

## LESSON PLAN INTRODUCTION

Teacher: Richard P. Bruneau

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Class: U.S. History

Grade Level: 11-12

Topic: Technology and War in American History

Unit Introduction: War and revolution spawned the United States and wars have shaped the course of American history from the Jamestown and Plymouth colonies to the present. At every step technology from weapons to modes of transportation and communication to the massive expansion of new products and production have had a significant impact on the outcome of these struggles. Likewise, wars have sparked technological innovations as well as private enterprises and government actions that have dramatically altered the political, economic, social and cultural fabric of the nation. Many factors of course have determined America's victories and defeats in war, but the technological strand represents a vital link to the broader study of American history and represents an area in which America has excelled. The competence of America's battlefield performances, stratagems, leaders and generals have varied widely, for example, but America's ability to make the most of her technological resources and productive capacities remains without peer, especially in the world wars. These three lesson plans allow students to search for the technological continuities to be found in American wars from colonial times to World War II and to link them to wider developments in American history. Hence, each unit focuses both narrow and broad lenses on the impact of technology. Students will bear witness, discuss and draw conclusions about the impact of technology in three seminal events in American military history:

- Henry Knox's 300-mile winter trek hauling cannon from Fort Ticonderoga in upstate New York to lift the siege of Boston in the spring of 1776.
- The 1876 Battle of the Little Big Horn, popularly known as Custer's Last Stand, where a force of 2,000, mostly Sioux and Cheyenne, wiped out the 7<sup>th</sup> U.S. Cavalry detachment of over 250 men.
- The massive explosion of America's Arsenal of Democracy in World War II.

In the last case, students will also view the impact of America's prodigious outpouring of war technology from a state (Connecticut), national and international (Lend Lease) perspective. Each lesson plan is self-contained, but can provide a continuum for discussions of technology and war over time. The basic format can also be expanded to demonstrate how technology and technological innovations influenced other American wars and battles. The essential point is to provide students with vehicles for exploring the role of technology in war and enabling them to then draw links to the broader highways of American history.

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**Lesson 1: Henry Knox the Ticonderoga Cannon and the Siege of Boston, 1775-1776.**

General George Washington's forces had surrounded and laid siege to Boston through the winter of 1775-76. Washington's forces, however, lacked sufficient artillery to drive the British from the city. Anticipating a spring battle for Boston in 1776, Washington dispatched the recently appointed chief of continental artillery, the 25-year-old Henry Knox on a seemingly impossible mission. Knox was ordered to bring the 59 cannons at Fort Ticonderoga to Boston. This trek of some 300 miles across lakes, mountains and rivers like the Hudson and Connecticut appeared doomed from the outset. Knox and his men remained undaunted employing 400 oxen, dozens of sleds, some 2,000 men and numerous improvisations in the dead of winter. The journey took three months and Washington's men in Boston were so inspired by this feat that once the cannons arrived in Boston they deployed them on Dorchester Heights overlooking the Boston harbor in a single night. The intimidating sight of these cannons commanding the harbor led the British to withdraw from Boston and retire to Halifax. Knox's determined and brilliant technological coup secured America's first bloodless victory of the war.

**Essential Questions:**

- Students will explore and discuss the difficulties of command faced by Washington as he took charge of colonial forces around Boston.
- Students will discuss the factor that led to Washington trusting the young Knox with the vital mission of transporting the cannons to Boston and the potential consequences of failure.
- What technological difficulties did Knox face and how did he overcome the weather, mountains, rivers and doubts of his men?
- How did the successful transportation of these cannons and the victory over the British in Boston influence American confidence and willingness to declare independence less than four months later?
- How did the Boston victory influence the growing myth of the militia and what impact would it have on future war preparations and battles?
- How did Knox's legendary feat contribute to American military traditions and national mythology?

**Learner Background:** Students will have explored the broader issues surrounding the American War for Independence along with the major characters and battles leading up to this early conflict.

**Materials/Resources: (Documents follow)**

A series of original documents

Map of Knox's trek from Fort Ticonderoga New York to Boston Massachusetts.

Secondary sources

**Initiation:** Simulation- Students representing the colonies at the Second Continental Congress will debate the appointment of a Commander in Chief of the Continental Army. Students will be required research and present arguments based on regional differences and priorities. The slate of potential candidates will include George Washington, Charles Lee and Horatio Gates.

**Learning Activities:**

- Slides on the American Revolution
- Power point on the American Revolution
- Individual and group assessments of documents.

**Closure:** Using Knox's journey and the American victory in Boston, student will continue to assess the important technological developments that influenced the course and outcome of the American Revolution

**Assessment:** Students will keep a technology journal that illustrates additional technological developments during the War for Independence. Students will use this journal and their observations, class notes, reading, etc. to write a 4-5 page essay assessing the impact of technology and technological innovation on the outcome of the American Revolution.

