

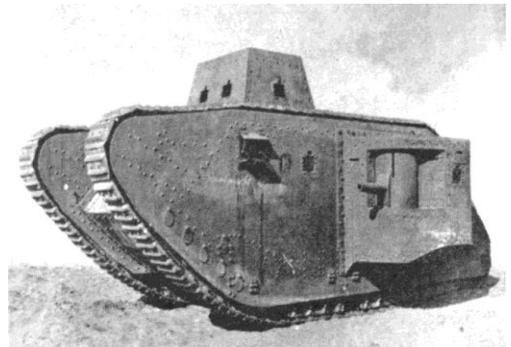
# Cultural History Discussion Lesson Plan

## *Jig-Saw Structured Academic Controversy Discussion*

How does technology affect society?



OR



OR



Darren Fleck  
Mendive Middle School  
[dfleck@washoeschool.net](mailto:dfleck@washoeschool.net)

# Cultural Discussion Lesson Plan

**Lesson Title:** How does technology affect society?

**Author Name:** Darren Fleck

**Contact Information:** [dfleck@washoeschools.net](mailto:dfleck@washoeschools.net)

**Appropriate for Grade Level:** 7-8

## **US History Standard(s)/Applicable CCSS(s):**

**H1.[6-8].11** Explain the effects of WWI and WWII on social and cultural life in Nevada and the United States.

**H2.[6-8].22** Describe the effects of **industrialization** and new technologies on the development of the United States.

**H3.[6-8].11** Discuss the rise of the Populist and Progressive Movements and explain how they reflected social change.

**H3.[6-8].12** Explain the major social, technological, and cultural developments of the 1920's.

**H4.[6-8].6** Explain the political and economic effects of World War I on the United States.

**G8.[6-8].2** Evaluate the role of technology in the human modification of the physical environment.

**CCSS:**Cite specific textual evidence to support analysis of primary and secondary sources.

**CCSS:**Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

**CCSS:** Analyze the relationship between a primary and secondary source on the same topic.

**Discussion Question:** Students will discuss the question: How do technological advances affect society?

## **Engagement Strategy:** Jig-saw *Structured Academic Controversy*

1. General instruction on WWI and the Progressive Era.

-This lesson works well as a summative assessment following both the Progressive Era and time period of world expansion culminating with World War I.

2. Students will read the primary and secondary source documents. The readings can be paired for both heterogeneous or homogeneous groupings. Two of the readings are historically based in the time period of WWI and the Progressive Era. They are simpler documents and will relate to content background. Two other documents are more complex with a focus on contemporary technology issues.

-4 Documents total . . . 2 Lower Reading Levels & Lesson Context Based

. . . 2 Higher Reading Levels & Contemporarily Based

-Students are to read one with a partner or in a group setting

3. All documents should be read aloud by the instructor or a peer to assist in modeling, differentiation along with auditory support for below grade level learners.

-Students will be analyzing and becoming experts on one specific article.

4. *Pairs/Groups will then use the reading support documents to help structure their use of evidence from the reading. This includes graphic organizers and general questions that support a structured and evidence based response to the main controversy.*

5. Discussion Preparation Document. Students must complete the Discussion Preparation Document by using their reading resources and have this completed before participating in the discussion.

6. Jig-saw SAC. Students will be put into jig-saw groups of 4 to 8 students. Each individual (or pair) will be an expert on their article. Each individual will take a turn summarizing and answering questions from the other participants during a prescribed time period.
- Presenting students must verbally present their information to the group.
  - Group members must take notes and write questions out from the verbal presentation.
    - \*It is suggested that all members of the group receive a copy of each document for the remainder of the lesson.
  - Assessment will consist of grading the preparation sheet and the notes taken on the SAC Form for completion of the required information.
7. Writing Component. Each student will conclude this lesson by completing a letter writing activity. The letter as presented in the lesson is historically based as a summative assessment for the Progressive and WWI Eras.
- \*\*\*EXPANDED or Modified Lesson for advanced students:**
- Have students respond to the essay comparing and contrasting the contemporary advances of technology (Docs. 3 & 4) with the historical issues covered in Doc. 1 & 2.
8. Conclusion/Deliberation. Have students complete the SAC Deliberation worksheet as the final piece of the lesson. This is best done as an Opener/Sponge the day following the writing class period. Follow-up with some simple open floor discussion with the students about what they feel worked or didn't work.

#### Lesson Components:

##### -Hook Activity:

##### 1. Computing Timeline Opener

[http://2.bp.blogspot.com/-NbfDCYYxT5I/T7c7Qwg93WI/AAAAAAAAAFU/MaR3II\\_dCvQ/s1600/Technology-timeline.jpg](http://2.bp.blogspot.com/-NbfDCYYxT5I/T7c7Qwg93WI/AAAAAAAAAFU/MaR3II_dCvQ/s1600/Technology-timeline.jpg)

##### 2. Opener Worksheet

##### -Discussion Documents:

##### 1. Article #1 – San Francisco's World Fair

<http://www.moah.org> (Museum of American Heritage Science & Technology, Palo Alto, Ca)

##### 2. Article #2 – WWI Library of Congress

<http://memory.loc.gov/ammem/collections/rotogravures/rotomil.html>

**\*\*Article 2-A** HG Wells "Civilization at the Breaking Point"( NY Times, May 27, 1915)

##### 3. Article #3- How Tech Has Changed Our Lives

Jennifer L. DeLeo, PCMag, 10/13/08

##### 4. Article #4- A Casualty of the Technology Revolution 'Locational Privacy'

Adam Cohen, Editorial Observer, 9/1/2009

##### -Lesson Activities

##### 1. Vocabulary Power Sentences/Main Idea Worksheet

##### 2. Super Annotator Outline

##### 3. Document Analysis/Jig-Saw Sheet

##### 4. Writing Rubric w/Brainstorm & 'Crows Feet' Outline

##### 5. Student Reflection/Deliberation of SAC

##### 6. Teacher Model Writing Sample

#### Description of Lesson Assessment:

Students will receive a test grade for their writing assignment. Additional assessment will come from the activities and work produced during the entire 5 day lesson process..

#### How will students reflect on the process and their learning?:

Students will complete the 'Student Reflection on Deliberation' sheet.

