

# Bombs Away!! The Role of Strategic Bombing in Changing Warfare in World War II

EMU TPS Workshop August 8 - 10, 2011



## Lesson Overview:

*Warfare developed new tools between World War I and World War II. The creation of tanks and airplanes changed how wars were fought, eliminating trench warfare of World War I. This lesson focuses on the conceptual leap made by war leaders of World War II, when attacking soldiers was no longer the only option, but also attacking the supply lines and support systems of the soldiers.*

## Objectives:

Students will be able to:

- Understand the role of strategic bombing in World War II.
- Appreciate that warfare changes as new weapons and technologies develop.
- Understand that advances in technology since World War II means several of the tactics used at that time are no longer used.
- Connect Mechanization and Industrialization themes to the changing face of warfare.

## Standards:

### Standard I.I Time and Chronology

All students will sequence chronologically the following eras of American History and key events within these eras in order to examine relationships and to explain cause and effect: The Meeting of Three Worlds (beginnings to 1620); Colonization and Settlement (1585-1763); Revolution and the New Nation (1754-1815); Expansion and Reform (1801-1861); and Civil War and Reconstruction (1850-1877); The Development of the Industrial United States (1870-1900); The Emergence of Modern

Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,

America (1890-1930); The Great Depression and World War II (1929-1945); Post War United States (1945-1970); and Contemporary United States (1968-present).

**Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,**

**Standard I.2 Comprehending the Past**

All students will understand narratives about major eras of American and world history by identifying the people involved, describing the setting, and sequencing the events.

**Standard I.4 Judging Decisions from the Past**

All students will evaluate key decisions made at critical turning points in history by assessing their implications and long-term consequences.

**Standard V.I Information Processing**

All students will acquire information from books, maps, newspapers, data sets, and other sources, organize and present the information in maps, graphs, charts, and time lines, interpret the meaning and significance of information, and use a variety of electronic technologies to assist in accessing and managing information.

**Standard V.2 Conducting Investigations**

All students will conduct investigations by formulating a clear statement of a question, gathering and organizing information from a variety of sources, analyzing and interpreting information, formulating and testing hypotheses, reporting results both orally and in writing, and making use of appropriate technology.

**Standard VI.2 Group Discussion**

All students will engage their peers in constructive conversation about matters of public concern by clarifying issues, considering opposing views, applying democratic values, anticipating consequences, and working toward making decisions.

**Standard VI.3 Persuasive Writing**

All students will compose coherent written essays that express a position on a public issue and justify the position with reasoned arguments.

**Time Required:**

**45-55 minutes for 1 lesson; 2 days if expanding lesson with projects.**

**Recommended Grade Level(s):**

High School, 9-12

**Topic(s):**

US History, World History, World War II

**Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,**

**Era:**

1940's, World War II

Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,

## Preparation:

### Materials:

Pictures or examples of World War I and World War II artifacts, some pictures are provided.

### Resources:

*See end for Resource Table.*

## Procedure:

### Activities *(described as steps)*

Teacher should provide a copy of World War I trenches to students or project one on the board. Teacher should lead a discussion that leads students to understand how warfare changes, in particular from WWI to WWII. Sample questions are included below.



Look at the picture of World War I trenches. Were these trenches temporary?

For how long would the trenches be used?

What was “No Man’s Land”?

Why was it so difficult for troops to advance in World War I?

What would modern troops do if faced with an enemy in a trench? List several ways to deal with such an enemy. Look at your list – how many of those methods of dealing with the enemy depend on weapons that were not available in WWI?

Provide a picture of an airplane from WWI and WWII. Have students compare and contrast several differences they notice. Help them notice design changes, change in use of materials, amount of weapons available, and more. You may want to use the Photo Analysis Worksheet available in the Teacher Toolkit at the Library of Congress website.



Provide students with a map of Germany, with several places listed and their main contributions to the war effort (Example: Hamburg is a major port, supplying many raw materials to the war effort). Have students list targets in order of importance to prevent the German troops from being ready for an Allied attack.



### Extension Activities:

Several advances in technology led to advances in warfare. Many of these advances were created during World War II. Development of Radar, submarines, atomic weapons and much more provide rich topics for additional projects that follow the same general theme of this lesson.

Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,

Have students make connections to literature, news reels, movies, music and other aspects of culture at the time. The poem "Ball Turret Gunner" and other respected works are available online ([http://en.wikipedia.org/wiki/The\\_Death\\_of\\_the\\_Ball\\_Turret\\_Gunner](http://en.wikipedia.org/wiki/The_Death_of_the_Ball_Turret_Gunner))

Research "Manhattan Project" in Wikipedia for a wealth of material ([http://en.wikipedia.org/wiki/manhattan\\_project](http://en.wikipedia.org/wiki/manhattan_project)) regarding the development of the atomic bomb.

## **Evaluation:**

*It is suggested that the teacher the evaluation of this lesson be a part of a larger unit test. An open-ended question format is suggested, preferably using a primary source-document as a basis for the question. Some suggestions are as follows:*



*Name three new weapons or military advances that developed between World War I and World War II and explain how warfare changed as a result of these advances.*

*Name three modern weapons or military advances that have developed since World War II and explain how warfare changed as a result of these advances.*

*Compare and contrast weapons available and tactics used in warfare in the Civil War and World War II. Provide three examples.*



**Name: Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,**

**Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,**

ITEM	DESCRIPTION	CREDITS	PERMANENT URL
 <p><b>Airplane, possibly World War I fighter plane</b></p>	<ul style="list-style-type: none"> <li>• Title: [Airplane, possibly World War I fighter plane] <ul style="list-style-type: none"> <li>• Related Names: <ul style="list-style-type: none"> <li><a href="#">Detroit Publishing Co.</a>, publisher</li> <li>• Date Created/Published: 1916 Oct. 12.</li> <li>• Medium: 1 negative ; glass ; 5 x 7 in.</li> </ul> </li> <li>• Reproduction Number: LC-D418-407 (b&amp;w glass neg.) <ul style="list-style-type: none"> <li>• Call Number: LC-D418-407 &lt;P&amp;P&gt; [P&amp;P]</li> </ul> </li> </ul> </li> <li>• Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA <ul style="list-style-type: none"> <li>• Notes:</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• Title devised by cataloger.</li> <li>• "C.S. 407, C.S. 250, Drew, 10/12-16, 60381 ..." on negative.</li> <li>• No Detroit Publishing Co. no.</li> <li>• Gift; State Historical Society of Colorado; 1949.</li> </ul> <ul style="list-style-type: none"> <li>• Digital ID: (digital file from intermediary roll film) det 4a26840 <a href="http://hdl.loc.gov/loc.pnp/det.4a26840">http://hdl.loc.gov/loc.pnp/det.4a26840</a></li> <li>• Reproduction Number: LC-D418-407 (b&amp;w glass neg.)</li> <li>• Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA</li> </ul>	<p>Reproduction Number: LC-D418-407 (b&amp;w glass neg.)</p> <p>Copyright unknown</p>	<p><a href="http://www.loc.gov/pictures/item/det199402279/7/PP/">http://www.loc.gov/pictures/item/det199402279/7/PP/</a></p>
 <p><b>Production. Airplane manufacture, general. Wooden wheels are attached to a P-51 ("Mustang") fighter plane so it may be moved around the ramp at the Inglewood, California plant of North American Aviation, Incorporated. When it is ready for flight tests, regular landing wheels with rubber tires will be substituted</b></p>	<ul style="list-style-type: none"> <li>• Creator(s): <a href="#">Palmer, Alfred T.</a>, photographer</li> <li>• Related Names: <ul style="list-style-type: none"> <li><a href="#">United States. Office of War Information.</a></li> </ul> </li> <li>• Date Created/Published: 1942 Oct.</li> <li>• Medium: 1 negative : safety ; 4 x 5 inches or smaller.</li> <li>• Reproduction Number: LC-USE6-D-007387 (b&amp;w film neg.)</li> <li>• Call Number: LC-USE6- D-007387 [P&amp;P]</li> <li>• Repository: Library of Congress Prints &amp; Photographs Division Washington, DC 20540 <a href="http://hdl.loc.gov/loc.pnp/pp.print">http://hdl.loc.gov/loc.pnp/pp.print</a></li> <li>• Notes: <ul style="list-style-type: none"> <li>○ Actual size of negative is C (approximately 4 x 5 inches).</li> <li>○ Title and other information from caption card.</li> <li>○ LOT 1986 (Location of corresponding print.)</li> <li>○ Transfer; United States. Office of War Information. Overseas Picture Division. Washington Division; 1944.</li> <li>○ More information about the FSA/OWI Collection is available at <a href="http://hdl.loc.gov/loc.pnp/pp.fsaowi">http://hdl.loc.gov/loc.pnp/pp.fsaowi</a></li> <li>○ Film copy on SIS roll 41, frame 267.</li> </ul> </li> <li>• Collections: <ul style="list-style-type: none"> <li>○ <a href="#">Farm Security Administration/Office of War Information Black-and-White Negatives</a></li> </ul> </li> </ul>	<p>View the <a href="#">MARC Record</a> for this item.</p> <p>Rights assessment is your responsibility.</p>	<p><a href="http://www.loc.gov/pictures/item/oem20020058/94/PP/">http://www.loc.gov/pictures/item/oem20020058/94/PP/</a></p>

