



CHANGING TECHNOLOGY, CHANGING TACTICS

How technology changed the way WWI was fought

Recommended Grade Levels: 9-12

Course/Content Area: World History/U.S. History

Authored by: Cameron C. May, National World War I Museum and Memorial Teacher Fellow

ESSENTIAL QUESTIONS:

- Why is WWI considered the first “modern” war?
- How are changes in technology and style of fighting linked?



SUMMARY: In this lesson, students will consider the advancement in technology and, specifically, adaptations of trench warfare based on technological advances through discussion, primary sources and a hands-on activity.

STANDARDS ALIGNMENT: Common Core and national standards (Appendix F)

TIME NEEDED: One 90-minute class period or two 50-minute class periods

OBJECTIVES: Students will:

- Examine the changes in trench design over the course of the war, analyzing how changes in technology contributed to the modification of trench style.
- Consider how adaptation of trench warfare may have contributed to technological advances.

INTERDISCIPLINARY: History, Science, Art, Math

THEMES & CONNECTIONS: This lesson is most effective when students have some basic background knowledge of the beginning of WWI, such as how the war began and when soldiers were sent to the front. It can also be adapted to serve as an introductory lesson to the war.

- MATERIALS NEEDED:**
- Blank 8-½ x 11 paper (unlined)
 - Pens or pencils
 - Photos of trenches (Appendix C)
 - Handouts of trench plans (Appendix D) - one set/student
 - Trench-building Supplies (See Appendix A for detailed supply/shopping list)
 - Box/container of some type (suggest plastic and with a lid)
 - One box per group of 4 students recommended
 - Sand
 - String
 - Assortment of items to mark your “battlefield” (See **Appendix A** for visual examples.)

- Access to YouTube
- Technology Power Point (See **Appendix B** for copy of slides.)
- Copies of optional reading *What the “Boys” Did Over There* (**Appendix E**)

- TECHNOLOGY SUGGESTION

If your students have personal or classroom access to PCs, Chromebooks, or iPads, save the Appendix C photos and the Technology Power Point in a student-access drive. Students will be able to review those case studies when creating their final trenches.

BACKGROUND INFORMATION

The First World War is considered the first modern war. In a mere four years, advances were made in weapons, airplanes, tanks, military maneuvers, medicine, and so much more. As the weapons advanced, so did the need to avoid those new weapons and heal wounds caused by war.

When WWI started, armies in Europe still followed patterns established in the Napoleonic wars. This meant speedy battlefield movement, combined with cavalry, artillery and infantry assaults. Soldiers fired muskets and then engaged in bayonet charges and hand-to-hand combat. With WWI came advances in artillery, such as the Maxim machine gun. Soldiers were no longer firing five bullets a minute; they were now capable of firing five hundred bullets per minute. Hundreds of soldiers faced being mowed down by charging armies and they began to “dig in” for protection. The trenches of 1914 were, at best, glorified ditches, which barely provided cover.

As the soldiers settled in, the Western front became mired in stalemate. Trenches developed from mere ditches into intricate systems in which men lived and fought. Following specific plans, underground command centers, fortified bunkers, communication stations, latrine areas and machine gun nests became part of trench systems. Soldiers entrenched themselves behind primary, secondary and tertiary trench lines, and became harder to root out. Necessity is the mother of invention. So, as weapons were perfected, so were ways to protect against them. In turn, as trenches became more complex, the need to create new ways to oust enemies from these multifarious trenches drove technical creation.



Early in the war



Late in the war

LESSON

PRE-ASSESSMENT:

1. Student-generated drawing of a trench and list of WWI weapons (See step 1 in “Directions,” Appendix A.)

DIRECTIONS:

1. Pre-Assessment:

Hand out blank 8½ x 11 paper to each student and instruct them to draw what they think of when they think of a trench. Then ask students to turn the page over and list some of the weapons they think soldiers had at the beginning of WWI.
2. Break students into groups of 3-4 students; give the groups five minutes to share the ideas generated.
3. Bring the class back together to discuss students’ guesses and ask volunteers to explain their choices.
4. Project photos of early trenches - 1914 (**Appendix C**) for discussion; compare what students drew on their trench papers.
5. Pass out trench supplies. Back in their groups, instruct students to create two trenches, parallel to each other in straight line. (Note: They will likely be replicating 1914 trenches and what most of them likely drew.)
6. Have students put “soldiers” in place and use piece of string to give them “line of sight”.
 - a. What do they notice? (Answer should be that it’s easy to shoot your opponent and there isn’t a lot of cover.)
 - b. See Appendix A for a quick reference guide of project steps, including example photos.
7. View: *WWI Uncut* “*Why trenches?*” (YouTube; **link in Appendix A**)

Explain to students that in 1914, trenches were similar to the ones they drew; glorified pits to hide in.
8. Have students add barbed wire to their trenches and check line of site.

What effect(s) does barbed wire have?
9. View: *WWI Uncut* “*Why barbed wire?*” (YouTube; **link in Appendix A**)
10. Have students add machine guns/artillery.

What do they observe? Is line of sight affected? Does the barbed wire help or hinder?
11. View: *WWI Uncut* “*Machine guns.*” (YouTube; **link in Appendix A**)

Suggestion: you can also include the segment on rifles from the same series if you think it will benefit the students.

12. Discuss technology advancements.
 - a. How did these advancements affect the trenches?
 - b. How did the trenches affect technology?
13. Present Technology Power Point.
 - a. See **Appendix B** for hard copy of the Power Point.
 - b. When presenting, pause at slide 9 to be prepared for step 14 in trench-building activity.
14. If using a screen to show the PowerPoint, raise the screen at this time. You will need to show *Slide 10* on a white board, chalk board, or butcher paper on a wall.
 - a. Take a moment to show students aerial images of trenches on board/wall.
 - b. Have volunteers come up to draw line of sight on the board.
 - c. Have class compare to previous trench.
 - d. Pause PowerPoint on slide 10; come back to slideshow at step 15.)
15. Handout trench plans (**Appendix D**) to each student.

Ask students what they notice about the drawings.

 - What surprises them?
 - What questions do they have?
16. *Recommended:* Take a picture of the original trench, have students sketch out their first trench design or have a sample project on the board via document camera or PowerPoint.

This gives students a reference point to the original trench they designed before creating the “new and improved” trench.
17. Students will return to their groups and create new trenches.
 - a. Students are to base the new trench on what they have learned and their previous trench. . .
 - i. including positioning barbed wire, artillery, fortifications and soldiers.
 - ii. Have them test sight line again and compare the new trench to the old.
 - b. *Note:* Should students require reminders or references, refer them to the location where they can electronically access the trench photos (**Appendixes B and C**) and the technology PowerPoint. If your students do not have electronic access to support materials, have photos and copies of the Technology PowerPoint available for students to look at as reminders/references of previous discussion. (**Appendixes B and C**)
18. With their new zig-zigged trenches and fortification, ask students to consider ways that may be developed to defeat armies so well entrenched.

What would they do to counteract the defensive measures taken?
19. Use slide 11 of PowerPoint to introduce the final media clip (*WWI Uncut “Tanks”*).

Optional addition: The Great War YouTube series – *Silent and Deadly – Gas Warfare in WWI* (YouTube; **link in Appendix A**)

Expanding the lesson (optional):

- *What the “Boys” Did Over There* article (**Appendix E**)
- Students read and annotate the article in preparation for class discussion during next class period.

POST-ASSESSMENT:

3-2-1 Exit Ticket (Students will list):

- 3 things they learned.
- 2 interesting/unusual facts.
- 1 question they still have.