**Differentiated Instruction:** This is a homogeneous grouped section. Students having trouble with the readings or in assessing the documents will meet with the teacher after school. Document assessments will also take place in part as a group activity.

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### **Lesson 2: The Battle of the Little Big Horn or Custer's Last Stand, 1876.**

On July 1876 General George Armstrong Custer boldly or recklessly charged into the valley of the Little Big Horn in pursuit of Indian hostiles. Ironically, Custer feared the Indians; mostly Sioux and Cheyenne, would escape. In his haste, he divided his command and left behind the most potent weapons in his arsenal, four Gatling guns. Too late, Custer realized his folly. His forces became the prey for a massive war party that ultimately obliterated his command. The slaughter of this famous Indian fighter and Civil War hero shocked the nation while it prepared its centennial celebration. This most famous of Indian victories has been studied and portrayed in dozens of books and films. In recent times, Custer's heroic image has given way to denizens of political correctness and sympathy for the plight of Native Americans. Valuable Indian accounts of the battle and archaeology research have also recast the historical record. Nonetheless, Custer's Last Stand has perpetuated a long fascination by historians and the public alike. Articles and books continue to spin this tale thereby ensuring Custer a kind of immortality in defeat amidst the greasy grass and rolling hills that surround the valley of the Little Big Horn.

#### **Essential Questions:**

- How can we account for Custer's supreme confidence when confronting Native American forces much larger than his own?
- What side had the technological advantage in weapons and firepower.
- Why did the Indians win this battle, and what if any role did technology play in the outcome?
- What role did technology play in the outcome of the Indian Wars?
- Custer's defeat became a kind of morality tale infused with all kinds of assumptions about heroism and war. Custer's immortality has endured but his glorious end has proved fleeting. Assess the Custer character and image and how it has been transformed over time.

**Learner Background:** Students will have studied the American Civil War and Reconstruction including the post-war push west of the Mississippi to the Pacific coast. Students will also be familiar with the clash between the native tribes of the Great Plains and the encroaching settlers and miners.

#### **Materials/Resources: (Documents follow)**

Accounts of the battle that reflect on the role of weapons on both sides of the battle. Accounts of the battle from historians and Native American participants.

## Maps of the battlefield

**Initiation:** Computer simulation on Custer Last Stand. Students will take on the roles of the combatants and conduct an historical and counterfactual replay of the battle. For example, had Custer not divided his command would the outcome have been different? Would the addition of four Gatling guns have altered the outcome the battle? If the soldiers had more repeating rifles would the outcome have been different? This simulation explores the battlefield and many of the What Ifs associated with Custer's defeat and will serve as a wonderful catalyst for exploring the battle.

### **Learning Activities:**

- Film: "They Died with Their Boots On" starring Errol Flynn
- Power Point presentation on the Battle of the Little Big Horn
- Individual and group assessments of original documents.
- Readings on Custer's Last Stand.
- Computer simulation on Custer's Last Stand.

**Closure:** Simulation: Students paired in groups will conduct a final computer simulation of the battle and write a 3 to 4 assessment of the simulation in comparison to the historical event. In particular, students will explore varied strategies and the role of various weapon technologies on the outcome of the battle.

**Assessment:** Students will write a 3 to 4 page assessment of the simulation in comparison to the historical event. Students will also write an assessment of the role of technology in determining the outcome of the battle.

**Differentiated Instruction:** This is a homogeneous grouped section. Students having trouble with the readings or in assessing the documents will meet with the teacher after school. Document assessments will also take place in part as a group activity. The simulation of the Battle of the Little Big Horn represents an exercise in cooperative learning and decision-making.

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### **Lesson 3: America and World War II: Arsenal of Democracy**

America's industrial, scientific, manufacturing and agricultural base created a prodigious World War II arsenal that enabled it to fight two wars simultaneously across two oceans while making massive shipments of food and material to her Russian and British Allies. Despite a near decade long economic depression, America's private enterprise system coupled with massive federal government initiatives outpaced the highest levels of production ever seen in war. This unit explores this technological and production wizardry at three levels. The first series of news documents reflect on Connecticut's contribution to the war effort. The second series of news documents review some of the social and economic consequence of this massive productive expansion on the home front. The third Series of news documents provide commentary on the U.S. Lend Lease program that sent extraordinary quantities of weapons, material and food to England and Soviet Russia. Together they present a view of the war beyond the battlefields and discussions of strategy, but also illustrate the vital role of technology in defeating the combined might of Nazi Germany and Imperial Japan.

#### **Essential Questions:**

- What historic role had Connecticut played as a progenitor of America's arsenal in earlier wars?
- What Connecticut industries and corporations made major technological contributions to the war effort?
- How did Connecticut companies transform peacetime production to war time needs? Explain this transition.
- What impact did America's full wartime mobilization have on families, gender roles, supplies of products on the home front and the labor supply?
- Trace the evolution of the Lend Lease program through the press accounts. How did perceptions of the Soviet Union and England relative to the Lend Lease program change over time?
- While the Lend Lease program represented a vital cog in the Allied victory machine, what impact did it have, if any, on the origins of the Cold War?
- What overall assessment can be made of the importance of technology and technological innovations to the Allied victory in World War II.