**Total Time Needed:** 5 days; 70 minute class periods

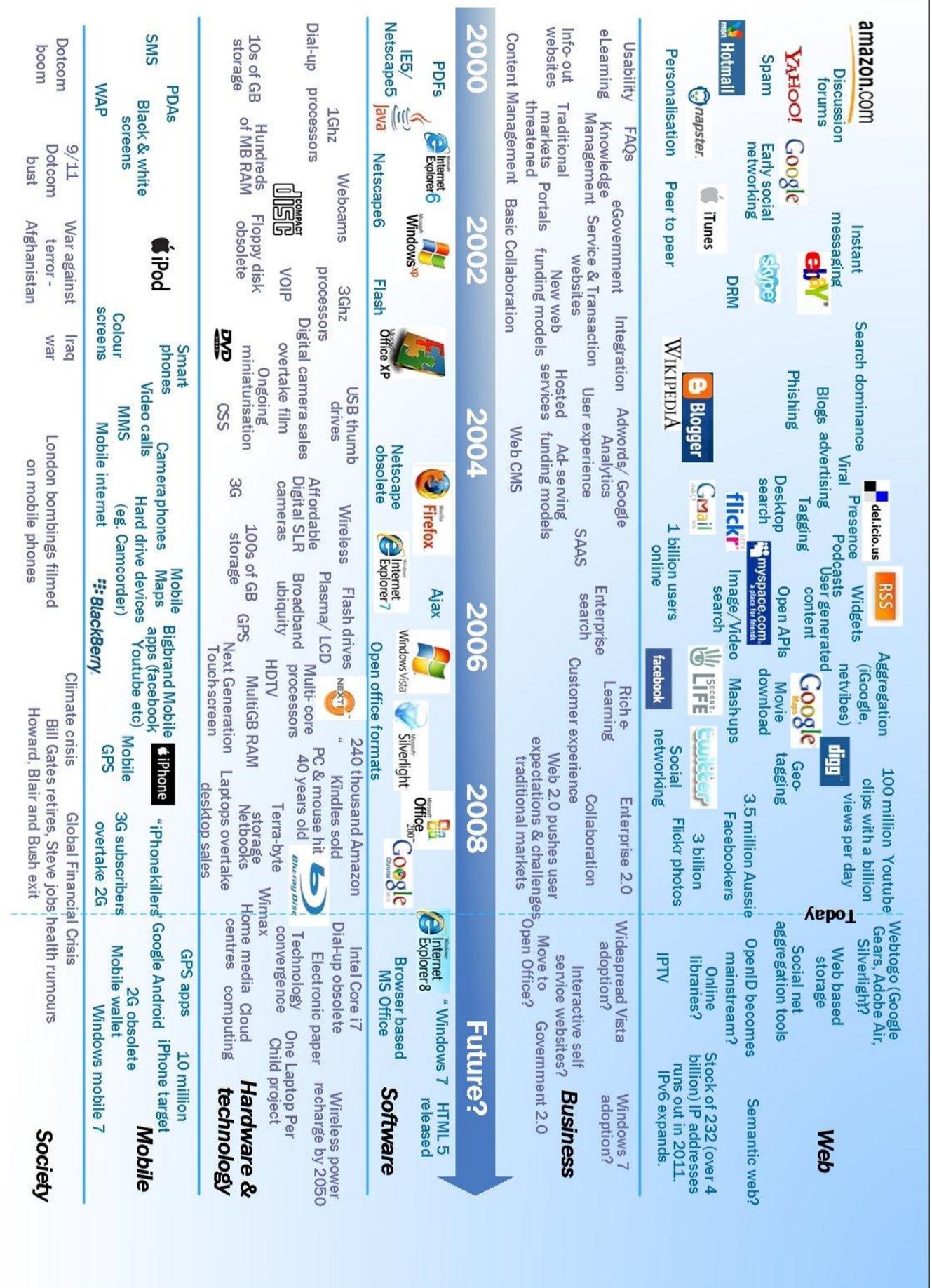
## Lesson Outline:

Time Frame	What is the teacher doing?	What are the students doing?
Prerequisite: 4-6wks	Complete a WWI & Progressivism based units of stud with focus with an understanding of technological advances in warfare and in society of the first twenty years of the 1900's.	Participate in general lesson activities. Be able to understand the technological advances that influenced WWI and the Progressive Era..
Day 1: 20min Opener/Sponge	Hand out Opener/Sponge activity 'Computing' Timeline and attached questions. Hold a short class discussion of answers and impact kids discuss about the technology presented.	Students will study the 'Technology Timeline' and complete the attached questions and skills practice. Students will also participate in a short discussion over their answers and impacts in their life.
Day 1: 20 min	Place students into 4 groups. Use reading levels and MAP scores to assist in dividing groups homogeneously. Each student in the group will receive the same reading.	Students will move into their groups and a volunteer will read aloud the group document to all students.
Day 1: 20 min.	Pass out to each group that has read the text aloud once, the 'Vocabulary Power Sentences / Main Idea' worksheet. Instruct each group to read the text again silently and circle TIER 2 Words as they read. Instruct the students to complete the 'Vocabulary Power Sentences' half of the worksheet as a whole group, choosing 3 TIER 2 words that would be most important to the understanding of the text.	Students will review the 'Vocabulary Power Sentences / Main Idea' worksheet. They will then read the text again silently and circle as many TIER 2 words as they encounter while reading. As a group they will complete the 'Vocabulary Power Sentences' half of the worksheet as a whole group, choosing 3 TIER 2 words that would be most important to the understanding of the text.
Day 1: 10 min	As students are working on the TIER 2 'Vocabulary Power Sentences' stop at each group and read the text aloud.	Students will read along with the teacher as he/she reads the text aloud.
Day 2: 20min Opener/Sponge	Dividing the class into homogeneous groups from the previous day, hand back out the readings and 'Vocabulary Power Sentences / 'Main Idea' worksheet. Students are to complete the Vocabulary Power Sentences'.	Students will work in groups to complete the 'Vocabulary Power Sentences'. Each group will present their words and sentences to the teacher verbally for approval.
Day 2: 30-60 min	Hand out 'Super Annotator' worksheet. Remind students to re-read the text (silently for advanced readers or aloud for poor readers) and complete the annotation. Students will then be asked to fill out the 'Main Idea' worksheet on the back of the 'Vocabulary Power Sentences'.	Students will complete the tasks assigned by the 'Super Annotator' worksheet. After annotating, students will fill out the 'Main Idea' worksheet on the back of the 'Vocabulary Power Sentences'.
Day 3: 10min Opener/Sponge	Have students copy onto the bottom of their 'Main Idea' worksheet , a piece of text that they believe would make the best quote if writing a summary of the document.	Students will read their document silently and write out a 1 to 3 line piece of text that they believe would make a good quote from the document.
Day 3: 20 min	<b>Discussion Day-</b> Give each student the 'Document Analysis / SAC Analysis' Sheet. They will be instructed to compete the from in preparation for discussing their document with students from other groups with different documents.	Students will use their annotations, notes and previous worksheets to organize their thoughts for their presentation to members of other groups. The 'Document Analysis / SAC Analysis' worksheet must be completed before being placed into the jig-sawed groupings.

