great Britain did not need American cotton because it had supplies from Egypt and India. From October of 1913 to October of 1914, U.S. cotton exports fell from 257,000 bales to 21,000 bales.
- Current Events: How are world events impacting farmers today?
 - Watch and discuss the CBS News clip on the trade war with China

Full explanation of the assessment method and/or scoring guide:

- Thematic Paragraph
 - Student explains how four terms are interconnected.
 - Possible Groupings:
 - wheat farmers, World War I, wheat prices, Europe
 - wheat farmers, World War I, World War II, China
 - yield, mechanization, fertilizer, cross breeding

Example: “Wheat farmers made a lot of money during World War I. The price of wheat increased greatly during WW I. Wheat prices almost tripled in three years. The price of wheat went from \$.78 per bushel in 1913 to \$2.12 per bushel in 1917. Farmers were encouraged by the government to ‘Win the War with Wheat.’ The wheat was not just for Americans. A lot of it went to Europe because they were not able to grow as much wheat during the war.”

- RAFT
 - A RAFT is a creative writing assignment. It is an acronym for Role, Audience, Format and Topic.
 -

Students choose one of the three choices, and they must complete a timeline detailing the information they will include in RAFT before beginning to write.

- o Students choosing roles #1 and #2 can access the primary sources at the Kansas State Historical Society “Wheat Harvest Tales” to get ideas for the RAFT.
- o Students choosing role #3 can access the article from Purdue University to get ideas for the RAFT.

Role	Audience	Format	Topic
Farmer – Born in 1900	Himself	Journal	A detailed account of his farming operation – what he experienced and what he learned
7th Grade Student Who Lives on a Farm Specializing in Wheat Production That Has Been in the Family For Generations	His or Her Family	Family Tree	A detailed account of what each generation of their family experienced – the challenges they faced and how they overcame them
Professional Agronomist That Works For the Kansas Department of Agriculture	Kansas Secretary of Agriculture and Kansas Farmers	Report	<p>The report addressed two questions:</p> <p>What can Kansas wheat farmers learn from the history of wheat production in Kansas?</p> <p>What can wheat farmers expect in the future?</p>

Discrepant Event Inquiry

This event was a boon for Kansas wheat farmers.

The event started accidentally. A terrorist assassinated a leader in a rather small and seemingly unimportant country. After the assassination, things slowly spiraled out of control. One by one, many countries chose sides.

Historians argue about what this event was really about. Some say it was about growing nationalism – or people feeling a growing sense of loyalty to their country. Others say it was about countries fighting for control of colonial lands around the world. Some say it was inevitable because many countries had secret alliances with each other and were heavily armed. Others say it was completely avoidable – that the main problem was greed and the use of a deadline imposed by one country that did not give the countries a chance to solve their problems.

Following the advice of President George Washington, the United States kept to itself – at least on the surface. Below the surface, the United States helped one side more than another. The United States traded more to one side than the other.

Financially, this event was a boon to Kansas wheat farmers, but it did affect them in a negative way. Eventually, over 63,000 Kansans would go and take part in this event. Some of them died.

What event was this?

Primary Source Analysis Woodrow Wilson – “Wilson’s War Message to Congress” – April 2, 1917

Context

- By the time Wilson delivered this speech to Congress in 1917, the war had been raging in Europe for over two and a half years.
- Wilson was not in favor of going to war. He ran for re-election in 1916 using the slogan “He Kept Us Out of War.”
- Wilson was pursuing a policy that he referred to as “armed neutrality.” However, between 1914 and 1916, U.S. trade with the Allies more than tripled, while trade with the Central Powers decreased. American banks had \$2.2 billion loaned to the Allies, and only \$27 million to the Central Powers.
- At the same time that Wilson was delivering this speech, a revolution was taking place in Russia. Russia had been fighting with the Allies (France and Great Britain,) but the revolution meant that Russia would sign an armistice with Germany and leave the war. It would also mean that Russia was transitioning from a monarchy – a government led by a Czar – to a different form of government. The U.S. hoped the new government would be democratic.

The First Part of the Speech: Wilson Talks About...

- Belgium. Germany went through Belgium when they invaded France, and there were many stories of the

brutality of German soldiers in Belgium.

- Shipping. World War I – and Germany in particular – was disrupting shipping in the Atlantic Ocean. Wilson referred to this as “warfare against mankind.”
- Neutrality. Not only is neutrality impractical, it is making things worse because it is drawing the U.S. into the war without making preparations.
- Autocrats. He makes it clear that he wants to fight the German government – an autocratic government that was not elected by the people - and not the German people. “We have no quarrel with the German people,” Wilson stated.

The Most Famous Part: What Do You Think Wilson Was Saying?