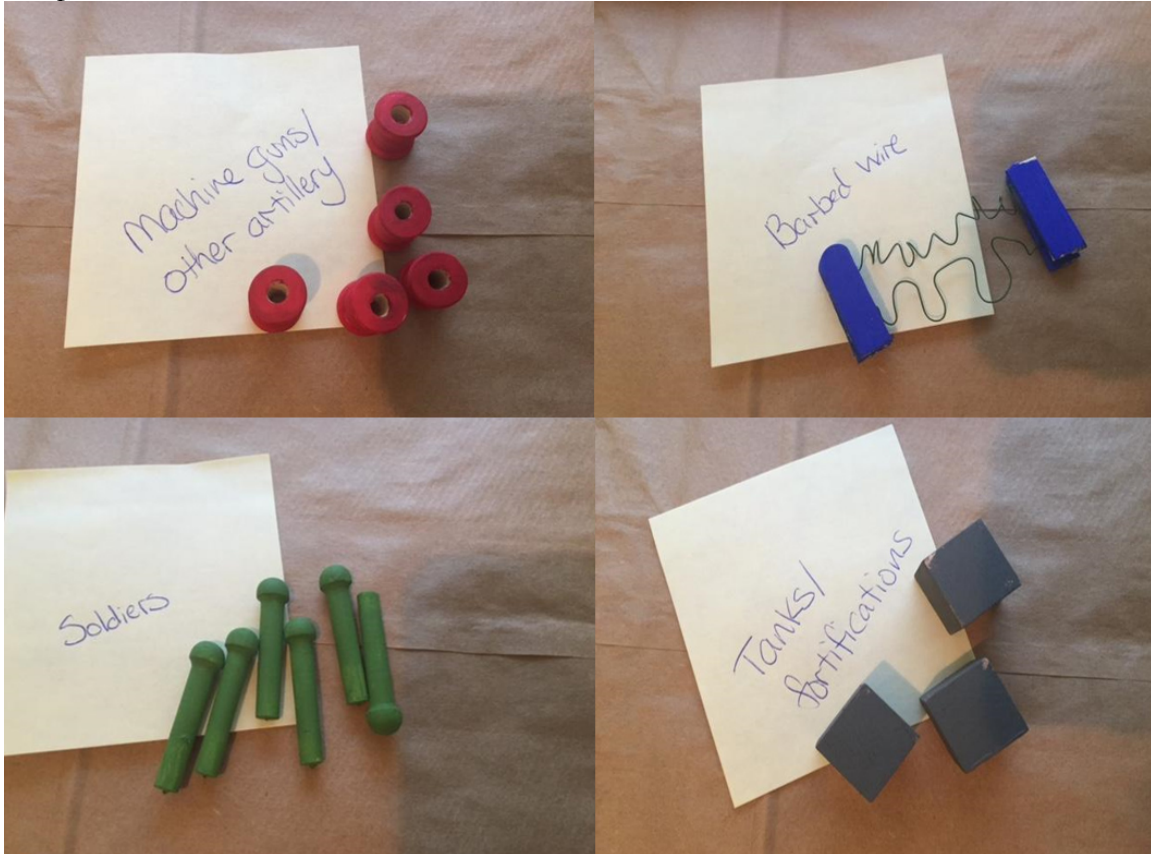
MODIFICATIONS/ACCOMMODATIONS:

This lesson works well for students with learning differences, as well as students who qualify as English language learners, due to the hands-on nature of the assignment. Modify writing and discussion portion as appropriate for IEPs, 504 Plans, and ELL accommodations.

Appendix A: Trench Activity

Teacher Directions, Supplies, Video Links

Sample of Materials



Teacher quick reference procedures list

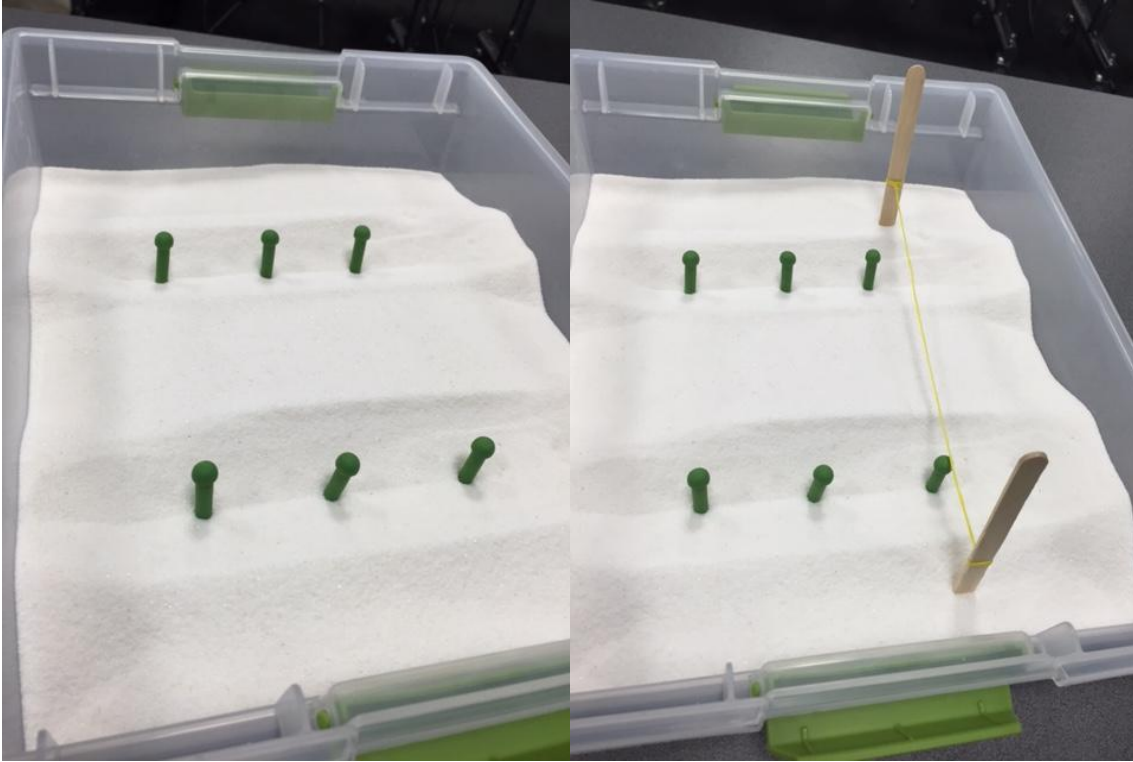
Step 1: Each student draws their mental image of a trench. On back of paper, have students list weapons they think soldiers had at the beginning of WWI.

Steps 2-3: In groups of 3-4, give students 5 minutes to share ideas. Bring students back together as a class to discuss and share their guesses.

Step 4: Show students what early trenches looked like; compare/contrast what they drew.

Step 5: Students back in groups, hand out trench supplies. Have students create two trenches facing each other, in a straight line. (1914 trenches)

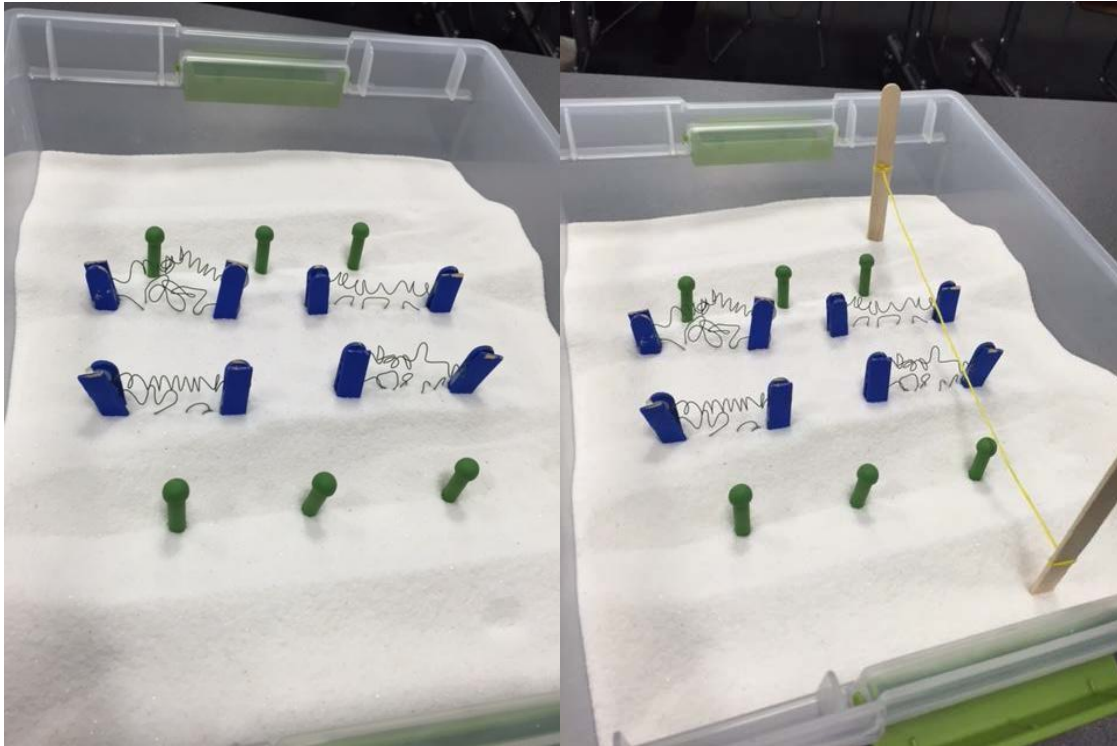
Step 6: Trenches with soldiers/soldiers with “line of sight” using string and popsicles sticks
What observations do students make? (Hint: It’s easy to shoot your opponent when there’s not a lot of cover and you’ve got a straight line to your target.)