Day 3: 40 min	<p><b>Discussion Day-</b> Place 1-2 students per text into a group (4 to 8). Each group should have each of the four documents present. Jig-saw. Students will be instructed to discuss the major aspects of their text using evidence and reasoning of the author. Group members will need to listen to the verbal presentation before being given a 3-5min timeperiod in which they may write information onto the marked spaces on the back of the 'Document Analysis / SAC Analysis'. Once all students are done recording, they may then ask questions of the presenter. Those answers may be written. Finally, the presenter will read his quote he deemed most important from his piece of text.</p> <p>Teacher will move throughout the room monitoring group progress and redirecting groups that are not complying with instructions or who have gone off task.</p>	<p>Students will be placed into Jig-sawed groups with students who have read and become experts on other documents.</p> <p>Students will take turns discussing the major aspects of their text using evidence and reasoning of the author. Group members will need to listen to the verbal presentation before being given a 3-5min time period in which they may write information onto the marked spaces on the back of the 'Document Analysis / SAC Analysis'. Once all students are done recording, they may then ask questions of the presenter. Those answers may be written. Finally, the presenter will read his quote he deemed most important from his piece of text.</p>
Day 4 30min.	Instructor will read aloud all four documents to start. Students will be encouraged to take additional notes on the 'Document Analysis / SAC Analysis'.	Students will listen to the four texts being read aloud. Students may take additional notes on the 'Document Analysis / SAC Analysis'.
Day 4 20-30min	<p><b>Discussion Day-</b> Instruct students in their jig-saw groups to answer the questions "How has technology affected society?" This will be the consensus aspect of the SAC Discussion. Each group will be required to display their answer on the front white board and Place it on a sheet of paper to be turned in. Document and Line #'s must be present on the paper with evidence to support the answer. At least 3 documents must be present as part of the evidence.</p>	Students in their jig-saw groups will answer the questions "How has technology affected society?" Each group will be required to compose one answer that is agreed to by all members. Their main answers in the form of a complex sentence must be displayed on the front white board and placed on a sheet of paper to be turned in. Document and Line #'s must be present on the paper with evidence to support the answer. At least 3 documents must be present as part of the evidence.
Day 4: 5-10min	Hand out writing prompt rubric "Letter from a WWI Soldier". Review the rubric and requirements. Explain that students will have one entire class period to complete the assignment starting with the next class period.	Students will follow along while teacher explains the rubric for "Letter from a WWI Soldier". Students should ask questions and clarify requirements.
Day 5 70min.	<b>Writing Period-</b> Instructor will hand out packets of each document to each student as writing resources.	Students will complete the writing assignment within the prescribes 70min. period using documents and following the rubric.
Day 6 Opener	Give out Student Reflection	Complete Student Reflection

# COMPUTING TIMELINE OPENER

http://2.bp.blogspot.com/-NbfDCYyXt5I/T7c7Qw93W/AAAAAAAAAFU/MaR3ll\_dcVQ/s1600/Technology-timeline.jpg



amazon.com

Discussion forums

YAHOO! Google

Spam Early social networking

Hotmail

Personalisation Peer to peer

napster iTunes

FAQs Knowledge Management

Government Service & Transaction websites

Integration Adwords/Google Analytics

Peer to peer

WIKIPEDIA Blogger

Search dominance

del.icio.us RSS

Presence Podcasts

Viral Blogging Tagging

Desktop search

mySPACE.com

Aggregation (Google, netives)

Widgets

Podcasts

User generated content

Open APIs

Movie download

Mashups

Social tagging

3.5 million Aussie Facebookers

3 billion Flickr photos

WebtoGo (Google Gears, Adobe Air, Silverlight?)

Web based storage

Social net aggregation tools

OpenID becomes mainstream?

Online libraries?

IPTV

Widespread Vista adoption?

Interactive self service websites?

Move to Government 2.0

Open Office?

Windows 7 adoption?

HTML 5 released

Browser based MS Office

Software

Intel Core i7

Dial-up obsolete

Electronic paper convergence

One Laptop Per Child project

Wireless power recharge by 2050

Cloud computing

10 million GPS apps

iPhone target

2G obsolete

Mobile wallet

Windows mobile 7

Semantic web?

Stock of 232 (over 4 billion) IP addresses runs out in 2011. IPv6 expands.

Web

Business

Software

Hardware & technology

Mobile

Society

Future?

Windows 7 released

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Browser based MS Office

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Name \_\_\_\_\_ Date \_\_\_\_\_

# Opener

1. **CIRCLE**  any **TERMS, COMPANIES, or PHRASES** you recognize on the Computing Timeline.

2. Put an 'X' over any term you circled that is *obsolete*.

3. Answer the following:

a. In what year was this timeline produced? \_\_\_\_\_

Evidence:

c. Pick two terms, companies or phrases and explain what they have in common or what they have to do with each other.

b. In what year were the following created?

-MySpace: \_\_\_\_\_ Category- \_\_\_\_\_

-Napster: \_\_\_\_\_ Category- \_\_\_\_\_

-BluRay: \_\_\_\_\_ Category- \_\_\_\_\_

-iPod: \_\_\_\_\_ Category- \_\_\_\_\_

4. At the end of the time line, what would you add for last year?

**\*\*Place at least 3 things on the chart in the correct category**

5. Complete the following chart. Choose 3 subjects from the timeline and explain how they affect your life, positively and negatively.

<b>TERMS, COMPANIES, or PHRASES</b>	<b>POSITIVE IMPACT</b>	<b>NEGATIVE IMPACT</b>

Name \_\_\_\_\_ Date: \_\_\_\_\_

Document: \_\_\_\_\_

## Vocabulary Power Sentences

Choose three (3) Tier 2 words from your assigned text and complete the following activity. Write three different types of power sentences which include *appropriate context clues*.

1. Statement Sentence
2. Question Sentence
3. Exclamation Sentence

Context clues exist in the words and phrases that appear near to a more difficult vocabulary term. These words provide clues for you to make a logical guess about the meaning of the word in its context. Context clues are helpful in reading, and they can be equally helpful in developing your writing. They can add detail to make your sentences more **clear** and **specific**.

### Context Clues Examples for CORONER

**Statement:** The **coroner** investigated the **dead body** and determined the **cause of death**.

**Question:** What **evidence** did the **coroner** use to **confirm this death** as a **suicide**?

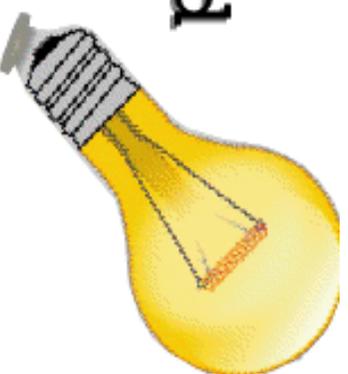
**Exclamation:** "Holy **etymology**," exclaimed the **coroner** during the **autopsy**, as she found hundreds of **blowfly larvae**.

Vocabulary Words for Your Power Sentences (3 per word)

*(Make sure to refer back to your readings to find context clues.)*

1. \_\_\_\_\_
  - a. Statement
  - b. Question
  - c. Exclamation
2. \_\_\_\_\_
  - a. Statement
  - b. Question
  - c. Exclamation
3. \_\_\_\_\_
  - a. Statement
  - b. Question
  - c. Exclamation

# Understanding the Ideas You Read



## DIRECTIONS:

1. Summarize three main ideas of the reading.
2. Give an example of the main idea.
3. Choose 2-3 keywords that restate the main idea.

