



Black and white photograph of the USS Leviathan with dazzle camouflage paint. Online Collections Database, 1982.112.529, www.theworldwar.org/research/database. National WWI Museum and Memorial.

Online Collections Database, **1982.112.529**, www.tneworldwar.org/research/database. National wwi Museum and Memorial.
Online.

Counter Technologies in the Great War and Daily Life

Recommended Grade Levels: 4-8

Course/Content Area(s): Social Studies/Civics

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LESSON OVERVIEW:	In this lesson, students will investigate the concepts of counter-technologies and reactive measures as deterrents and solutions to warfare. In small groups students will identify measures and countermeasures, technologies and counter technologies. Students will read and discuss <i>Dazzle Ships: World War I and the Art of Confusion</i> by Chris Barton.
OBJECTIVES:	Students will:
	 Explore the concepts of measures and countermeasures as they relate to the evolving tactics/stalemate of the WWI conflict areas Work in small groups to generate potential counter technologies Discuss Dazzle Ships: World War I and the Art of Confusion Generate their own counter technologies for problems in today's world
STANDARDS	National Council for the Social Studies (NCSS) C3 Framework Standards:
ALIGNMENT:	D2.His.2.3-5: Compare life in specific historical time periods to life today.
	D2.His.16.3-5: Use evidence to develop a claim about the past.
	English Language Arts:
	CCSS.ELA-LITERACY.W.5.4: Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
	CCSS.ELA-LITERACY.SL.5.1: Engage effectively in a range of collaborative discussions with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
TIME NEEDED:	Two 50-minute class sessions with possible additional day to share projects
INTERDISCIPLINARY: Language arts, social studies	
PRIOR KNOWLEDGE:	 An introductory understanding of the Great War An introductory understanding of the relevant geographies surrounding maritime trade routes and the Western Front.
MATERIALS NEEDED:	 Clipboards, worksheets, pencils & paper Groups of 3 or 4 students Counter technologies in the First World War #1 Counter technologies in the First World War #2 Counter technologies in the First World War #3 Counter technologies in the First World War #4 Develop Your Own Counter Technologies Worksheet

LESSON

PRE-ASSESSMENT/INTRODUCTION/HOOK:

Explain:

The Western Front during the First World War was a reactive landscape of continually evolving strategies and countermeasures. Some of these were innovations and inventions, and others were actions or strategies, but all were created to give any advantage to one's own army. Because of these measures and countermeasures, the years of fighting along the Western Front resulted in an almost absolute stalemate between the competing powers.

Ask:

Have you ever noticed how today we still live in a world of measures and countermeasures? Convenient home deliveries, but security cameras may be needed to discourage theft. Increasingly complex passwords for websites to thwart data breaches. Pop-up ads and then pop-up ad blockers. It seems like technologies are continually being developed and then undermined. Brainstorm for a minute, alone or with a partner, and come up with some examples.

Today, we'll look at some technologies from the Western Front during the First World War, and in small groups brainstorm some possible strategies to undermine them.

DIRECTIONS:

Day One:

- Assemble the class, introduce the lesson, and discuss the nature of trench warfare along the Western Front.
- Show images of machine guns and trenches and question how they relate to each other. Show a map of the trench lines and illuminate how little territory changed sides throughout the war.
 - o The Western Front 1914-1918 Map
 - o The Western Front 1916-1917 Map
- Divide into small groups and hand out different "counter technologies" worksheets to each group.
 Give 10-20 minutes for completion, then come back together to share short group presentations and discuss.
- Discuss the concepts of offensive versus defensive technologies.
- Introduce the book, *Dazzle Ships: World War I and the Art of Confusion*, and read it aloud to the class, perhaps while projecting images of the book. Discuss the implications of confusion and misdirection as a tactic.

Day Two:

- Using the lessons of *Dazzle Ships* as a springboard, ask students: how could similar actions be applied to current problems?
- As a class, brainstorm problems experienced by students, people in general, and the world in the current times.
- Topics could include but are not limited to:
 - o Bullying

- Pay inequities
- Gender inequities
- Social media
- o Screen time
- Tailgating
- Animal/vehicle collisions
- Single-use plastic
- o Climate change
- Ask for volunteers or assign students to each category, ideally one they are invested in or feel passionate about, and hand out the "Develop Your Own Counter Technology" worksheet.
- Allow the remainder of the class period for group work to design ideas and strategies. Have groups decide how to best convey their ideas to a larger group.

POST-ASSESSMENT/EXTENSIONS

Students work on methods to share or showcase their ideas.

- Students may either share their ideas in a presentation-style format or to be displayed in museum-style/bulletin board. The counter technology worksheet should be used as a framework for the completed project.
- Finished products should include:
 - A description of the technology or problem to be solved
 - An explanation of why it is a problem and its related implications
 - A clear proposal of how the suggested counter technology would work and the pros and cons associated with it
 - A creative final project allowing for academic choice. Possible ideas:
 - Directions presented in the form of WWI training manual
 - Persuasive poster in the style of WWI
 - Brochures
 - Persuasive letter written to political leader or authority

MODIFICATIONS/ACCOMMODATIONS

- Ideas could be presented as audio recordings, perhaps in the form of radio broadcasts
- Worksheets and questions can be modified or simplified for different student needs.
- Students can work in pairs or groups on the worksheets and projects.
- Allow students to share insights aloud or text-to speech into the document.