Step 7: Watch clip: *WWI Uncut “Why Trenches?”*
<https://youtu.be/XqIhpYhZKQ?list=PLdZBuepzlEn9giR4sLjN8vzTQiTjNOag>

Step 8: Discuss how trenches the students just created mirror the trenches of 1914; glorified pits to hide in.

Step 9: Trenches with soldiers and barbed wire



Step 10: Watch *WWI Uncut* “Why barbed wire?”

<https://youtu.be/aapvArc0JmU?list=PLdZBuepzlEn9giR4sLjN8vzTQiTjNOag>

Step 11: Add machine guns/artillery. What observations do students make? Is line of sight affected? Does the barbed wire help or hinder?

Step 12: Watch *WWI Uncut* “Machine Guns” (optional: same series, video on rifles, if you find it beneficial)

<https://youtu.be/B06izR0HWyc?list=PLdZBuepzlEn9giR4sLjN8vzTQiTjNOag>

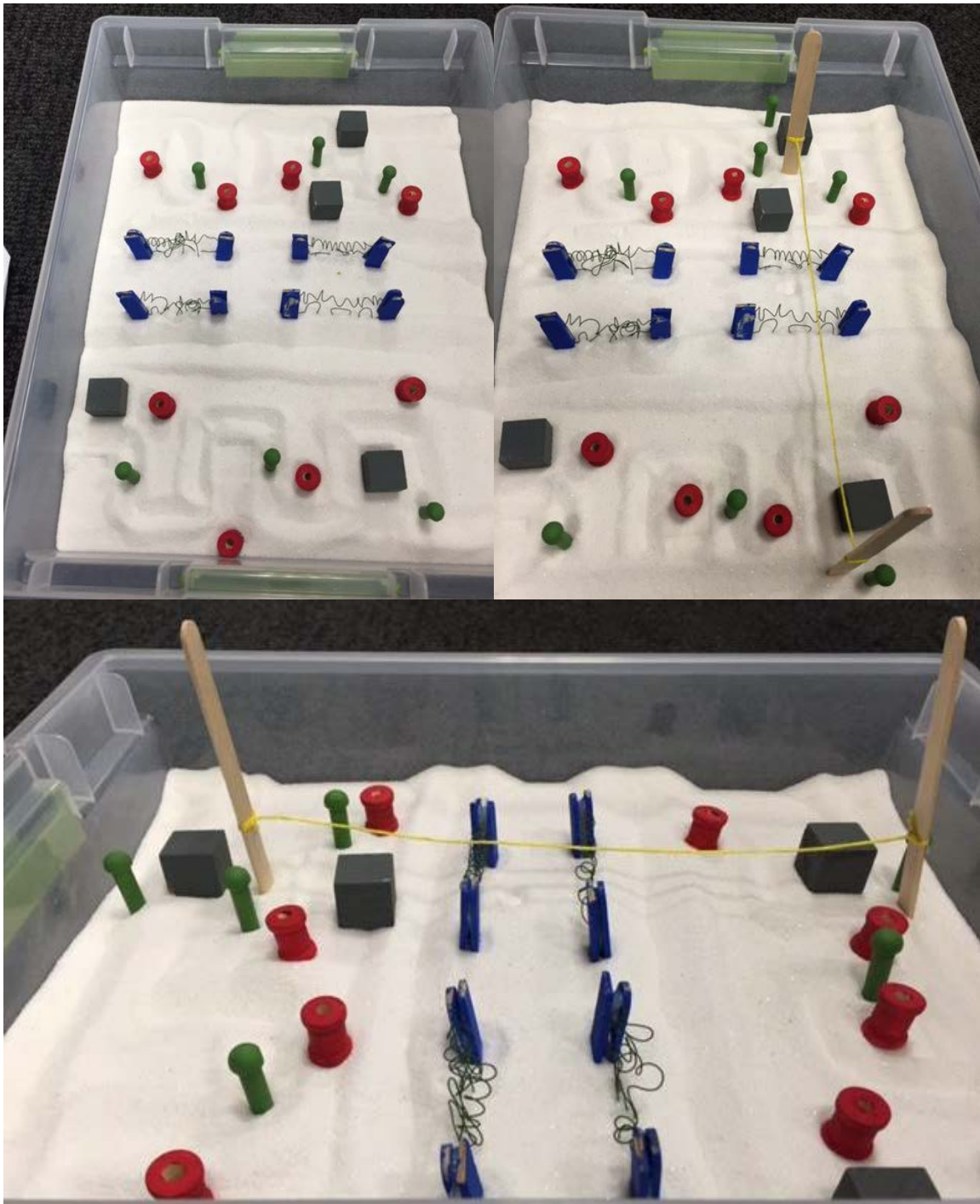
Step 13: Discuss technological advancements and how these affected trenches and were affected by trenches. (See Appendix B for PowerPoint; **stop at slide 9** to be ready for step 14.)

Step 14: Share aerial images of trenches on board (slide 10); have volunteers go to the board to draw line of sight, if possible, and compare to early trenches of the war.

Step 15: Hand out trench plans; ask students what they notice about these drawings. What, if anything, surprises them? What questions do they have?

Step 16: Before creating final trench, have students create a reference of the original trench. Take a photo, have students sketch what it looks like, have a sample “original” trench project on the board or by document camera.

Step 17: Final trench - Have groups create a new trench, using the plans they've been given and what they have learned during class. Have them look at line of sight with the new design and all obstacles in place.



Step 18: With their new and improved trenches, ask students to consider ways that may be developed to defeat armies that are so well entrenched. What would they do to counteract the defensive measures taken?

Step 19: Use Slide 11 in PowerPoint to introduce the final media clip; WWI Uncut “Tanks” (*optional addition:* The Great War YouTube series – Silent and Deadly – Gas Warfare in WWI) https://youtu.be/OrHFEPuANI?list=PLB2vhKMBjSxMU2-UiexaQ_pwpxxgQUdat

Detailed supplies list (See first photo in this appendix for examples.)