<b>Main Idea</b> <b>1</b>	
<b>Example</b>	
<b>Key Words</b>	

<b>Main Idea</b> <b>2</b>	
<b>Example</b>	
<b>Key Words</b>	

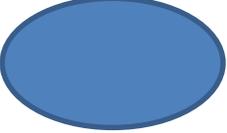
<b>Main Idea</b> <b>3</b>	
<b>Example</b>	
<b>Key Words</b>	

# HUDDLE UP SUPERHEROS! IT'S TIME TO SUPER-ANNOTATE!



## THE ANNOTATOR!

CREATED BY ANGELA ORR

	<p><b>Circle</b> words that are unknown or that might need explanation. Double circle words that might have a unique connotation or meaning. If necessary, comment in the margins.</p>
<p><b>?</b></p>	<p>Consider this the "huh, what?" section. Put a ? next to areas where you say, "huh, what?" and write a <b>brief description</b> of your inference in the margin.</p>
<p><b>2-6</b></p>	<p>1) At the top, write down a <b>two to six "Central Idea"</b> of the document. (<b>The GIST</b>) 2) At the bottom, write a short summary explaining the main idea of the document (<b>no more than 2 sentences.</b>)</p>
<p><b>1-3</b></p> <hr/>	<p><b>Underline</b> each specific argument or claim in a text. Is the argument or claim valid or relevant? On a <b>scale of 1-3</b> (one is very relevant and valid and three is not relevant or valid) rate the evidence.</p>
	<p>When a word or phrase helps you understand the author's point of view, draw a talking <b>bubble</b> in the margin and write a few words to describe the point of view.</p>

Name: \_\_\_\_\_ Period: \_\_\_\_\_ # \_\_\_\_\_

# How does technology affect society?

## Document Analysis Sheet

### Directions:

1. **Read** –Annotation Guide and take notes as you read the document.
2. When you finish annotating, answer the following **Reflection of the reading**  
**\*\*You will complete 2 readings & 2 Annotations along with a Reflection for each**
3. Finally, **PREPARE for the Discussion**: After completing 2 readings and comparing readings with a partner . . . . What is your claim/argument to the central question? Support your claim with facts/evidence gathered from the reading. **Try to reference the text (using line numbers).**

### Central Question:

## How does technology affect society?

1. What is the **question** asking? - Re-write the question in your own words.

---

**\*\*PUZZLE PIECE 1 of 4\*\***

**Document Title:**

**Source :** \_\_\_\_\_ **: Primary or Secondary**

**Target Audience?**

**I'm a little confused about... (Be specific)**

**The big idea inherent in this seems to be...**

**The most interesting claim the author made was... (direct text)**

**I'd like to talk with other people about ...**

Puzzle Piece \_\_\_\_ of 4 Name (s) \_\_\_\_\_

How do technological advances affect society?

Evidence:

Questions:

Puzzle Piece \_\_\_\_ of 4 Name (s) \_\_\_\_\_

How do technological advances affect society?

Evidence:

Questions:

Puzzle Piece \_\_\_\_ of 4 Name (s) \_\_\_\_\_

How do technological advances affect society?

Evidence:

Questions:

# Review Essay: Progressivism / World Expansion

8<sup>th</sup> Social Studies

## Due Date: \_\_\_\_\_

This process will involve looking at specific aspects of an argumentative paper such as, *CLAIM*, *REASONING & EVIDENCE*. You will also be responsible for addressing a specific audience. **YOUR FINAL ASSIGNMENT WILL BE TO CREATE A POSTER IN WHICH YOUR PARAGRAPHS ARE HIGHLIGHTED, ANNOTATED and/or DIAGRAMED TO SHOW ALL MAJOR REQUIREMENTS.** Have fun and good luck!!

### Audience:

Knowing your audience is important to writing. All audiences have expectations and you should attempt to **understand your audience** and address their bias, ideas and concerns in your paper. It is also important to **understand your voice** and from what perspective you are writing.

**VOICE: You are a veteran from WWI who also visited the 1915 World's Fair in San Francisco called the 'Panama Pacific Exhibition'.**

**AUDIENCE: Your friend back in Reno who has never left his ranch and is always asking in his letters about the 'Modern World'.**

Here is the letter you are responding to:

"When I read the newspaper, I keep hearing about how becoming an industrialized nation is changing everything from economics, to politics, to social ideas. But in my isolated world, not much has changed. I need some perspective. Is it true? **How has industrialism changed the world?**"

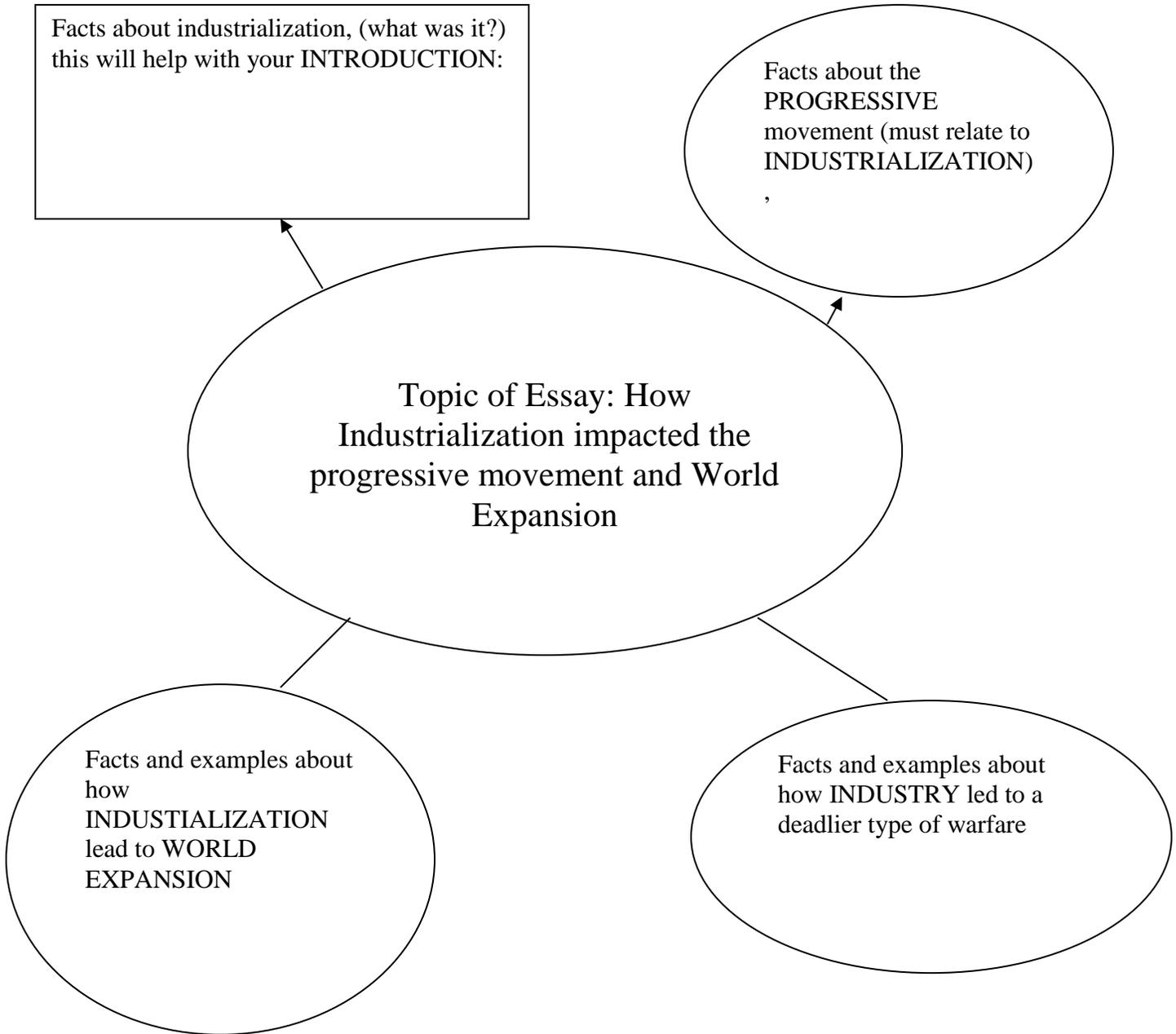
### Assignment:

Write a letter to your friend explaining your view of  
***HOW INDUSTRIALISM HAS CHANGED THE WORLD.***

### GOALS:

1. Use resources to identify the major writing traits of an argumentative essay :  
-CLAIM      -REASONING      -EVIDENCE      -COUNTER ARGUMENT
2. Use the 'CROWS FEET' Outline to set-up your writing that correctly displays:
  - a. a ***CLAIM***
  - b. ***REASONING*** that supports your claim
  - c. ***EVIDENCE*** that proves your claim
  - d. ***Recognition of a COUNTER ARGUMENT***  
(an idea or evidence that disagrees with your claim)
3. Write a well written introductory paragraph that uses the 'CROWS FOOT' outline to support well written, complete sentences to state your required writing traits of  
-CLAIM      -REASONING      -EVIDENCE      -COUNTER CLAIM
4. Create a Poster that *visually displays* all of the above writing traits of you work.

# Quarter Essay Brainstorming



CROWS FOOT Outline		Evidence
	Reasons	_____
		_____
		_____
CLAIM		_____
		_____
		_____

Conclusion: What I have learned from this brainstorming:

Name \_\_\_\_\_ Date \_\_\_\_\_

## Student Reflection on Deliberation

### SAC Jig-Saw: What We Learned

What were the most compelling facts/evidence you heard or read?

What was your group's consensus?

What questions do you still have?

What are some reasons why deliberating (discussing) this issue is important in a democracy?

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### Individual Reflection: What I Learned

Which number best describes your understanding of the focus issue? [circle one]

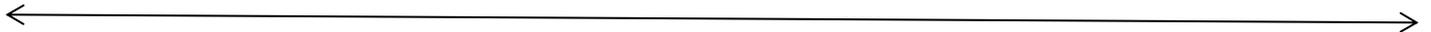
1

2

3

4

5



NO DEEPER MUCH DEEPER  
UNDERSTANDING

MUCH DEEPER UNDERSTANDING

What new insights did you gain? Explain how the SAC influenced your thinking about the topic.

What did you do well in the deliberation (discussion)?

What do you need to work on to improve your personal deliberation skills?/ Identify a personal goal for the next seminar.

What did someone else in your group do or say that was particularly helpful? Is there anything the group should work on to improve the group deliberation?/ Identify a group goal and how would you be willing to contribute to it:

## Teacher Modeled Writing Sample:

12/17/19

Dear Old Friend,

Oh, how I miss the beautiful western sky of Nevada. I hope your alfalfa has been a good crop this year and all the calves have been born healthy. I sure do miss the smell of the fresh cut crops and your mom's apple pie. It all seems so far away here in the trenches of France, I can't help but wipe the tears from my cheek as I write this.

I know you have bugged me about all that technology I have seen in my travels, and I can say for sure that I feel my life is a living answer to your question. I have in just a few short years experienced a "sense of wonder" (Art. 1, Line 5) at the amazing good of technology and have been terrified by what HG Wells described in a tattered article being passed around the trenches as "Civilization at the Breaking Point". (Art. 2, Line 4-5). Industrialism and the technology it has created is the reason the world has become so much easier to live in, but more dangerous at the same time.

You know that I told you of the wonders I saw in San Francisco at the World's Fair after enlisting. Life seemed like it would only be easier with all the new technology. The reproduction of the Panama Canal was fascinating. Imagine, "visitors riding around the model on a moving platform, listening to information over a telephone receiver." (Art. 1, Lines 6-8). I was able to stand and hear the voice of Thomas Edison speaking from New Jersey over the loud speaker. (Art. 1, Lines 9-11) Could you imagine how much easier life would be to communicate without hitching up the team and driving all day into town? Of course I was mostly amazed at how Henry Ford's assembly line created cars so fast. (Art. 1, Line 12-14) I have changed my mind though, now knowing that those same assembly lines created the tanks, guns and bombs that were so quickly used to kill.

Timmy, the terror I have experienced was almost entirely from the new technology. I have seen huge guns on land and sea rain bombs on cities so far away you couldn't even see where they were shooting. (Art. 2, Lines 17-18) Gas attacks are the worst, they are "the most awful form of scientific torture." (Art. 2, Lines 28-29). I apologize, but I just can't go on further. The flashbacks and memories of the trenches, no man's land, and bodies on top of bodies are driving me to a dark place.

Don't ever stop writing please. Please check on my mother for me. Her writing seems so weak, though I know she should feel better now that the armistice has come to be. Merry Christmas old friend, I hope to see you again soon!

Yours Truly,  
D. Fleck

Red: Claim

Orange: Reason

Green: Evidence

Blue: Counter Claim

# ARTICLE #1

## San Francisco World's Fair

<http://www.moah.org> (Museum of American Heritage Science & Technology, Palo Alto, Ca)

### Introduction

1 Think of it - just nine years after the devastating 1906 earthquake, San Francisco  
2 staged the 1915 Panama-Pacific International Exposition, celebrating the  
3 opening of the Panama Canal in August, 1914 and showing more than 18 million  
4 visitors from around the world that it remained "the city that knew how."  
5 Understandably, the universal reaction of fair-goers was "a sense of wonder." :

- 6 • The fair featured a reproduction of the Panama Canal that covered five  
7 acres. Visitors rode around the model on a moving platform, listening to  
8 information over a telephone receiver.
- 9 • The first trans-continental telephone call was made by Alexander Graham  
10 Bell to the fairgrounds before the fair opened, and a cross-country call was  
11 made every day the fair was open.
- 12 • An actual Ford assembly line was set up in the Palace of Transportation  
13 and turned out one car every 10 minutes for three hours every afternoon,  
14 except Sunday. 4,400 cars were produced during the Exposition.
- 15 • The entire area was illuminated by indirect lighting by General Electric. The  
16 "Scintillator," a battery of searchlights on a barge in the Bay, beamed 48  
17 lights in seven colors across San Francisco's fog banks. If the fog wasn't in  
18 -- no problem: A steam locomotive was available to generate artificial fog.

19 When it opened, the fair had a substantial impact on the nation. Numerous  
20 personages of note attended, and special excursion trains were run from the  
21 East Coast and other locations. The Liberty Bell made a special trip to the fair  
22 and was a favorite spot for celebrities to be photographed.

23 The Exposition emphasized contemporary events and technology from the  
24 previous decade. The moving-picture machine was extensively used to illustrate  
25 industrial progress in various exhibits, and the presence of both mechanical and  
26 electrical devices was larger than life in many cases. Exhibits in the Palace of  
27 Machinery showcased Diesel engines, water-driven power plants and numerous  
28 electrical motors and communication devices. On opening day, President  
29 Woodrow Wilson started, by wireless, the Diesel-driven generator that supplied  
30 all of the direct current used in the Palace.

31 But the greatest amount of space was given to labor saving devices, safety  
32 inventions and machines that increased the comfort (if not the comfort level) of  
33 humanity. The overwhelming theme was that machines would play a major role  
34 in making life more comfortable and enjoyable.

