

Lesson Title: Why didn't it happen like that? ; A Student Inquiry into the Environmental Movement

Author Name: Ashley Showers

Contact Information: ashowers@nevada.unr.edu

Appropriate for Grade Level(s): 11th grade

Type of Lesson: Mini Inquiry

NVACS for Social Studies:

SS.9-12.US.2. Generate and answer supporting questions while explaining how they contribute to an inquiry and how new compelling and supporting questions emerge through the inquiry process.

SS.9-12.US.6. Identify evidence that draws information directly and substantially from multiple sources to detect inconsistencies in evidence in order to revise or strengthen claims.

SS.9-12.US.14. Evaluate the impact of individuals and reform movements on the struggle for greater civil rights and liberties throughout U.S. history.

SS.9-12.US.32. Examine the changing roles, impact, and power of political leaders, parties, and voting blocs over time.

Student Objectives:

Students will be able to interpret the research presented in the beginning section of facts in order to evaluate new sources.

Students will be able to research supportive questions, which help to understand the compelling question.

Students will be able to communicate their supporting questions created and their research findings.

Rationale for teaching this lesson:

This inquiry lesson allows students to ask questions, research answers and draw text based conclusion. This creates a deeper interest in what they are researching, stemming from their own question. The skills in this lesson provide an opportunity for additional research to be completed.

Materials:

Mini-Inquiry Template: Why didn't it happen like that?

Computer or tablet to complete research

Lesson Plan Outline: Two Day Lesson

<i>Approximate Time (e.g. 15 mins)</i>	<i>Teacher is...</i>	<i>Students are...</i>
10 minutes Day 1	Pass out the Mini-Inquiry Packet. Read aloud the first page of evidence. It builds a narrative that as a society, we should be more evolved when it comes to the environment. After the first reading have the students read to themselves for a second read.	Students are listening and thinking about the text. Then they will read to themselves.
10 minutes Day 1	Number the students off into groups of 4. Read the “Why Might This Be” section of the minquiry. Students then individually frame supporting questions to help them research the problem. Allow time for students to share their questions after this period of working by themselves.	Get into groups of 4. Listen while I read By themselves they frame supporting questions through the use of PLACES to help them research a better understanding of the actual problem. Share these questions with group
10 minutes Day 1	Groups collaboratively plan their research questions. Monitor the room, help when needed in organizing question themes in groups, key search terms to use to do research.	Work together to plan out your different research questions and key themes and search terms to use when doing your research.
15 minutes Day 1	Remind students about credible sources. Instruct the students to complete their research for the remaining period time. Walk around and help where needed.	Students are on task and researching their questions in order to bring back their finding to their groups
15 minutes Day 1	Students go back to their groups and communicate answers to the first three questions in Communicating Conclusions. Explain that part of research is discovering new information and its okay to get lost in a rabbit hole and to need refocus. Walk around to gauge student work. Answer questions as needed. Students that they will be presenting a Google Slide on the main question as well as their findings to the class which will be 2 minutes long.	Attend to the first three questions in the section of Communicating Conclusions. Deciding who will complete what for the slide which will be due the next period. Allowing the students to present their findings and start their Google Slide. Homework: Finish up the Google Slide
10 minutes Day 2	Students meet in their group and go over any last-minute changes they need.	Quick briefing of information so the groups are all on the same page and finishing last minute details.
20 minutes Day 2	Explain to the audience that they are filling out the “What did I learn from other groups minquiries?” section of the packet. Watch and learn with the students while they present. Adding in anything important for the students to understand and monitoring the students not presenting to see if they are completing their other groups section of the packet.	Students are filling out the “What did I learn from other groups mini inquiries?” section of the packet while the other groups present their findings.

15 minutes Day 2	Instruct the students to turn to their section where it asks, "What new questions I have?" They must complete this section individually and then they can open it up to their group mates	Answering "What new questions I have?" quietly. Then sharing with their groups what they wanted to know more about.
10 minutes Day 2	For their exit ticket the students must finish up the packet. They will spend the 5 minutes of the period completing the reflection portion of the packet. They will also pull out their running quick write sheet and write until the end of the period	Completing the reflection piece. Complete quick write.

Work Cited:

"The Modern Environmental Movement." PBS, Public Broadcasting Service, www.pbs.org/wgbh/americanexperience/features/earth-days-modern-environmental-movement/.