- Box or container (one for each group of students)
 - I used a plastic box with a locking lid, roughly 6x11”, about 6” deep. You can use whatever type of container you would like. You just need something to contain the sand students will be using. (I opted for the locking lid so sand didn’t spill everywhere and so that I didn’t have to deal with pouring the sand back into some sort of bag.)
- Sand
 - I used a 3-lb bag of fine sand that I got at a craft store.
- String
 - I recommend each group get a 10”-12” piece
 - You can use twine, yarn, string. This is used to help students have a visual of “line of sight”.
- Battlefield markers
 - You need to be able to represent the following:
 - Soldiers
 - Barbed wire
 - Machine guns/heavy artillery
 - Tanks/fortifications
 - I used items I had at home or got at a craft store.
 - Soldiers – painted small pegs green
 - Barbed wire – hot glued floral wire onto popsicle stick pieces
 - Machine guns/artillery – painted small wooden spools red

Videos from YouTube

- Dan Snow’s WWI Uncut series
 - Why Trenches?
 - <https://youtu.be/XqIhpYlhZKQ?list=PLdZBuepzlEn9giR4sLjN8vzTQiTjNOag>
 - Why Barbed Wire?
 - <https://youtu.be/aapvArc0JmU?list=PLdZBuepzlEn9giR4sLjN8vzTQiTjNOag>
 - Machine Guns
 - <https://youtu.be/B06izR0HWyc?list=PLdZBuepzlEn9giR4sLjN8vzTQiTjNOag>
 - Tanks
 - <https://youtu.be/ezBSURCMe-o?list=PLdZBuepzlEn9giR4sLjN8vzTQiTjNOag>
- The Great War
 - Silent and Deadly – Gas Warfare in WWI
 - https://youtu.be/OrHFEPuANI?list=PLB2vhKMBjSxMU2-UiexaQ_pwpxxgQUdat

Appendix B: PowerPoint Presentation

[Download PowerPoint →](#)



CHANGING TECHNOLOGY, CHANGING TACTICS

LESSON BY CAMERON C. MAY,
NATIONAL WWI MUSEUM AND MEMORIAL TEACHER FELLOW

EARLY TRENCHES – GLORIFIED HOLE IN THE GROUND



"French trench in Champagne, France photo 1976.227.19" (Kansas City, MO: National WWI Museum and Memorial).

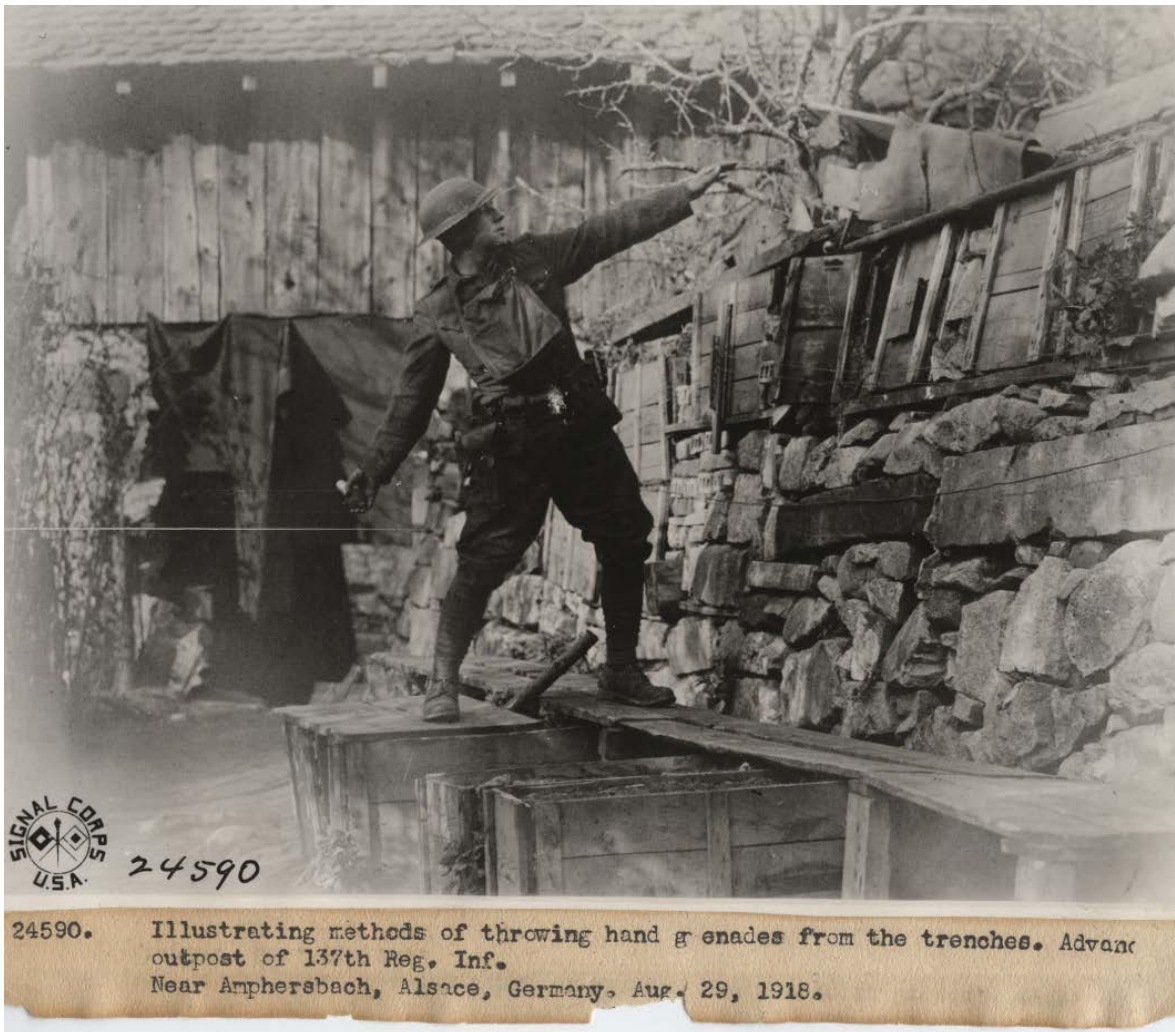


Appendix C: Photos and Handouts

Hand these out for reminders and reference as students design the final trench in step 16



"Digging trenches and erecting barbed wire photo, 2002.37" (Kansas City, MO: National WWI Museum and Memorial).



24590

24590. Illustrating methods of throwing hand grenades from the trenches. Advance outpost of 137th Reg. Inf. Near Amfersbach, Alsace, Germany. Aug. 29, 1918.

“1918 Methods of throwing hand grenades from trenches photo, 1926.28.384” (Kansas City, MO: National WWI Museum and Memorial).



“Soldier shooting over top of trench photo, 1926.28.444” (Kansas City, MO: National WWI Museum and Memorial).



"Tank going forward at the Battle of the Somme photo, 1926.21.2c" (Kansas City, MO: National WWI Museum and Memorial).



“Members of three hundred and fourteenth Ammunition Train receiving mail photo, 1926.28.224” (Kansas City, MO: National WWI Museum and Memorial).



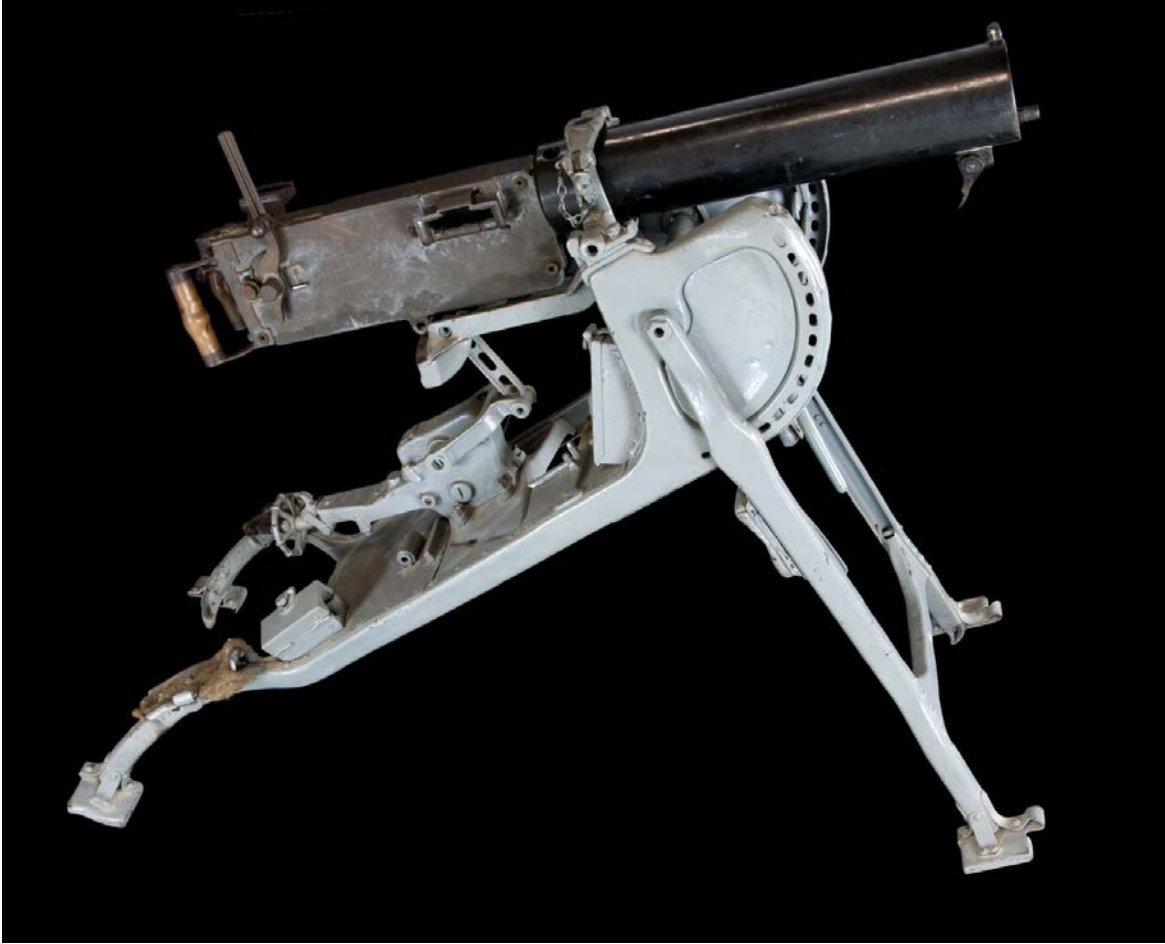
“Men in a front line trench near Ploegstreert Wood, 1917 photo, 1926.21.2h” (Kansas City, MO: National WWI Museum and Memorial).