Bryan Richards, Grosse Ile High School, [richarb@gischools.org](mailto:richarb@gischools.org)  
Joe Maci, Grosse Ile High School,



	<ul style="list-style-type: none"> <li>• Part of: Farm Security Administration - Office of War Information Photograph Collection (Library of Congress)</li> <li>• Bookmark This Record: <a href="http://www.loc.gov/pictures/item/oem2002005894/PP/">http://www.loc.gov/pictures/item/oem2002005894/PP/</a></li> </ul>		
	<ul style="list-style-type: none"> <li>• Title: American Red Cross men in Italian trenches, World War I. Distributing gifts</li> <li>• Date Created/Published: [between 1914 and 1918]</li> <li>• Medium: 1 photographic print.</li> <li>• Reproduction Number: LC-USZ62-64488 (b&amp;w film copy neg.)</li> <li>• Rights Advisory: Rights status not evaluated. For general information see "Copyright and Other Restrictions..." (<a href="http://lcweb.loc.gov/rr/print/195_copr.html">http://lcweb.loc.gov/rr/print/195_copr.html</a>).</li> <li>• Call Number: No call number recorded on caption card [item] [P&amp;P]</li> <li>• Repository: Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA</li> <li>• Notes: <ul style="list-style-type: none"> <li>○ Photoprint # 2743.</li> <li>○ American Natl. Red Cross Collection Italy Red Cross Personnel and Officers</li> <li>○ This record contains unverified, old data from caption card with subsequent revisions.</li> <li>○ Caption card tracings: Red Cross Coll. Cat.; Red Cross in Italy; WWI Italy; ANRC Coll. Cat.; Shelf.</li> </ul> </li> <li>• Collections: <ul style="list-style-type: none"> <li>○ <a href="#">Miscellaneous Items in High Demand</a></li> </ul> </li> <li>• Bookmark This Record: <a href="http://www.loc.gov/pictures/item/2003675929/">http://www.loc.gov/pictures/item/2003675929/</a></li> </ul> <p>View the <a href="#">MARC Record</a> for this item.</p> <p><b>Rights assessment is your responsibility.</b></p>	<p><b>Rights assessment is your responsibility.</b></p>	<p><a href="http://www.loc.gov/pictures/item/2003675929/">http://www.loc.gov/pictures/item/2003675929/</a></p>
	<ul style="list-style-type: none"> <li>• Title: [German soldiers posed in trenches in World War I]</li> <li>• Date Created/Published: [between 1914 and 1918]</li> <li>• Medium: 1 photographic print (postcard)</li> <li>• Reproduction Number: LC-USZ62-98186 (b&amp;w film copy neg.)</li> <li>• Call Number: SSF - World War, 1914-1918--Trench warfare, German [item] [P&amp;P] [P&amp;P]</li> <li>• Subjects: <ul style="list-style-type: none"> <li>○ <a href="#">World War, 1914-1918--Military personnel--German.</a></li> <li>○ <a href="#">Trench warfare--1910-1920.</a></li> </ul> </li> <li>• Format: <ul style="list-style-type: none"> <li>○ <a href="#">Photographic postcards--1910-1920.</a></li> <li>○ <a href="#">Photographic prints--1910-1920.</a></li> </ul> </li> <li>• Collections: <ul style="list-style-type: none"> <li>○ <a href="#">Miscellaneous Items in High Demand</a></li> </ul> </li> <li>• Bookmark This Record:</li> </ul>	<p><b>Rights assessment is your responsibility.</b></p>	<p><a href="http://www.loc.gov/pictures/item/89715083/">http://www.loc.gov/pictures/item/89715083/</a></p>

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