What Wilson Said	Your Interpretation
<p>“The world must be made safe for democracy. Its peace must be planted upon the tested foundations of political liberty. We have no selfish ends to serve. We desire no conquest, no dominion. We seek no indemnities for ourselves, no material compensation for the sacrifices we shall freely make. We are but one of the champions of the rights of mankind. We shall be satisfied when those rights have been made as secure as the faith and the freedom of nations can make them.”</p>	

Glossary

Democracy: Self-Government

Political Liberty: Political Freedom

Dominion: Ownership

Indemnities: Repayment

Compensation: Payment

Vocabulary

Commodity: Something that can be 1) bought and sold, and 2) used .

Examples: grains, metals, oil, natural gas, beef, electricity, and currencies

- Wheat is a commodity

Harvesting

Reaping: To harvest or gather a crop

Threshing: Separating grain from a plant

Combine: A machine that performs both reaping and threshing

Bushels, Acres and Yield

Bushel: A unit of measure that is 64 pints.

- A bushel of wheat weighs about 60 lbs.

Acre: An area that is 4,840 square yards

- This is roughly the size of a football field.

Yield: The amount of grain harvested

- This is typically measured in bushels per acre.

If a farmer harvested 1,200 bushels on 160 acres of land, the yield would be 7.5 bushels per acre.

Total Bushels / Acres = Yield

1,200 Bushels / 160 Acres = 7.5 Bushels per Acre

Inflation

Inflation: A general increase in the prices of goods and services, and a decrease in the purchasing power of money

- "Inflation" explains why a hamburger at McDonalds is more expensive today than it was twenty years ago.
- Inflation means that you cannot compare money values from different eras.

Which one is NOT a commodity?

- a. Gold
- b. Euro
- c. Stock of Wal-Mart
- d. Soybeans
- e. Orange Juice

Draw a picture that illustrates the difference between these two terms: reaping and threshing.



Solve the following problem: A farmer owns 1,000 acres. He plants 500 acres to wheat, and he is able to harvest 450 acres. He harvests a total of 13,500 bushels. What is his total yield?

According to Bureau of Labor Statistics, prices in 2018 are 9.75% higher than they were in 2012. If the price of a “whatchamacallit” was \$200 in 2012 – what would the price of the “whatchamacallit” be in 2018?

Kansas Wheat History: 1866-1910

When was the price of wheat highest during this time period?

When was the price of what lowest during this time?

What was the “range” between these two prices?

Which of these two statements do you agree with?

During this time period, the price of wheat seems rather stable. During this time period, the price of wheat seems rather volatile.

During this time period, does the yield – the number of bushels harvested per acre - greatly increase, greatly decrease or pretty much stay the same?

Which of these statements do you agree with?

During this time period, the amount of land harvested increases slowly. During this time period, the amount of land harvested explodes in one year.

During this time period, in what year did “Production” reach its peak?

During this time period, at what year does the “Farm Value” of wheat in Kansas reach its peak?

Kansas Wheat History: 1910-1940

When was the price of wheat highest during this time period?

When was the price of what lowest during this time?

What was the “range” between these two prices?

Which of these two statements do you agree with?

During this time period, the price of wheat seems rather stable. During this time period, the price of wheat seems rather volatile.

During this time period, does the yield – the number of bushels harvested per acre - greatly increase, greatly decrease or pretty much stay the same?

Which of these statements do you agree with?

During this time period, the amount of land harvested increases slowly. During this time period, the amount of land harvested explodes in one year.

During this time period, in what year did “Production” reach its peak?

During this time period, at what year does the “Farm Value” of wheat in Kansas reach its peak?

Kansas Wheat History: 1940-1970

When was the price of wheat highest during this time period?

When was the price of what lowest during this time?

What was the “range” between these two prices?

Which of these two statements do you agree with?

During this time period, the price of wheat seems rather stable. During this time period, the price of wheat seems rather volatile.

During this time period, does the yield – the number of bushels harvested per acre - greatly increase, greatly decrease or pretty much stay the same?

Which of these statements do you agree with?

During this time period, the amount of land harvested increases slowly. During this time period, the amount of land harvested explodes in one year.

During this time period, in what year did “Production” reach its peak?

During this time period, at what year does the “Farm Value” of wheat in Kansas reach its peak?

Kansas Wheat History: 1970-2017

When was the price of wheat highest during this time period?

When was the price of what lowest during this time?

What was the “range” between these two prices?

Which of these two statements do you agree with?

During this time period, the price of wheat seems rather stable. During this time period, the price of wheat seems rather volatile.

During this time period, does the yield – the number of bushels harvested per acre - greatly increase, greatly decrease or pretty much stay the same?

Which of these statements do you agree with?

During this time period, the amount of land harvested increases slowly. During this time period, the amount of land harvested explodes in one year.

During this time period, in what year did “Production” reach its peak?

During this time period, at what year does the “Farm Value” of wheat in Kansas reach its peak?