"M 1917 Rifle with Bayonette, 1981.003.0078" (Jefferson City, MO: Missouri History Museum).



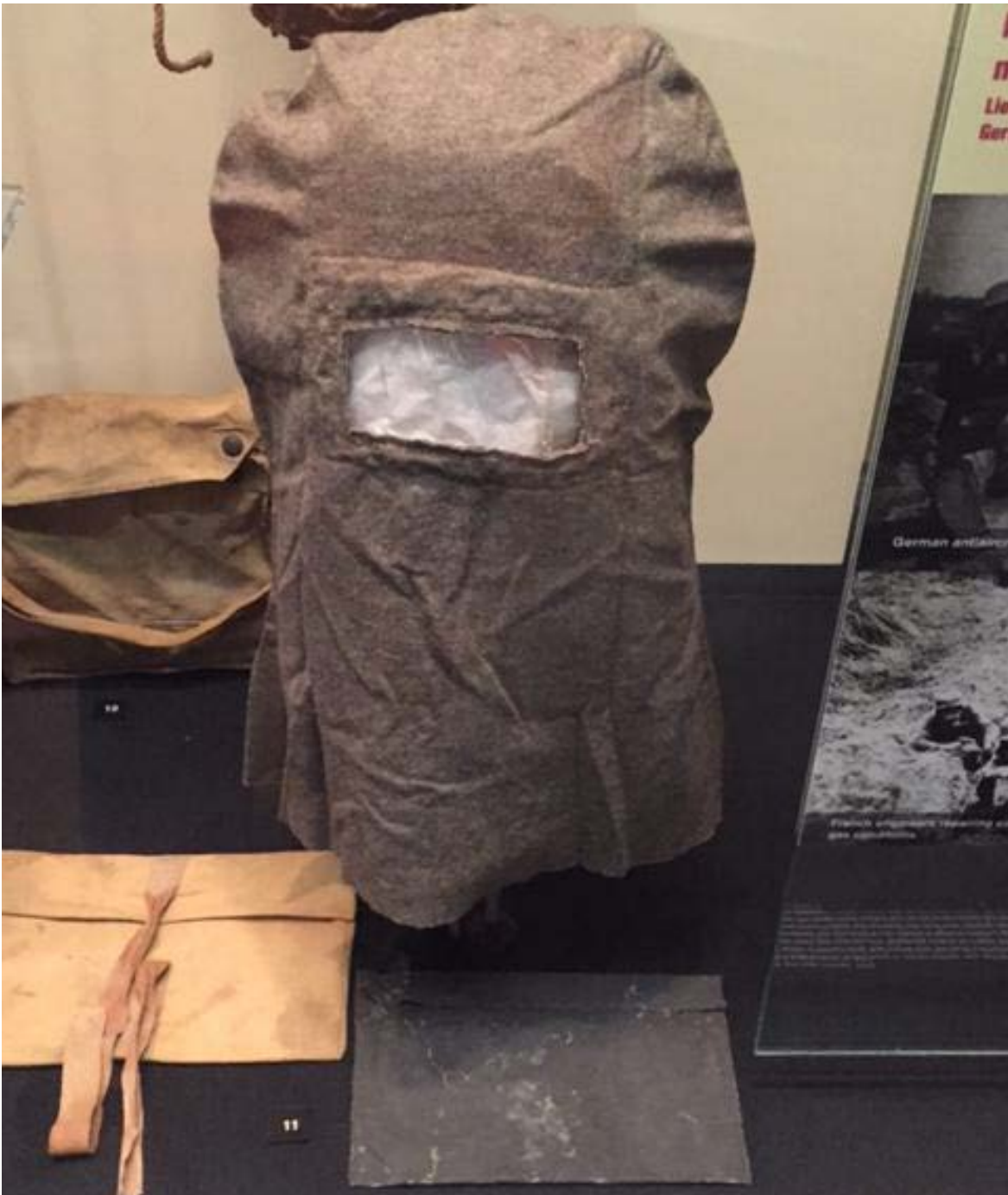
"Mauser Anti-Tank Rifle, no catalog number" (Jefferson City, MO: Missouri State Museum).



“Maxim MG08 machine gun, no catalog number” (Jefferson City, MO: Missouri State Museum).



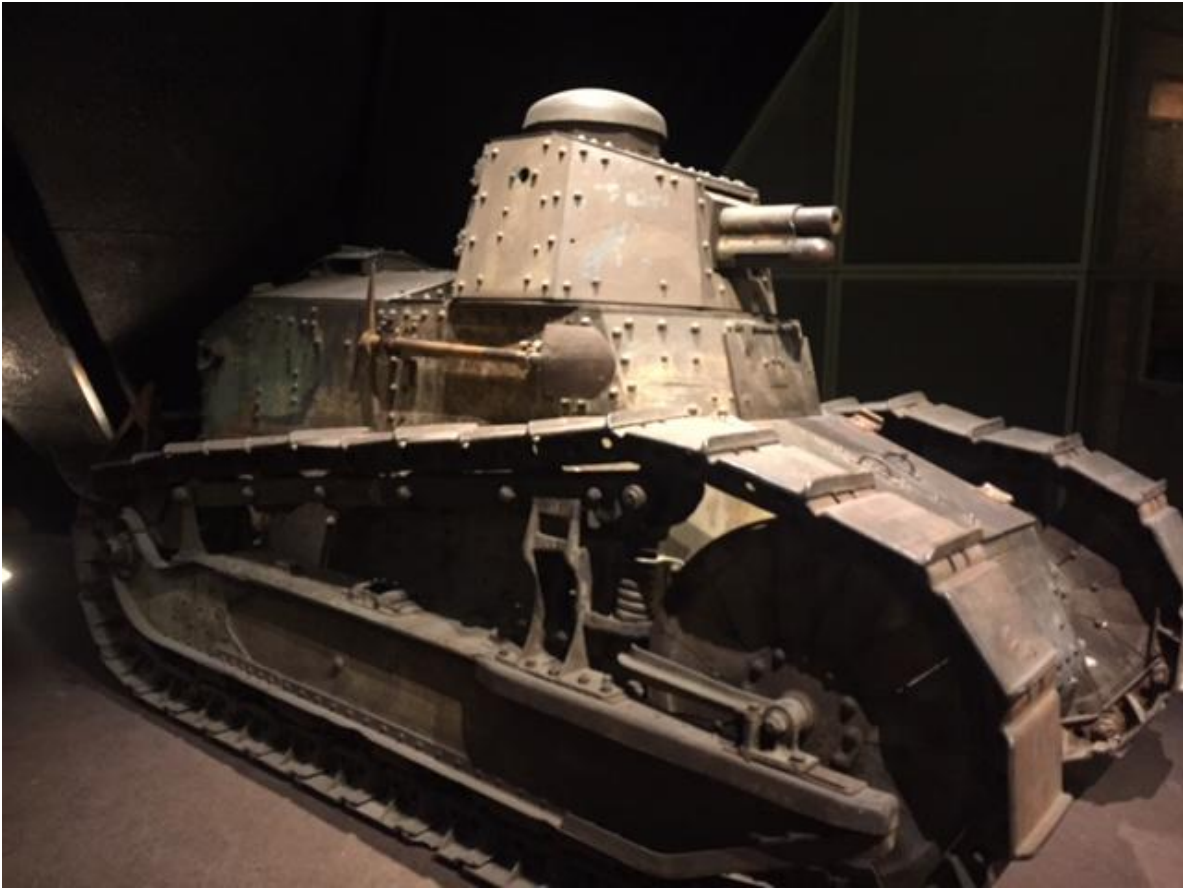
“Stokes Mortar Round, no catalog number” (Carthage, MO: Powers Museum).