Why didn't it happen like that? The Environmental Movement

First, "Silent Spring" by Rachel Carson was published in 1962. Her book condemns the overuse of pesticides, especially DDT. The book's importance and popularity went even further because it leads her to testify before the Senate subcommittee on pesticides in 1963. This led to the overall ban of DDT in the U.S. by 1972. Throughout the last part of the 60's many different environmental Acts passed through Congress such as the Clean Air Act (1963), the Water Quality Act (1965), the Motor Vehicle Air Pollution Control Act (1965), and the Wild and Scenic Rivers Act (1968).

A picture taken from Apollo 8 in 1968 was named Earthrise. This was the first time we were able to see the Earth from space through the use of a picture.

A wake-up call occurred during the summer of 1969 when the Ohio's Cuyahoga River appears to burst into flames when oil and chemicals floating on the surface ignite. This causes flames over 5 stories high.

Due to the growing media coverage of the Environment over the last couple years President Richard Nixon in his State of the Union Address elaborated the importance of environmental issues.

Source: "The Modern Environmental Movement." PBS, Public Broadcasting Service, www.pbs.org/wgbh/americanexperience/features/earth-days-modern-environmental-movement/.

In addition, the first National Earth Day occurred on April 22, 1970 which took the stance of a protest focusing upon environmental ignorance. Approximately 20 million people around the United States participated in it making it the largest demonstration ever in American History.

After this demonstration occurred the Environmental Protection Agency (EPA) was created. This federal agency is responsible for the passage of environmental legislation, ecological programs and research. In 1974 they are also put in charge of settling and monitoring water quality standards with the Safe Drinking Water Act. In 1976 they are given complete control over hazardous waste in Resource Conservation and Recovery.

In 1977 President Jimmy Carter establishes the Department of Energy which is put in charge of carrying out a comprehensive national energy plan which reflects federal legislation.

And then, Ronald Reagan in 1981 cut the EPA budget by 44% compared to the 1978 level.

However, in September 1987 the Montreal Protocol was signed by the US and 23 other countries agreeing to phase out ozone-depleting CFCs by 2000.

In December of 1988 the World Meteorological Organization and the United Nations Environmental Program establish the Intergovernmental Panel on Climate Change (IPCC).

President Bill Clinton signed the Kyoto Protocol which vowed to reduce greenhouse gas emissions based on the scientific consensus that global warming is occurring. However, the Senate did not ratify.

SO THEN...

THE ASSUMPTION MIGHT BE: By 2017, the environmental concerns of the 1960's to the 1990's would be resolved, and the government would be working towards ever cleaner technologies.

THE REALITY IS: There is still great controversy over the factuality of human effects on the environment. Although scientists stand fairly united on policy changes needed, politicians and the public remain divided on solutions to global warming, greenhouse gases and clean energy.

Why might this be? After 40 years of increasing knowledge of the negative impacts of humans on the environment, why is there no political consensus on policy decisions?

What supporting questions could help you research this topic?

STEPS TO CONSIDER WITH IN PLANNING YOUR MININQUIRY

1. How could you categorize your supporting questions: Political, Economic, Social, Geographic, Minority v. Majority, Legal, Etc. Or by a different means?
2. What are some key search terms that will help you find better answers to the question with Google?
3. Are there some trusted sources and/or databases that could guide you to better answers?
4. How many facts will each person need to bring back to the group? Time limit? How much source information? How will we capture our facts and sources to share with the group?

COMMUNICATING CONCLUSIONS

1. Share out the evidence each person found to help answer the question. Some ways to start this discussion might be: “The most interesting thing I found was...” followed by similar or supporting evidence that others found. In this way, you will begin to “chunk” together like evidence.
2. Once the evidence has been shared, get rid of evidence you found that does not come from a trusted source. Discuss how you will make this decision.
3. Rank the remaining evidence chunks according to what you find most insightful and most intriguing.
4. Collaboratively create a slide to share with the class about your findings. Make sure you are answering the original question and a supporting questions(s).

WHAT DID I LEARN FROM OTHER GROUP’S MINIQUIRIES?

WHAT NEW QUESTIONS DO I HAVE?

MININQUIRY REFLECTIONS

What is the most interesting new fact/idea you learned while researching this topic with the class? How does that idea/fact align with something (specific) we've already learned? Explain in a paragraph using evidence from this inquiry as well as from our past learning.

What would you change about the group process for your next minquiry? Why?

What is one goal you have for yourself in future inquiry, research and communicating conclusions?

What score out of / would you provide yourself? Your group? Why?