## ARTICLE #2

1  
2 World War I was less than one year old when British writer H. G. Wells  
3 lamented the fate of humanity at the hands of "man's increasing power of  
4 destruction" (H. G. Wells, "Civilization at the Breaking Point," *New York*  
5 *Times*, May 27, 1915, 2). Although considered a father of science fiction,  
6 Wells was observing something all too real—technology had changed the  
7 face of combat in World War I and ultimately accounted for an  
8 unprecedented loss of human life.

9 Infantry warfare had depended upon hand-to-hand combat. World War  
10 I popularized the use of the machine gun—capable of bringing down row  
11 after row of soldiers from a distance on the battlefield. This weapon, along  
12 with barbed wire and mines, made movement across open land both difficult  
13 and dangerous. Thus trench warfare was born. The British introduced tanks  
14 in 1916; they were used with airplanes and artillery to advance the front.  
15 The advent of chemical warfare added to the soldier's perils.

16 Sea and airborne weapons made killing from a distance more effective  
17 as well. Guns mounted on ships were able to strike targets up to twenty  
18 miles inland. The stealth and speed of German submarines gave Germany a  
19 considerable advantage in its dominance of the North Sea. Although  
20 airplanes were technologically crude, they offered a psychological  
21 advantage. Fighter pilot aces such as Manfred von Richthofen, Germany's  
22 "Red Baron," became celebrities and heroes, capturing the world's  
23 imagination with their daring and thrilling mid-air maneuvers.

24 Newspapers charted the public's reaction—horror and vengeance—to  
25 these technological advancements. A few weeks after the Germans first  
26 used poison gas in Ypres, Belgium, on April 22, 1915, a London newswire to  
27 the *New York Times* described the brutal details of the attack and the  
28 immediate effects on the soldiers, concluding: "It is without doubt the most  
29 awful form of scientific torture."

30 In previous wars, victory was achieved through territorial supremacy;  
31 in World War I it was accomplished by simply outlasting the opponent—a  
32 "war of attrition." Initially described at the onset of the fighting in April 1914  
33 as a "splendid little war" that would be over by Christmas, the conflict lasted  
34 for more than four years and scarred an entire generation with its  
35 unprecedented brutality.

36 <http://memory.loc.gov/ammem/collections/rotogravures/rotomil.html>  
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## ARTICLE #2-A

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### Civilization at the Breaking Point

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By H. G. Wells

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*[The New York Times, May 27, 1915]*

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The submarine and aircraft have put a new proposition before the world. It is a proposition that will be stated here as plainly and simply as possible. These two inventions present mankind with a choice of two alternatives, or, to vary the phrase, they mark quite definitely that we are at the parting of two ways; either mankind must succeed within quite a brief period of years now in establishing a world State, a world Government of some sort able to prevent war, or civilization as we know it must break up into a system of warring communities, perpetually on the warpath, perpetually insecure and engaged in undying national vendettas. These consequences have been latent in all the development of scientific warfare that has been going on during the last century; they are inherent in the characteristics of the aircraft and of the submarine for any one to see.

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They are so manifestly inherent that even before this war speculative minds had pointed out the direction to which these inventions pointed, but now, after more than three-quarters of a year of war, it is possible to approach this question, no longer as something as yet fantastically outside the experience of mankind, but as something supported by countless witnesses, something which the dullest, least imaginative minds can receive and ponder.

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What the submarine and aircraft make manifest and convincing is this point, which argument alone has never been able to hammer into the mass of inattentive minds, that if the human intelligence is applied continuously to the mechanism of war it will steadily develop destructive powers, but that it will fail to develop any corresponding power of decision and settlement, because the development of the former is easy and obvious in comparison with the development of the latter; it will therefore progressively make war more catastrophic and less definitive. It will not make war impossible in the ordinary meaning of the word, the bigger the gun and the viler the lethal implement the more possible does war become, but it will make war "impossible" in the slang use of five or six years ago, in the sense, that is, of its being utterly useless and mischievous, the sense in which Norman Angell employed it and so brought upon himself an avalanche of quite unfair derision. No nation ever embarked upon so fair a prospect of conquest and dominion as the victorious Germans when, after 1871, they decided to continue to give themselves to the development of overwhelming military power. And after exertions unparalleled in the whole history of mankind their net conquests are nothing; they have destroyed enormously and achieved no other single thing, and today they repeat on a colossal scale the adventures of Fort Chabrol and Sidney Street, and are no better than a nation of murderous outcasts besieged by an outraged world.

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Now, among many delusions that this war has usefully dispelled is the delusion that there can be a sort of legality about war, that you can make war a little, but not make war altogether, that the civilized world can look forward to a sort of tame war in the future, a war crossed with peace, a lap-dog war that will bark but not bite. War is war; it is the cessation of law and argument, it is outrage, and Germany has demonstrated on the large scale what our British suffragettes learned on a small one, that with every failure to accomplish your end by violent means you are forced to further outrages. Violence has no reserves but further violence. Each failure of the violent is met by the desperate cry, the heroic scream: "We will not be beaten. If you will not give in to us for this much, then see! We will go further." Wars always do go further. Wars always end more savagely than they begin. Even our war in South Africa, certainly the most decently conducted war in all history, got to farm burning and concentration camps. A side that hopes for victory fights with conciliation in its mind. Victory and conciliation recede together. When the German who is really, one must remember, a human being like the rest of us, at the worst just merely a little worse in his upbringing when he finds he cannot march gloriously into Paris or Warsaw, then, and only then, does he begin to try to damage Paris and Warsaw with bombs, when he finds he cannot beat the French Army and the British fleet, then, and not till then, does he attack and murder the slumbering civilians of Scarborough and Dunkirk, and lies in wait for and sinks the Lusitania. If war by the rules will not bring success, then harsher measures must be taken; let us suddenly torture and murder our hated enemies with poison gas, let us poison the South African wells, let us ill-treat prisoners and assassinate civilians. Let us abolish the noncombatant and the neutral. These are no peculiar German inequities, though the Germans have brought them to an unparalleled perfection; they are the natural psychological consequences of aggressive war heroically conceived and bitterly thwarted; they are "fierceness;" they are the logical necessary outcome of going to war and being disappointed and getting hit hard and repeatedly. Any military nation in a corner will play the savage, the wildcat at bay, in this fashion, rather than

92 confess itself done. And since the prophetic Bloch has been justified and the long inconclusiveness of modern  
93 war, with its entrenchments and entanglements, has been more than completely demonstrated, this is the way  
94 that every war in the future is likely to go. Fair and open conquest becoming more and more out of the  
95 question, each side will seek to cow, dismay, and subjugate the spirit of the other, and particularly the spirit  
96 of the noncombatant masses, by more and more horrible proceedings. "What do you think of that?" said the  
97 German officer, with a grin, as he was led prisoner past one of our soldiers, dying in agonies of asphyxiation.  
98 To that point war brings men. Probably at the beginning of the war he was quite a decent man. But once he  
99 was committed to war the fatal logic of our new resources in science laid hold of him. And war is war.