"Early gas mask" (Kansas City, MO: National WWI Museum and Memorial).



“Soldier wearing gas mask pen and ink drawing, 2014.I39.6” (Kansas City, MO: National WWI Museum and Memorial).



"French-made Renault FT17 Tank" (Kansas City, MO: National WWI Museum and Memorial).



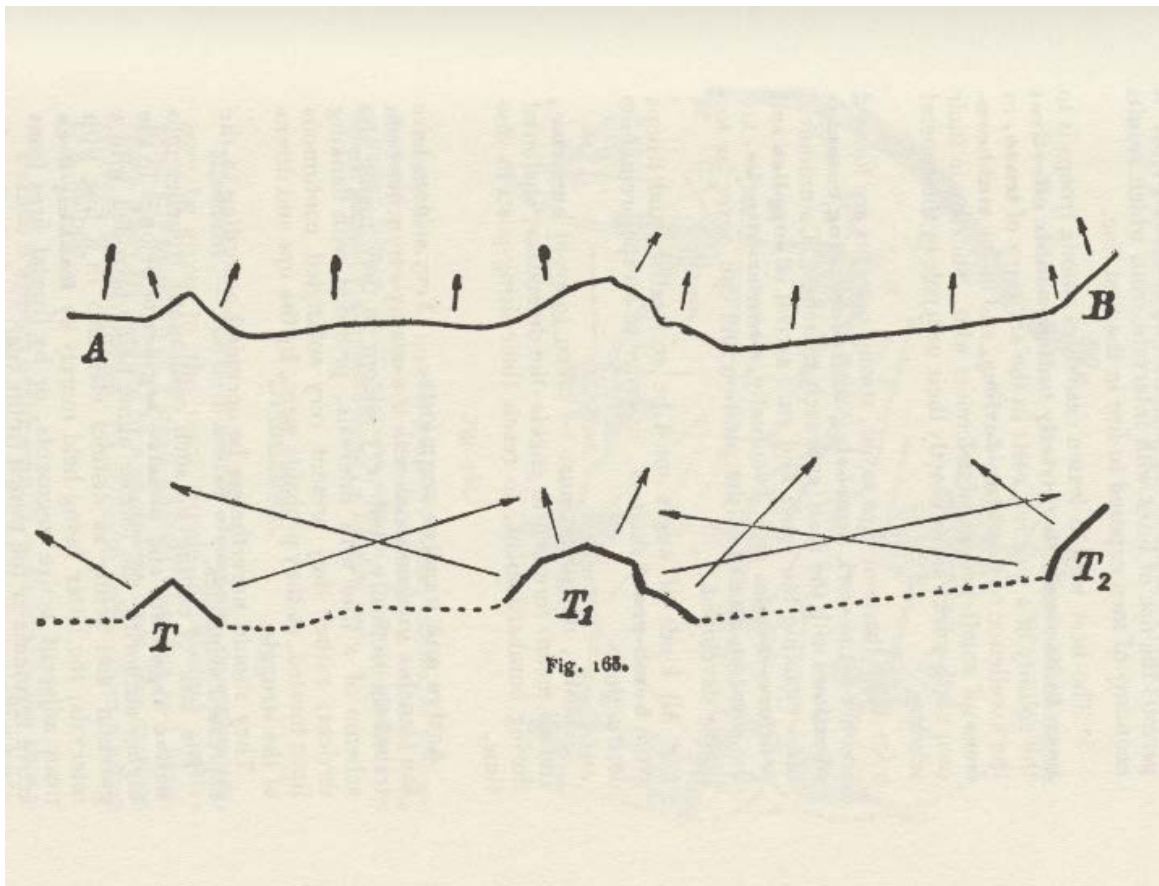
"Trenches at Sofia aerial photo, 1976.227.235" (Kansas City, MO: National WWI Museum and Memorial).



"Trench lines at Fey-en-Haye, France, aerial photo, 1941.1.41" (Kansas City, MO: National WWI Museum And Memorial).

Appendix D: Trench Examples

Taken from *French Trench Warfare*, describing how trenches developed circa 1917-1918



French Trench Warfare, p. 174

Figure demonstrating how rapid and continuous fire should be set up in the trenches.

“.. the intervals must look like neighboring elements so that the enemy is not able to discover the occupation plan of our positions. To accomplish this, trenches belonging to the different strong-points are connected by communicating or dummy trenches.”

Profile of the firing trench. — The regular type of **firing trench** has been given Part II, Chapter VIII, School of sap (Fig. 33).

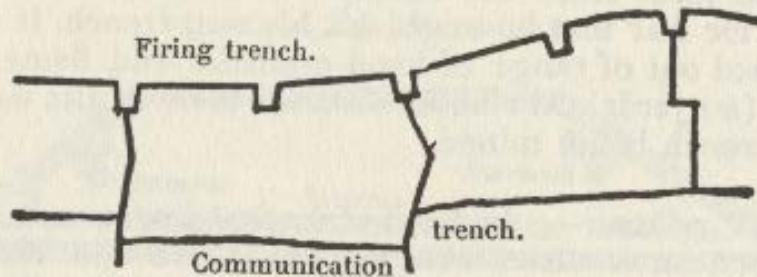


Fig. 186.

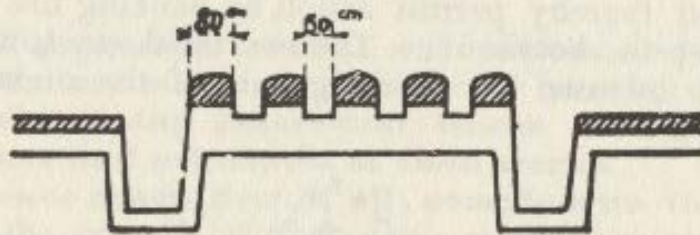


Fig. 187.

Narrow and deep trenches are those which afford the best protection against artillery-fire, bombs, rifle and hand grenades. But the circulation is very difficult for relief, for carrying the wounded, etc. So it becomes necessary either to widen the trench and to dig it still deeper, making a circulating passage on a lower level than the banquette, or to dig a special circulating-trench from 12 to 15 yards in the rear. The depth enabling circulation under cover behind firing squads and through the communicating trenches must be **at the very least 6 feet** and frequently 7 feet, better still, 8 feet.

French Trench Warfare, p. 188

Top figure (186) is an aerial view trench. Bottom figure (187) is profile of firing trench with depths indicated. Refer to excerpt below Fig. 187 for more detail.

