From Horses to Airplanes
Technology in WWI and Its Effects

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Grade Level	10th Grade
Subject	Social Studies
Course	World History

Essential Question

How does war influence innovation? What are the consequences of war-time innovations?

Summary

Students begin this lesson by analyzing a poem written by Wilfred Owen, a British soldier in WWI. Students then make observations and inferences about the technologies developed and used in WWI. Students view a short video about WWI technologies and complete Jigsaw readings in groups about the technologies. Students then collect data about the casualties of WWI and summarize their learning by responding to a Claim-Evidence-Reasoning question.

Snapshot

Engage

Students analyze the poem "Dulce et Decorum est."

Explore

Students observe images of WWI technology and make inferences.

Explain

In groups, students watch a video and complete Jigsaw readings about WWI weapon technologies.

Extend

Students research the number of WWI casualties and create a chart.

Evaluate

Students use the Claim-Evidence-Reasoning strategy to respond to a question.

Standards

Oklahoma Academic Standards (Social Studies: World History (9th through 12th grade))

WH.4.2: Describe the significant events of World War I, including key strategies, advancements in technology, the war's significant turning points, and its lasting impact.

Attachments

- [CER—From Horses to Airplanes - Spanish.docx](#)
- [CER—From Horses to Airplanes - Spanish.pdf](#)
- [CER—From Horses to Airplanes.docx](#)
- [CER—From Horses to Airplanes.pdf](#)
- [Images Painting a Picture—From Horses to Airplanes - Spanish.docx](#)
- [Images Painting a Picture—From Horses to Airplanes - Spanish.pdf](#)
- [Images Painting a Picture—From Horses to Airplanes.docx](#)
- [Images Painting a Picture—From Horses to Airplanes.pdf](#)
- [Jigsaw Readings Note Catcher—From Horses to Airplanes - Spanish.docx](#)
- [Jigsaw Readings Note Catcher—From Horses to Airplanes - Spanish.pdf](#)
- [Jigsaw Readings Note Catcher—From Horses to Airplanes.docx](#)
- [Jigsaw Readings Note Catcher—From Horses to Airplanes.pdf](#)
- [Jigsaw Readings—From Horses to Airplanes - Spanish.docx](#)
- [Jigsaw Readings—From Horses to Airplanes - Spanish.pdf](#)
- [Jigsaw Readings—From Horses to Airplanes.docx](#)
- [Jigsaw Readings—From Horses to Airplanes.pdf](#)
- [Lesson Slides—From Horses to Airplanes.pptx](#)
- [Painting a Picture Chart—From Horses to Airplanes - Spanish.docx](#)
- [Painting a Picture Chart—From Horses to Airplanes - Spanish.pdf](#)
- [Painting a Picture Chart—From Horses to Airplanes.docx](#)
- [Painting a Picture Chart—From Horses to Airplanes.pdf](#)
- [Poem Dulce Et Decorum Est—From Horses to Airplanes - Spanish.docx](#)
- [Poem Dulce Et Decorum Est—From Horses to Airplanes - Spanish.pdf](#)
- [Poem Dulce Et Decorum Est—From Horses to Airplanes.docx](#)
- [Poem Dulce Et Decorum Est—From Horses to Airplanes.pdf](#)
- [Researching WWI Casualties—From Horses to Airplanes - Spanish.docx](#)
- [Researching WWI Casualties—From Horses to Airplanes - Spanish.pdf](#)
- [Researching WWI Casualties—From Horses to Airplanes.docx](#)
- [Researching WWI Casualties—From Horses to Airplanes.pdf](#)
- [Student Example Painting a Picture Chart—From Horses to Airplanes.docx](#)
- [Student Example Painting a Picture Chart—From Horses to Airplanes.pdf](#)

Materials

- Lesson Slides (attached)
- "Dulce Et Decorum Est" handout (attached; one per student)
- Images Painting a Picture (attached)
- Painting a Picture Chart handout (attached; one per student)
- Student Example Painting a Picture Chart (attached)
- Technologies of WWI Jigsaw Readings (attached)
- Technologies of WWI Note Catcher (attached)
- Researching WWI Casualties handout (attached)
- C-E-R handout (attached)

10 minutes

Engage

Use the attached **Lesson Slides** to guide the lesson. Review the essential questions and lesson objective on **slides 3 and 4** with students. Pass out the attached **Dulce Et Decorum Est** handout to provide students with a copy of the poem. Read the poem aloud to students or show **slide 5** and play the video of the poem being read while students follow along.