**Learner Background:** Student will have studied the key event leading up to Pearl Harbor and America's entry into the Second World War as well as the major developments in Europe and the Far East. Students will have explored the debates that divided and paralyzed America prior to Pearl Harbor. Finally, student will explore the

war after America's entry and will be familiar with the major events, characters and developments on all fronts through the end of the war.

**Materials/Resources: (Documents follow)**

Three series of newspaper and magazine accounts reflecting on the impact of America's wartime production.

**Initiation:** A poem entitled: "A Handsome Young Airman" Author unknown

**Learning Activities:**

Film: Video scenes from the World at War series and the History Channel, History of World War II.

Power Point presentation on World War II.

**Closure:** Student will form three groups corresponding to the three series of news documents. Each group will make an assessment of the documents in relation to the essential question and then present and discuss their findings.

**Assessment:** Student will write two essays, two to three pages in length, that assess the impact of technology and technological innovation on the outcome of World War II. The students will select two series to analyze out the three series of news documents.

**Differentiated Instruction:** This is a homogeneous grouped section. Students having trouble with the readings or in assessing the documents will meet with the teacher after school. Document assessments will also take place in part as a group activity.

## Technology and War in American History

### Lesson 1: Henry Knox the Ticonderoga Cannon and the Siege of Boston, 1775-1776.

#### Documents

**Document A** - “The Knox Trail” excerpts from the Knox Diary.

**Document B** – “Greene’s Story” excerpts from the diary of American General Nathanael Greene.

**Document C** – Eyewitness accounts of the victory at Boston from *Rebels & Redcoats*, pages 104-107.

**Document D** – “Big Guns for Washington” by Clay Perry, *American Heritage*, April 1955. secondary source, map and illustration.



## **Technology and War in American History**

### **Lesson 2: The Battle of the Little Big Horn or Custer's Last Stand, 1876.**

**Document A – Map, The Battle of the Little Bighorn, June 25, 1876**

**Document B – *Archaeological Perspectives on the Battle of the Little Big Horn* (1989) by Douglas D. Scott, et al.** Secondary source discussion of how individual firearms were used by the Indians at the battle.

**Document C – “Guns of the Little Bighorn”** by Greg Michno, *Wild West*, June 1998

**Document D – “Lokota Noon”** by Greg Michno *Wild West*, June 1996. Eyewitness Testimony by the Lakota Sioux.

**Document E – “How to Pacify the Indians,”** *New York Times*, May 14, 1871

**Document F - “The Indians,”** *New York Times*, September 11, 1866

## **Technology and War in American History**

### **Lesson 3: America and World War II: Arsenal of Democracy**

#### **Document A – “A Handsome Young Airman” Author Unknown**

##### **Document Section I – Connecticut**

- Document A – “Victories for Democracies Being Forged In Connecticut”** *The Hartford Courant*, January 11, 1942 (3 pages)
- Document B – Connecticut Arsenal for Democracy Since 1775,** *The Hartford Courant*, July 5, 1942 (2 pages)
- Document C – “The ‘E’ Flag over Colt’s”** *The Hartford Courant*, November 18, 1941 ( 1 page)
- Document D – “Democracy at Work in Connecticut Industry”** *The Hartford Courant*, January 3, 1943 (3 pages)
- Document E – Connecticut War Production \$10 Billion”** *The Hartford Courant*, July 2, 1944 (3 pages)
- Document F – “The Heart of the Matter”** *Time Magazine*, July 31, 1950. (3 pages)
- Document G – “The Hellcat of World War II Fame”** web (1 page)
- Document H – “B-26 Marauder: American Bomber in World War II”** *The History Net*, March 2006.

##### **Document Section II – Lend Lease**

- Document A – “Russia Now Leads Food Lend-Lease”** *New York Times*, January 28, 1943 (4 pages)
- Document B – “Lend Lease Hits 15 Billions Total”** *New York Times*, September 29, 1943. (2 pages)
- Document C – “President Says Lend Lease Is Big Help in Red Victories”** *New York Times*, January 9, 1944 (2 pages)
- Document D – “Misuse by Allies of Lend-Lease Aid Denied by Crowley”** *New York Times*, April 15, 1944 (4 pages)
- Document E – “Russian Press Hails American Friendship”** *New York Times*, June 12, 1944 (1 page)
- Document F – U.S. Refuses Lend Lease of goods for Post-War Industry to Russia”** *New York Times*, January 7, 1945 (2 pages)
- Document G – “Lend-Lease as a Strategic Weapon”** *New York Times*, June 26, 1945 ( 2 pages)