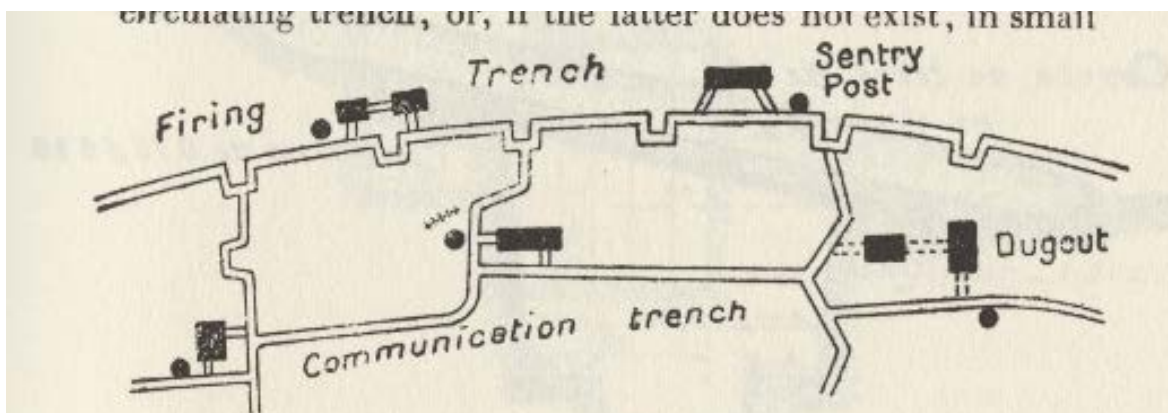


Fig. 213.

special transversals connected with the firing trenches be means of two communicating trenches, or more. Other shelters will be located in the support-trenches, designed for the platoons reserved for counter-attacks. Their location depends upon the location of **sentinel posts**. The most favorable points for locating the latter must first be chosen. The shelter will be constructed in close proximity to one of these posts.

The number of these shelters must be great enough to allow the whole

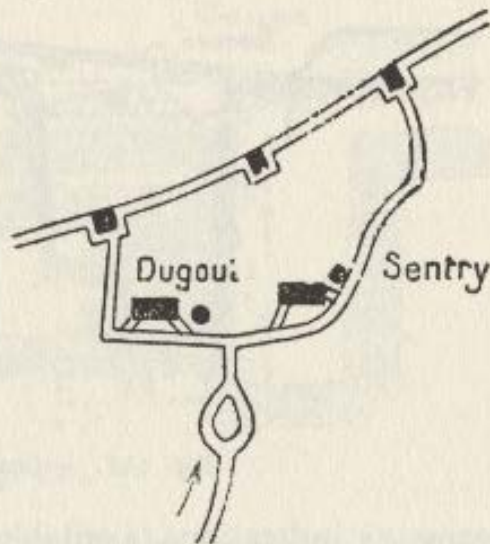


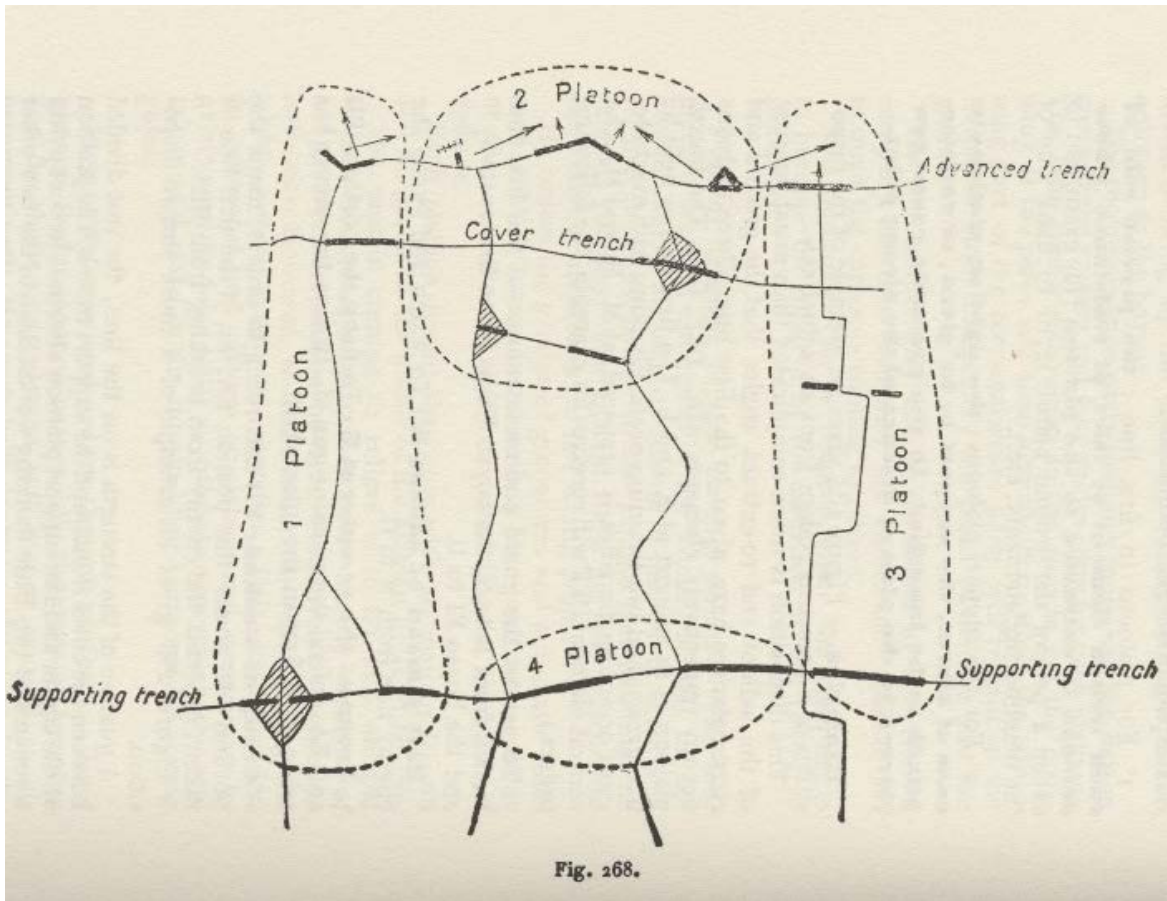
Fig. 214.

French Trench Warfare, p. 219

Figures show trenches with shelters dug in, as well as a firing trench, communication trench and sentry post.

“Shelters should seldom be constructed in the firing trench; but rather a circulating trench...”

Circulating trenches allowed soldiers to move within the trench system with minimal to no exposure to enemy fire and allowed them relatively safe access to other points in the trench, such as communications or shelters.



French Trench Warfare, p. 290

The above image is a trench system with platoon positions overlaid. The idea was to have each group know where they needed to be positioned and what their assigned task was in case communication became difficult or impossible.

“But the difficulty is to communicate it to all concerned with such precision and clearness that at a given moment nobody will be turned aside from his duty by the foreseen or unforeseen circumstances, which inevitably will

Appendix E:
Lesson Extension

Read and annotate for discussion (optional)

WHAT THE "BOYS" DID OVER THERE

EDITED BY

HENRY L. FOX
(1919)

LIFE IN THE TRENCHES

BY CORP. FRANK SEARS

LIFE in the trenches is made up of "cooties," "rats," "mud" and "gas masks."

We had heard from fellows who had been there before us what we thought were jokes about "cooties" and trench rats, but it was no joke to me when I looked, for the first time, at a rat almost as big as a cat. It was lying in my bunk and I heard it squeal. Looking down I had my first view of a trench rat. I threw a heavy hob-nailed shoe at him and he merely changed his position and looked around to see who had interrupted him. After that it wasn't strange to wake up and find them running across you. But I will say that if it were a matter of choice, I would select a hundred rats in preference to two "cooties," for the "cootie" is an unreasonable bird, and when a Sammie has come back from the lines exhausted, he lays down in the hopes of snatching a few hours' sleep before being called on; but the "cooties" have no respect for Sammie and they pester him until he has

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no more idea of sleep, only to start in and hunt for the “cooties” that are annoying him.

