

Title: Can the Accident Chain Be Disrupted?

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Overview / Description:

This inquiry project embeds an Academic and Career Planning concept into historical inquiry, allowing students to make connections between historic accident analysis and the type of accident chain analysis a business might do today. By investigating the compelling question “Can the Accident Chain be disrupted?” students evaluate secondary sources about the Great Molasses Flood and address the issue of whether there are points along the accident chain when alternate decisions can avoid a calamity.

Subject(s): Social Studies, History

Grade Level(s): 9-12

Learning goals/objectives:

After completing this activity, students should be able to:

- Understand the accident chain and the importance of accident analysis
- Analyze the accident chain in a historical accident (The Great Molasses Flood)
- Construct and support an argument using specific claims and relevant evidence from historical and current sources

Type of Activity (check all that apply):

- X Individual
- Small Group
- X Whole Class

Teaching Strategies (check all that apply or include new strategies):

- X Discussion
- Partner work
- X Use of Technology
- Role Playing
- Simulation
- X Performance Assessment

Content Standards

Wisconsin Standards for Social Studies:

- Standard SS.Inq2: Wisconsin students will gather and evaluate sources.
- Standard SS.Inq3: Wisconsin students will develop claims using evidence to support reasoning.
- Standard SS.Inq4: Wisconsin students will communicate and critique conclusions.
- Standard SS.Hist1: Wisconsin students will use historical evidence for determining cause and effect.

Model Academic Standards for School Counseling:

- Content Standard C: Students will understand the relationship of academics to the world of work, and to life at home and in the community.
 - Core Performance Standard 1: Understand how to relate school to life experiences.

School Counselor Association Mindsets and Behaviors for Student Success:

- Category 2: Behavior Standards
 - B-LS 9. Gather evidence and consider multiple perspectives to make informed decisions.

Length of Time and length of class periods:

5 or 6 40-minute class periods

Materials List (linked if online resource please):

- The full C3 lesson can be found at https://drive.google.com/a/cesa8.org/file/d/1SqR1qSv-VBnCURAJh6VoDQd_beu0SsHp/view?usp=sharing
- [Accident Chain Performance Task](#)
- [Breaking the Accident Chain](#) video
- [The Day I Broke the Accident Chain](#) article
- [The Day I Broke the Accident Chain Analysis](#)
- [The Great Molasses Flood](#) reader's theater script
- [Boston Post](#) front page story
- [The Science of the Great Molasses Flood](#) article
- [Death by Molasses](#) article
- [Boston Molasses Flood](#) article
- [5W1H](#) organizer

Directions (Step-by-Step):

See the full C3 lesson plan for step-by-step directions:

https://drive.google.com/a/cesa8.org/file/d/1SqR1qSv-VBnCURAJh6VoDQd_beu0SsHp/view?usp=sharing

Wrap-Up:

Once students have learned about the Accident Chain, as well as the background information on the Great Molasses Flood, they will then use their knowledge of the Accident Chain to analyze the causes of the molasses flood and have started forming opinions about who is most to blame for the accident.

Formative/Summative Assessment:

In this summative task, students construct an evidence-based argument using multiple sources to answer the compelling question “Can the Accident Chain be disrupted?” Students should be expected to demonstrate the breadth of their understandings and their abilities to use evidence from multiple sources to support their claims. It is important to note that students’ arguments could take a variety of forms, including a detailed outline, poster, or essay.

Students’ arguments will likely vary, but could include any of the following:

- The U.S. Industrial Alcohol Company is most to blame--if they had built the molasses tank to handle the pressures of the volume of molasses they were planning on using, the accident chain would have been disrupted before it even began.
- The Boston Building Department was most to blame--if they had properly studied the building plans, the tank would never have been approved. If they had inspected the tank on a regular basis or paid attention to the complaints of the immigrants living in the area, repairs to the tank could have been made, breaking the accident chain.
- The Boston citizens are most to blame--if they had been willing to have higher taxes in order to give the Building Department the funding they needed to do their jobs, they could have broken the accident chain.

To extend their arguments, teachers may have students write their own Reader’s Theater script interviewing one of the parties being held accountable for the Great Molasses Flood (U.S. Industrial Alcohol Company, Boston Building Department, Boston citizens, etc.). Students could choose to perform their Reader’s Theater plays if time permits.

Extension Activity for differentiation:

Students have the opportunity to take informed action by drawing on their understandings of the accident chain. To *understand*, students can identify another preventable historical accident. To *assess*, they can determine if an accident chain exists which could have resulted in the prevention of the accident (using their knowledge of the sphere of influence). To *act*, student can create an action plan to address spots in the accident chain where an alternate actions could have taken place and analyze the result of each alternate action.

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