Embedded video

https://youtube.com/watch?v=qB4cdRgIcB8

After reading the poem, have students discuss in pairs what the poem is about. Show **slide 6** and use the questions to guide students as they discuss the poem. After students share with a partner, ask them to share their thoughts on the poem.

Show **slide 7**. Explain to students that the last two lines of the poem are in Latin and translate to, "It is sweet and good to die for your country." Ask students if their thoughts about the poem changed after learning the meaning of the last two lines.

Show **slide 8.** Provide students with information about the author of the poem, Wilfred Owen. Ask them if their thoughts about the poem changed after learning something about Wilfred Owen.

20 minutes

Explore

> **Teacher's Note: Activity Preparation**
>
> Prior to class, print and hang up the images in the **Images-Painting a Picture Packet** around the classroom for students to access.

Pass out the attached **Painting a Picture Chart** handout.

Show **slide 9**. Explain the Painting a Picture strategy to students. Ask students to move about the classroom with their Painting a Picture Chart handout as they view the six image sets. Ask students to write on the left side of the chart what they observe in each image. When they have made their observations, ask them to write on the right side of the chart what they think each image reflects about World War I and the countries who participated in the war.

Provide sufficient time for students to visit each image set; then, have them compare their charts with a partner. Ask for volunteers to share the information they have included for each image set.

> **Teacher's Note**
>
> See the attached **Student Example Painting a Picture Chart** as possible student responses to the Painting a Picture Images.

25 minutes

Explain

Tell students that World War I led to many new weapon technologies. Show **slide 10** and play the video, which introduces how new technology was used during the war.

> **Embedded video**
>
> https://youtube.com/watch?v=k7v3cq1ZJjM

Place students into groups of three. Tell the groups they will learn more about how each piece of technology was used in World War I. Pass out the attached **Jigsaw Readings** packet to each group and a **Jigsaw Readings Note Catcher** to each student.

Show **slide 11**. Introduce students to the Jigsaw strategy. Have students divide the six readings between the three group members. Explain that as they read their assigned topics, they should take notes on their Note Catcher. After students have read their assigned parts, ask them to share the information they have gathered with the other group members.

Explain that group members will take turns sharing so that all six technologies have been discussed and students have written notes about each technology. Ask students to think about how these new technologies affected the duration of the war and the number of people killed and injured in combat.

20 minutes

Extend

Show **slide 12.** Tell students they will next research the number of casualties in each country with their groups. Pass out the attached **Researching WWI Casualties** handout to each group and have students use their devices to research how many people died during the war.

Instruct students to turn their data into a chart using an application such as Google Sheets after compiling information about each country. Discuss as a class the number of deaths in the war. Ask students to think about how the technologies influenced the number of deaths in the war as well as the duration of the war.

10 minutes

Evaluate

For the final activity, pass out the attached **C-E-R** handout to each student. Show **slide 13** and ask students to first think about the question, *How did new technologies impact World War 1 and its combatants?* Ask students to respond to the question as follows:

- Write your claim in the first box.
- Describe the evidence for your claim.
- Explain how the evidence backs up the claim.

Collect completed CER's and assess student understanding of the lesson content.

Possible Student Responses

The many new technologies created during World War I contributed significantly to the number of deaths and injuries.

Weapons such as poisonous gas and machine guns resulted in serious injuries and deaths.

Countries were able to drop bombs from airplanes, which also resulted in many deaths.

Without these technologies, the casualty levels would have been much lower and the war might not have lasted as long.

Resources

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