You have all more or less had fever, but I guess there are none of you, over here, who knows of the “mud fever.” We all used to shy at mud, during the rainy season in the year 1917. After a heavy storm the boys hated to go out to drill, as the mud got so bad there that the only way of getting out from the drill was by going on sick report in the morning. I remember the morning six buddies and myself went over to the infirmary. I happened to be the first one in line. The doctor came up to me and said:

“What’s your trouble?”

At first I said, “I don’t know, sir,” and he said:

“Well, what are you doing here if you don’t know? Where do you feel sick?”

And I told him all over. So he called the pill roller over and told him to take my temperature. I sat down and the pill roller put the glass tube in my mouth, which always “balled the detail up.” He then held hands with me for a while and I asked him what he was doing. He told me he was taking my pulse. He then gave the final report to the “skipper” who came to me and said, “You have the ‘mud fever’.” He then turned to the orderly and said, “Give him

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two C.C. pills and mark him 'DUTY.'" That's how I happened to get over the mud fever. We became so used to mud, up in the lines, that if our "chow" did not have some mud, or muddy water, in it we could not digest it. It was just a case of mud all over: eat, drink, sleep and wash in mud.

And now for the "old reliable," which tortured us while wearing it, but without which we should have been lost. The gas mask!!!

We were not fortunate enough to have ever received the American gas masks and have never seen one over there. The first two American divisions received English and French masks. The English mask looks like a false face with two big glass eyes, and a nose clip which resembles a clothespin, and keeps the gas from going through the nostrils. There is also a tube which goes into the mouth, with a hard piece of rubber on it to make it air-tight. This mouth-piece is a long caterpillar tube which connects the mask to a tin can containing a chemical composition of charcoal, rocks, sand and other medical decoctions. There were times when we endured these masks from eighteen to thirty-six hours. Sometimes we would just get the order to take them off, and, thinking the danger passed, would get ready to eat, when the command to

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put them on again would be given. This is done by means of horns at intervals along the whole line of trenches. Each horn gives the signal which is repeated right through the lines. It is a wonderful relief after having a mask on a long time to be able to breathe fresh air again.

Appendix F:

Standards Alignment

Common Core College and Career Readiness Anchor Standards for Reading for students in grades 6–12:

[CCSS.ELA-Literacy.CCRA.R.1](#): Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

[CCSS.ELA-Literacy.CCRA.R.2](#): Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

[CCSS.ELA-Literacy.CCRA.R.3](#): Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

[CCSS.ELA-Literacy.CCRA.R.4](#): Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

[CCSS.ELA-Literacy.CCRA.R.5](#): Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

[CCSS.ELA-Literacy.CCRA.R.6](#): Assess how point of view or purpose shapes the content and style of a text.

[CCSS.ELA-Literacy.CCRA.R.7](#): Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

[CCSS.ELA-Literacy.CCRA.R.8](#): Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

[CCSS.ELA-Literacy.CCRA.R.9](#): Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

[CCSS.ELA-Literacy.CCRA.R.10](#): Read and comprehend complex literary and informational texts independently and proficiently.

Common Core English Language Arts Standards for History/Social Studies for students in grades 9-10:

[CCSS.ELA-Literacy.RH.9-10.1](#): Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.

[CCSS.ELA-Literacy.RH.9-10.2](#): Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.

[CCSS.ELA-Literacy.RH.9-10.3](#): Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them.

[CCSS.ELA-Literacy.RH.9-10.4](#): Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social science.

[CCSS.ELA-Literacy.RH.9-10.5](#): Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.

[CCSS.ELA-Literacy.RH.9-10.6](#): Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.

[CCSS.ELA-Literacy.RH.9-10.8](#): Assess the extent to which the reasoning and evidence in a text support the author's claims.

[CCSS.ELA-Literacy.RH.9-10.9](#): Compare and contrast treatments of the same topic in several primary and secondary sources.

[CCSS.ELA-Literacy.RH.9-10.10](#): By the end of grade 10, read and comprehend history/social studies texts in the grades 9–10 text complexity band independently and proficiently.

Common Core English Language Arts Standards for History/Social Studies for students in grades 11-12:

[CCSS.ELA-Literacy.RH.11-12.1](#): Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

[CCSS.ELA-Literacy.RH.11-12.2](#): Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

[CCSS.ELA-Literacy.RH.11-12.3](#): Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.

[CCSS.ELA-Literacy.RH.11-12.4](#): Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).

[CCSS.ELA-Literacy.RH.11-12.5](#): Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.

[CCSS.ELA-Literacy.RH.11-12.6](#): Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.

[CCSS.ELA-Literacy.RH.11-12.7](#): Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

[CCSS.ELA-Literacy.RH.11-12.8](#): Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.

[CCSS.ELA-Literacy.RH.11-12.9](#): Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.

[CCSS.ELA-Literacy.RH.11-12.10](#): By the end of grade 12, read and comprehend history/social studies texts in the grades 11–CCR text complexity band independently and proficiently.

National Standards for English Language Arts (Developed by the International Reading Association [IRA] and the National Council of Teachers of English [NCTE].)

1. Students read a wide range of print and nonprint texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).
4. Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
6. Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and nonprint texts.
7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.
9. Students develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.
11. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.
12. Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

[The National Standards for History](#) are presented by [The National Center for History in the Schools](#)

U.S. History:

[NSS-USH.5-12.7](#) *Era 7: The Emergence of Modern America (1890-1930)*

The student in grades 5-12:

Understands the changing role of the United States in world affairs through World War I.

World History:

NSS-WH.5-12.8 Era 8: A Half-Century of Crisis and Achievement, 1900-1945

The student in grades 5-12:

Understands the causes and global consequences of World War I.

National Standards for Social Studies Teachers prepared by National Council for the Social Studies

Thematic Standards:

I. Culture and Cultural Diversity

II. Time, Continuity, and Change

III. People, Places, and Environments

IV. Individual Development and Identity

VI. Power, Authority, and Governance

IX. Global Connections

X. Civic Ideals and Practices

Further Resources

Barthas, Louis. 2014. *Poilu: The World War I Notebooks of Louis Barthas, Barrelmaker, 1914-1918*. New Haven: Yale UP, 2014.

Gilbert, Martin, *The First World War: A Complete History*. London: Phoenix, 2008

"Interactive WWI Timeline." The National World War I Museum and Memorial, accessed June 21 2016. <https://www.theworldwar.org/explore/interactive-wwi-timeline>.

"Online Collections Database." National World War I Museum and Memorial, accessed June 21, 2016. <https://www.theworldwar.org/explore/online-collections-database>

Preston, Diana. 2016. *A Higher Form of Killing: Six Weeks in World War I That Forever Changed the Nature of Warfare*. New York: Bloomsbury.

Simkins, Peter, Geoffrey Jukes, and Michael Hickey. 2014. *The First World War: The War to End All Wars*. Oxford: Osprey.

Strachan, Hew. 2004. *The First World War*. New York: Viking.

Bibliography

“Artifacts,” Missouri Over There, accessed June 21st 2016,
<http://missourioverthere.org/explore/artifacts/>.

Faulkner, Shawn. "The Devil's Dilemma: Trench Warfare 1915-1918." Lecture, National WWI Museum and Memorial Fellowship, National WWI Museum and Memorial, Kansas City, MO, June 25, 2015.

French Trench Warfare, 1917-1918: A Reference Manual. Reprint, Nashville, TN: The Battery Press, 2002.

The Great War Channel. “Silent and Deadly – GAS WARFARE IN WORLD WAR I.” YouTube video, 11:23. April 7, 2015.
https://www.youtube.com/watch?v=OrHFEPu_ANI.

McKay, John P. *A History of Western Society*. Boston, MA: Bedford/St. Martins, 2011.

Sears, Corp. Frank. "Life in the Trenches." *What the "Boys" Did Over There*. New York: Allied Overseas Veterans' Stores, 1918, 1919. 44-47. Print.
“Book 2016.49.0” (Kansas City, MO: National WWI Museum and Memorial).

WWI Uncut. Dir. Dan Snow. Perf. Dan Snow. *Dan Snow's History Hit*. Ballista Media for BBC, 2014. Web. 21 June 2016.
<https://www.youtube.com/playlist?list=PLPYbVPqV7je_-7VTOK2UJ5DVolzVGVT_w>.