100 Now there does not appear the slightest hope of any invention that will make war more conclusive or less  
101 destructive; there are, however, the clearest prospects in many directions that it may be more destructive and  
102 less conclusive. It will be dreadfuller and bitterer; its horrors will be less and less forgivable; it will leave vast  
103 sundering floods of hate. The submarine and the aircraft are quite typical of the new order of things. You can  
104 sweep a visible fleet off the seas, you can drive an invading army into its own country, but while your enemy  
105 has a score of miles of coast line or a thousand square miles of territory left him, you cannot, it seems, keep  
106 his aircraft out of your borders, and still less can you keep his submarines out of the sea. You can, of course,  
107 make reprisals, but you can not hold him powerless as it was once possible to do. He can work his bloody  
108 mischief on your civil life to the very end of the war, and you must set your teeth and stick to your main  
109 attack. To that pitch this war has come, and to that pitch every subsequent war will come. The civil life will be  
110 treated as a hostage, and as it becomes more and more accessible, as it will do, to the antagonist it will be  
111 more and more destroyed. The sinking of the Lusitania is just a sign and a sample of what war now becomes,  
112 its rich and ever richer opportunities of unforgettable exasperation. Germany is resolved to hurt and destroy to  
113 the utmost, every exasperated militarism will come naturally to such resolves, and only by pain and  
114 destruction, by hurting, shaming and damaging Germany to the point of breaking the German spirit can this  
115 inflamed and war-mad people be made to relinquish their gigantic aggression upon the world. Germany, that  
116 great camp of warriors, must be broken as the Red Indians and the Zulus were broken, if civilization is to have  
117 another chance, and its breaking cannot be done without unparalleled resentments. War is war, and it is not  
118 the Allies who have forced its logic to this bitter end.

119 Unless this war does help to bring about a lasting peace in the world, it is idle to pretend that it will have been  
120 anything else but a monstrous experience of evil. If at the end of it we cannot bring about some worldwide  
121 political synthesis, unanimous enough and powerful enough to prohibit further wars by a stupendous array of  
122 moral and material force, then all this terrible year of stress and suffering has been no more than a waste of  
123 life, and our sons and brothers and friends and allies have died in vain. If we cannot summon enough good-will  
124 and wisdom in the world to establish a world alliance and a world congress to control the clash of "legitimate  
125 national aspirations" and "conflicting interests" and to abolish all the forensic trickeries of diplomacy, then this  
126 will be neither the last war, nor will it be the worst, and men must prepare themselves to face a harsh and  
127 terrible future, to harden their spirits against continuing and increasing adversity, and to steel their children to  
128 cruelty and danger. Revenge will become the burden of history. That is the price men will pay for clinging to  
129 their little separatist cults and monarchies and complete independencies, now. The traffic and wealth of our  
130 great and liberal age will diminish, the arts will dwindle and learning fade, science will cease to advance, and  
131 the rude and hard will inherit the earth. The Warpath or the World State; that is the choice for mankind.

132 This lesson of the submarine which destroys much and achieves nothing has ample support in history. There  
133 never was so blind a superstition as the belief that progress is inevitable. The world has seen the great  
134 civilization of the Western empire give place to the warring chaos of the baronial castles of the ninth and tenth  
135 centuries; it has seen the Eastern empire for 500 years decay and retrogress under the militarism of the Turk;  
136 it has watched the Red Indians, with rifles in their hands, grimly engage in mutual extermination. Is it still a  
137 blind world, doomed to blunder down again from such light and order and hope as we were born to, toward  
138 such another millennium of barbaric hates and aimless wars? That is no mere possibility; it is the present  
139 probability unless men exert themselves to make it impossible. It is quite conceivable that ours is the last  
140 generation for many generations that will go freely about the world, that will have abundance of leisure, and  
141 science and free speech and abundant art and much beauty and many varied occupations. We stand about in  
142 our old haunts and try to keep on with our old ways of living and speculate when the war will be "over," and  
143 when we shall be able to go back to everything just as it was before the war. This war and its consequences  
144 will never be "over," and we have not even begun to realize what it has cost us.

145 The course of human history is downward and very dark, indeed, unless our race can give mind and will now  
146 unreservedly in unprecedented abundance to the stern necessities that follow logically from the aircraft bomb  
147 and the poison gas and that silent, invisible, unattainable murderer, the submarine.

# ARTICLE #3

1  
2 How Tech Has Changed Our Lives  
3 By: Jennifer L. DeLeo  
4 PCMag 10/13/08

5 Through the years, we've watched technology grow like a child budding into adulthood: It starts out  
6 mostly crying and pooping, then crawling, gradually learning to walk, and finally able to run at a speed  
7 we all wish we could keep up with. We've seen technology fail, and we've seen it succeed. We've poked  
8 fun at it when it doesn't make sense, and we've praised it when it's absolutely brilliant. We've yelled at it  
9 when it runs out of power, and we've fixed or replaced it when it gets run down.

10 We treat technology as a family member—even if that is a little co-dependent. You can't blame us,  
11 though; it's certainly made aspects of our lives easier: We're no longer forced to send letters through the  
12 postal service, book vacations through travel agents, shop in stores, visit the library for research  
13 material, or wait for our photos to be developed. Thanks to technology, all of these activities can be  
14 performed either digitally or online.

15 At the same time, though, technology can make life more convoluted—especially when something  
16 doesn't work right or doesn't do what it's supposed to: Say, for instance, a GPS device tells you to turn  
17 the wrong way on a one-way street (yikes!), or a computer erases all of your important data (ouch!). . . .

18 For the most part, however, technology does us more good than harm: It's reconnected us with old  
19 college roommates, helped us learn a foreign language, and encouraged us to exercise. Follow us as we  
20 look back at how technology has changed our lives—for the better and for the worse—in terms of  
21 communication, computing, . . . . .

22 **Communication** - For many of us, communicating with family used to mean sending letters and cards  
23 through the mail and getting no response until weeks later. We'd pass hand-written notes to friends in  
24 class. We'd pick up the telephone—paying for long-distance calls, no less—and could only talk to one  
25 person at a time. On top of that, there were no answering machines to leave messages if a person wasn't  
26 home, or Caller ID to screen calls if we didn't feel like picking up the phone. And pay phones were the  
27 only option to call home if our car broke down on the side of the road, or if we had to stay after school.

28 **The Good:** For the past decade or so, technology has transformed the way we communicate, in part due  
29 to the advent of the Internet. Instead of mailing letters, we're writing e-mails through [Gmail](#) or [Windows](#)  
30 [Live Hotmail](#) that can be sent instantaneously to a recipient. We can even add multiple recipients to  
31 these e-mails, so that more than one person can read them. Even more, we can send greeting cards over  
32 the Web with sites like [someecards.com](#) and [GroupCard.com](#). No postage needed! . . .

33 We are no longer bound to long-distance charges, either. Many folks have already kicked their landline  
34 phones to the curb and replaced them with Voice-over-Internet protocol (VoIP) and mobile phones. We  
35 can place free video calls (yes, we can see the person we're talking to) to anyone in the world over the  
36 Internet by using [Skype](#) and a headset. For a monthly paid service we can make regular phone calls over  
37 the Internet using the popular [Vonage](#) service or signing up for VoIP through our cable company. . . .

