

How the Cold War Arms Race Fueled a Sprint to the Moon



Lesson Plan: How the Cold War Arms Race Fueled a Sprint to the Moon

Overview: The Cold War arms race created a competitive environment between the United States and the Soviet Union, driving both countries to invest heavily in space exploration as a means of demonstrating technological superiority, achieving national prestige and advancing military capabilities. The goal of reaching the moon became a symbolic representation of this competition, ultimately resulting in one of the most significant achievements in human history.

Subjects: Social Studies and English Language Arts (E.L.A.)

- Social Studies: This lesson can be used in the context of a high school United States or World History Class, ideally in a unit covering the Cold War. It also fits in an Economics class in evaluating free markets and competition.
- English: This lesson can be used in the context of an 8th grade to 12th grade English class while covering how to conduct research and informative writing.

Grade Level: Grades 7-12

- The essay includes a starter outline to help scaffold for younger students as well as older students who may find it helpful.

Lesson Duration:

- Three 45 minute class periods
 - One 45 minute period to do the lesson.
 - One period to write the essay and another to revise and edit the essay.

Essential Questions:

- How does the Cold War rivalry between the United States and the Soviet Union serve as a model for understanding how competition can drive innovation?
- How has competition served as a factor in innovations throughout history?
- What are the positives and negatives of competition and cooperation when it comes to driving innovation?

Lesson Objectives:

Students will:

- Analyze the relationship between competition and innovation.
- Examine how the Cold War rivalry fueled the Space race.
- Research and analyze technological innovations driven by competition in various industries.
- Assess the societal impacts of a chosen innovation resulting from competition.

Materials:

- [How the Cold War Arms Race Fueled a Sprint to the Moon](#) ([Transcript](#))
- [Student Activity](#) handout

- [How Edison's 150-Year-Old Secret For Innovation Can Help Your Company's Competitiveness](#) | Forbes
- [The Rule of Co-opetition](#) | Harvard Business Review
- Optional:
 - CCSS Rubrics Informational/Explanatory Rubrics: [7th/8th Grade](#), [9th/10th Grade](#), [11th/12th Grade](#) | [Body and Mind Solutions](#)

Procedure:

1. Think–Pair–Share:
 - a. Distribute the student activity handout and direct students to the link for the students to access the articles [How Edison's 150-Year-Old Secret For Innovation Can Help Your Company's Competitiveness](#) and [The Rules of Co-opetition](#). Hard copies of the articles may be distributed, depending on preference or need.
 - b. Instruct the students to skim read each article individually and respond to the question: "Does competition drive innovation?"
 - i. Go over skimming methods, as necessary. See [Skimming](#) | The Learning Center, University of North Carolina at Chapel Hill for more information.
 - ii. If a shorter selection is needed to replace "The Rules of Co-opetition:" [Why Cooperation Is Better Business Than Competition](#) | NBS News
 - c. Have the students find a partner (or assign a partner) to discuss their perspective.
 - d. After the students have discussed their responses with their partner, have them share their ideas with the class.
 - e. Answer any questions the class may have regarding the topic.
2. Introduce the video "[How the Cold War Arms Race fueled a Sprint to the Moon](#)" and provide the transcript to help students follow along with the video.
 - a. Have students watch the video carefully (may need to watch more than once) and have them take notes on how the Cold War rivalry impacted the space race.
 - b. Encourage students to focus on both the political and technological aspects of the space race as well as its implications.
3. Assign students to research technological innovations that have been driven by competition in various industries.
 - a. Provide guidelines or suggestions for research topics and credible sources for students to utilize.
 - i. Edison vs. Tesla
 - ii. Ford v. Ferrari
 - iii. Apple vs. Microsoft
 - iv. Smartphones
 - v. Streaming Services
 - vi. Pharmaceutical companies (Covid 19 vaccine, etc)
 - b. Instruct students to identify how each innovation was the result of competition and document their findings.
4. After completing the research, instruct the students to choose one innovation from their research and describe how it affected society.

- a. Have students identify and analyze both beneficial and harmful effects of the chosen innovation on society.
 - b. Remind students to provide evidence and examples to support their analysis.
5. Explain the essay prompt to students and provide them with the outline to help structure their essay.
 - a. Instruct students to conduct further research as needed to gather historical and contemporary examples.
 - b. Provide guidance and support as students work on their essays.

Extension Activity:

1. Have students present their informative essays by turning them into a presentation on the innovation they chose.
2. Have students look at the banning of non-compete contracts and how they could factor into innovation.
 - a. Potential sources include [“FTC Announces Rule Banning Noncompetes”](#) | FTC
 - b. [“New Federal rule would bar ‘noncompete’ agreements for most employees”](#) | Associated Press

Relevant Standards/ Frameworks:

College, Career, and Civic Life (C3) Framework for Social Studies

- **D2.His.11.9-12.** Critique the usefulness of historical sources for a specific historical inquiry based on their maker, date, place of origin, intended audience, and purpose.
- **D4.2.9-12.** Construct explanations using sound reasoning, correct sequence (linear or nonlinear), examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation given its purpose (e.g., cause and effect, chronological, procedural, technical).
- **D4.3.9-12.** Present adaptations of arguments and explanations that feature evocative ideas and perspectives on issues and topics to reach a range of audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).
- **D2. Eco.7.6-8** Analyze the role of innovation and entrepreneurship in a market economy.

Common Core Literacy Standards

- **CCSS.ELA-LITERACY.RI.9-10.1** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- **CCSS.ELA-LITERACY.RI.9-10.8** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.
- **CCSS.ELA-LITERACY.WS.9-10.2** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
 - a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aid comprehension.

- b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
- c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
- d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.
- e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

About the Author:

Brande Johnson is a middle and high school English, Social Studies and AP Computer Science teacher in Nevada. She has a Master's in Instructional Design and Technology. She has been a teacher in both California and Nevada since 2009. She has taught 6-12th grade ELA, Social Studies, middle and high school computer science, as well as student leadership and student council.