World War I and Wheat Farmers – Thematic Paragraph

Choose one of the following groups and write a paragraph explaining how the terms are interconnected. Make sure to underline the four terms in your paragraph.

Group 1: wheat farmers, World War I, wheat prices, Europe

Group 2: wheat farmers, World War I, World War II, China

Group 3: yield, mechanization, fertilizer, cross breeding

<p>Terms</p> <p>Uses and demonstrates an understanding of all four terms.</p>				
<p>Conventions</p> <p>Contains six sentences, is easily understood, and mistakes do not detract from the writing.</p>				
<p>Connections</p> <p>All terms are connected with another term, and all terms work together to tell one story.</p>				
<p>Understanding</p> <p>Demonstrates a deep level of understanding.</p>				

World War I and Wheat Farmers

- In 1917, Isaac Baker used a tractor to pull the reaper/binder through his wheat fields near Bismarck, North Dakota. Note the bundles lying on the ground behind the binder. The photo and caption is from the North Dakota historical website: www.ndstudies.gov.

RAFT Writing Assignment

A RAFT is a creative writing assignment that allows you to use historical information in a creative way. All of the information that has been covered can be used – but there is no way that you can use all of it. Your job is to decide what information to use, and how to make it all work together and make sense. Your goal is to create a convincing document – but you are also trying to demonstrate that you understand the material.

Your Choices

Role	Audience	Format	Topic
Farmer – Born in 1900	Himself	Journal	A detailed account of his farming operation – what he experienced and what he learned
7th Grade Student Who Lives on a Farm Specializing in Wheat Production That Has Been in the Family For Generations	His or Her Family	Family Tree	A detailed account of what each generation of their family experienced – the challenges they faced and how they overcame them

<p>Professional Agronomist That Works For the Kansas Department of Agriculture</p>	<p>Kansas Secretary of Agriculture and Kansas Farmers</p>	<p>Report</p>	<p>The report addressed two questions:</p> <p>What can Kansas wheat farmers learn from the history of wheat production in Kansas?</p> <p>What can wheat farmers expect in the future?</p>
--	---	---------------	---

RAFT – Things to Consider

Your Childhood: 1900-1910

- The first President you would be able to remember would be Theodore Roosevelt. He was President from 1901-1909.

Your Teens: 1910-1920

- 24 million men registered for the draft, and about 3 million were drafted. You would have had a roughly 12.5% chance of being drafted.
- 2 million men volunteered for the military in World War I. There is about a 10% chance that you would have volunteered for the military.
- Women get the right to vote in 1919.

Your Twenties: 1920-1930

- In the twenties, the average male married at 24 to 25 years of age.
- Family sizes peaked in 1920. It would have been in your interest to have a larger family.

Your Thirties: 1930-1940

- Southwest Kansas was in the bullseye of the Dust Bowl. Stafford County was on the edge of the area

affected by the Dust Bowl. · Wherever you lived, you would have been greatly affected by the Great Depression – an event that was separate from the Dust Bowl. · Birth rates during the Great Depression declined.

Your Forties: 1940-1950

- You would have been too old to be drafted into World War II.
- Your greatest value during WW II was to farm – to help create food for the war effort.
- It is possible that a male child – or children - could have been fighting in WW II.

Your Fifties: 1950-1960

- The average lifespan for a male born in 1900 was approximately 46 years, and the average lifespan for a woman was approximately 48 years.
- In your fifties, you would have been a relatively old person.

Your Sixties: 1960-1970

- During the Great Depression, the federal government created a program called “Social Security” in 1935. It provided a pension for elderly Americans.
- Farmers were included in Social Security in 1955.
- You would have qualified for Social Security benefits in 1965, at the age of 65.

Golden Years: 1970+

- You would have witnessed farming boom of the 70’s, the farming bust of the 80’s, and the rise of technology in the 90’s.

RAFT Rubric

	4	3	2	1
Timeline	Timeline meets the	Timeline meets the	Timeline DOES NOT	Timeline is confusing

	deadline, includes six details from six different decades, and compares data from at least three decades	deadline, includes four details from four different decades, and compares data from two decades	meet the deadline, or contains less than four details, or it does not compare data from different decades	and does not help preparation for the RAFT
Role	Convincingly fulfills role of a wheat farmer	Adequately fulfills role of a wheat farmer	Begins to fulfill role of a wheat farmer	Does not fulfill role of a wheat farmer
Understanding	Displays a deep level of understanding	Displays an adequate level of understanding	Displays some understanding	Displays little understanding
Physical Product	A highly unique product with extreme authenticity	A unique product with some authenticity	Contains little authenticity	Contains no authenticity
Conventions	Writing is easily understood and mistakes do not detract from the essay	Mistakes begin to detract from the essay	Mistakes significantly detract from the essay	Essay is extremely difficult to read