38 **The Bad:** It's true that technology has also made society somewhat impersonal. Here at PC Magazine  
39 we communicate with each other mostly through e-mail and instant message. As a result, it's difficult to  
40 tell when a person is serious or sarcastic—our clever turns of phrase can easily be misconstrued.  
41 Technology tends to make communication drag out more than it has to, too; sometimes it's quicker to  
42 just get out of your seat and walk to the person, or simply pick up the phone.

43 Even worse, younger generations have forgotten how to spell and write complete sentences due to the  
44 increased use of text messaging on mobile phones. The [State Examination Commission out of Dublin,](#)  
45 [Ireland](#) said in a report that in many cases, teenagers seemed "unduly reliant on short sentences, simple  
46 tenses, and a limited vocabulary" and that with the use of phonetic spelling and little or no punctuation,  
47 it's beginning to pose a threat to traditional conventions in writing, not to mention oral communication.

48 In addition, we've seen how addicted people can become to their smartphones, like the [Apple iPhone](#)  
49 and the [BlackBerry Storm 9530](#). (You've probably heard the term for it: "CrackBerry.") People possess  
50 an obsessive need to constantly check their e-mail, even when on vacation with the family. It's as if  
51 we're afraid we'll miss something important or be out of the loop. If there isn't a group for BlackBerry  
52 addicts, there should be.—

53 **Computing** - Before word processors there were typewriters. Keys were punched and a typebar would  
54 hit an inked ribbon in order to make an imprint onto paper. For each new line of text, we had to push a  
55 "carriage return" lever. If a mistake was made, we'd grab for the sticky tape that could remove the black  
56 ink of a typed character, or paint over it with Wite-Out. There was no way to save our work or make  
57 copies.

58 Then before computers there were word processors, which allowed for the editing of text. Later on, new  
59 models were introduced with spell-checking programs, increased formatting options, and dot-matrix  
60 printing.

61 **The Good:** Today, the personal computer has become an integral part of our lives. What was once a  
62 bulky machine taking up all of the space on our desk (remember the [IBM PC](#) and [Apple II](#)?), the  
63 personal computer is now a sleeker system that's capable of storing terabytes of data and operating at  
64 lightning-fast speeds.

65 PCs are no longer deskbound, either. Laptops and netbooks (also known as ultramobile PCs) are now  
66 capable of performing similar tasks and functions as their desktop counterparts while being optimized  
67 for mobile use. They are easy to carry (weighing anywhere from 2 to 12 pounds), and they're convenient  
68 for working while on the go. Netbooks in particular are beginning to take off: [ABI Research](#) forecasts  
69 that shipments of netbooks as well as Mobile Internet Devices are expected to exceed 200 million in  
70 2013.

71 Through the use of computers, we've mastered the art of multitasking: typing articles by using word-  
72 processing programs such as [MS Word](#) and [OpenOffice](#), checking e-mail through Microsoft Outlook,  
73 designing and optimizing images and photos with [Adobe Photoshop](#), building a digital library of our  
74 favorite music with [Apple iTunes](#), and much, much more.

75 **The Bad:** Undoubtedly computers save us a lot of time, but we might depend on them a little too  
76 trustingly. It's possible to lose tons of data if a drive crashes and we haven't backed it up. We've counted  
77 on Spell Check to make our words literate, but it's certainly not a good copy editor. Computers tend to  
78 distract students in class, as well; they'll surf the Web when they should be taking notes. Even  
79 relationships have suffered from excessive use of the computer, from [World of Warcraft](#) sessions to  
80 work projects . . .

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# ARTICLE #4

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September 1, 2009

## EDITORIAL OBSERVER

A Casualty of the Technology Revolution: ‘Locational Privacy’

By ADAM COHEN

When I woke up the other day, I went straight to my computer to catch up on the news and read e-mail. About 20 minutes later, I walked half a block to the gym, where I exercised for 45 minutes. I took the C train to The New York Times building, and then at the end of the day, I was back on the C train. I had dinner on my friends Elisabeth and Dan’s rooftop, then walked home seven blocks.

I’m not giving away any secrets here — nothing I did was secret to begin with. Verizon online knows when I logged on, and New York Sports Club knows when I swiped my membership card. The M.T.A. could trace (through the MetroCard I bought with a credit card) when and where I took the subway, and The Times knows when I used my ID to enter the building. AT&T could follow me along the way through my iPhone.

There may also be videotape of my travels, given the ubiquity of surveillance cameras in New York City. There are thousands of cameras on buildings and lampposts around Manhattan, according to the New York Civil Liberties Union, many near my home and office. Several may have been in a position to film dinner on Elisabeth and Dan’s roof.

A little-appreciated downside of the technology revolution is that, mainly without thinking about it, we have given up “locational privacy.” Even in low-tech days, our movements were not entirely private. The desk attendant at my gym might have recalled seeing me, or my colleagues might have remembered when I arrived. Now the information is collected automatically and often stored indefinitely.

Privacy advocates are rightly concerned. Corporations and the government can keep track of what political meetings people attend, what bars and clubs they go to, whose homes they visit. It is the fact that people’s locations are being recorded “pervasively, silently, and cheaply that we’re worried about,” the Electronic Frontier Foundation said in a recent report.

People’s cellphones and E-ZPasses are increasingly being used against them in court. If your phone is on, even if you are not on a call, you may be able to be found (and perhaps picked up) at any hour of the day or night. As disturbing as it is to have your private data breached, it is worse to think that your physical location might fall into the hands of people who mean you harm.

40 This decline in locational privacy, from near-absolute to very little in just a few  
41 years, has not generated much outrage, or even discussion.  
42 That is partly because so much of it is a side-effect of technology that people like.  
43 Drivers love E-ZPasses. G.P.S. enables all sorts of cool smart phone applications,  
44 from driving directions and find-a-nearby-restaurant features to the ever-popular  
45 “Take Me to My Car.”  
46 And people usually do not know that they are being monitored. The transit authority  
47 does not warn buyers that their MetroCards track their subway use (or that the  
48 police have used the cards in criminal investigations). Cameras that follow people on  
49 the street are placed in locations that are hard to spot.

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51 It is difficult for cellphone users to know precisely what information their devices  
52 are sending about their current location, when they are doing it, and where that  
53 information is going. Some privacy advocates were upset by recent reports that the  
54 Palm Pre, which has built-in G.P.S., has a feature that regularly sends its users’  
55 location back to Palm without notifying them at the time.

56  
57 What can be done? As much as possible, location-specific information should not be  
58 collected in the first place, or not in personally identifiable form. There are many  
59 ways, as the Electronic Frontier Foundation notes, to use cryptography and  
60 anonymization to protect locational privacy. To tell you about nearby coffee shops, a  
61 cellphone application needs to know where you are. It does not need to know who  
62 you are.

63  
64 When locational information is collected, people should be given advance notice and  
65 a chance to opt out. Data should be erased as soon as its main purpose is met. After  
66 you pay your E-ZPass bill, there is no reason for the government to keep records of  
67 your travel.

68 The idea of constantly monitoring the citizenry’s movements used to conjure up  
69 images of totalitarian states. Now, technology does the surveillance — generally in  
70 the name of being helpful. It’s time for a serious conversation about how much of  
71 our privacy of movement we want to give up.

72