



LESSON PLAN

WINDS OF CHANGE: THE GALVESTON HURRICANE OF 1900

Social Studies, Grades 9–12

OBJECTIVE

Through the use of primary sources, students will analyze the impact of hurricanes on the lives and livelihoods of the people and regions affected by them. Students will further compare the impacts of the Galveston 1900 Hurricane, Hurricane Katrina, and Hurricane Ike on the Texas coast, judging both immediate impact and long-term effect. Additionally, student will read accounts from Isaac’s Storm about the Galveston Hurricane, the biggest natural disaster in American history. Students will work in literary circles to draw parallels between the moving images and the written descriptions of the event.

PROCESS

Prior Knowledge

Students should have a working knowledge of Texas geography, including the Gulf Coast region.

Students should be aware of the devastating impact of natural disasters on communities and the economy.

Hook A

Display a map of the Texas Gulf Coast that includes Cuba; identify the cities of Galveston and Havana on the map.

Ask the class to make a list of how information was communicated between two separate locations around 1900. Write the students’ responses on the board.

Ask how someone in Havana might be able to warn someone in Galveston that a storm was coming around 1900. The answer is that there was no way to communicate this information effectively, and as a result, the Galveston Hurricane devastated Galveston Island in 1900.

Extension: Have students brainstorm one of the following:

- The benefits of modern technology, such as storm radar, which informs meteorologists that a major storm is coming several days before it arrives.
- The problems associated with not having the technology to give people an advance warning that a storm is coming.

Hook B

Ask if anyone can name a natural disaster. Write students’ responses on the board and make sure you list a variety of them.



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Using a map or globe, ask students to identify where many of these natural disasters occur, from tornadoes in the Midwest and earthquakes along fault lines to hurricanes on the gulf coasts, etc. Discuss their causes.

Ask students if they can name any recent natural disasters and discuss when and where they occurred, as well as their long-term impact.

Lesson

Watch the film, *Panorama of East Galveston* or one of the other suggested films (see Videos). This film illustrates the significant damage wrought by the hurricane that struck Galveston on September 8, 1900. Rather than react verbally, have students write down what images they see.

Ask students:

- How does this film look different from the images you see on your TV at home?
Black and white, blurry images, jumpy images
- Why does this look different from the images we watch?
This was filmed when moving images were first invented and had not been perfected.
- What similarities do you see between this footage and scenes that have resulted after Hurricane Katrina or Hurricane Ike?
Have students refer to their paper to see what they wrote down.
- What are the major differences between the footage of the Galveston Hurricane of 1900 and what you have seen of Hurricanes Katrina or Ike?
More focus on people's personal stories and losses, less of a focus on the physical destruction of the wreckage.
- Thinker Question: Why are some buildings left standing during a hurricane while others are not?
- Why do people continue to resettle and rebuild Galveston Island though hurricanes continue to ravage the area?
Possible answers: ports, trade, transportation, culture, tourism.
- Why is it especially unfortunate that Galveston is an island?
There was no way to get off the island as the hurricane approached and no way to import supplies onto the island after the storm.
- Though technology has changed, and more than 100 years have passed, what has not changed about the effect of natural disasters and hurricanes?



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Show students pictures from Hurricane Katrina

(https://www.nola.com/multimedia/photos/collection_1ae901f2-ca7a-11e9-a269-c31141550f2b.html#14) so they have an additional frame of reference to those

provided in the videos. Then ask them how long they think it takes to rebuild an area after a hurricane has struck land? What do you think the long term effects are on an area after a hurricane strikes?

Explain to students that the Galveston Hurricane was the deadliest natural disaster in American history: between 6,000 and 8,000 people died.

Tell students they are going to learn about what factors enable Galveston to continue to thrive as a city, though it continues to be ravaged by hurricanes

Have students work in small groups of four or five and read segments out of Isaac's Storm by Erik Larson. Have them discuss how the book describes the period before, during and after the storm.

Compare and contrast the book's description of the event with the moving images of Galveston shot in 1900 after the storm destroyed the city in literary circles of four. Assign different roles to each student in the reading group. Have one student create a summary of what they read (specific chapters you assigned), another student will create 5- 10 reading questions, another select quotes that stood out from the book and the other will write about some of the parallels between the written and visual descriptions of the Galveston Hurricane.

Ask students to then compare and contrast the footage of the Galveston Hurricane with today's news coverage of natural disasters.

Or research Thomas Edison and his contribution to moving images. The Galveston Hurricane was one of the first major events in America to be filmed and viewed by a wide audience.

Independent Practice

(To be completed over the course of several class periods)

Divide students into groups, and assign each group one of the following topics:

- Understanding the science of hurricanes: how do they happen?
- The shipping industry: 1900 and present day
- The evolution of communication: the telegraph, telephone, internet
- The history of meteorology
- Emergency response to hurricanes: 1900 and present day



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- Recording Hurricanes: footage of destruction then and now (Focus on Edison’s process and how the news media covers hurricanes today.)
- Have each group research their topic in regards to:
- Basic background information about their topics (who, what, when, where, how)
- How the topic affected Galveston Island in 1900
- How their topic affects Galveston Island today
- Why do you think people continue to settle in Galveston despite the risk of hurricanes? (Or how does your topic affect the distribution of populations along the Gulf Coast?)

Each group will present their findings (either through a 5-10 minute presentation or a poster) and will be evaluated on the following:

- Accuracy of information about topic
- Explanation of how their topic has shaped contemporary society
- Displaying differences between 1900 and present day
- Aesthetic value/engaging participation
- Explanation of why people continue to rebuild and settle on Galveston Island

Closing

Explain to students that though living in a hurricane zone is dangerous, much advancement in technology and the desirability of Galveston’s geographic placement has made it possible to weather natural disasters.

Extended Learning

Have students read the September 14, 2008 New York Times article “Hurricane Ike’s aftermath has some still looking for a way out” by Ian Urbina

(<https://www.nytimes.com/2008/09/15/us/15galveston.html>) and respond to the following questions:

What are the major problems facing the people who remained on Galveston Island?

What are some reasons people may have stayed on Galveston Island rather than evacuating as they were told to?

What are some of the sensory images (sounds, sights, smells, etc) that the author uses to describe the scene in Galveston after Hurricane Ike?

Why does one mother refuse to go to the shelter set up on the island?



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What are some similarities between the aftermath of Hurricane Ike and the aftermath of the Galveston Hurricane?

What are some differences between the aftermaths of the two hurricanes?

OPTION 1: Have students compose an imaginary narrative describing what it would have been like to experience the events of the Galveston Hurricane of 1900. Encourage them to describe the shock of many Galveston residents when the ocean current began to rise and what the aftermath must have been like.

OPTION 2: Have students compose a letter to a family member living in Galveston who has decided to not leave the island because they want to “ride out” the storm. Students must include facts from what they have learned to persuade their relative why “riding out” the storm is not a good plan.



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Videos



Panorama of East Galveston

https://texasarchive.org/2006_00114



Launching a Stranded Schooner from the Docks

https://texasarchive.org/2006_00113



Panorama of Galveston Power House (Galveston, Texas Hurricane and Tidal Wave)

https://texasarchive.org/2006_00115



Panorama of Orphans Home, Galveston

https://texasarchive.org/2006_00116



Panorama of Wreckage of Water Front

https://texasarchive.org/2006_00117



Panoramic View of Tremont Hotel

https://texasarchive.org/2006_00001



Searching Ruins on Broadway, Galveston, for Dead Bodies

https://texasarchive.org/2006_00118



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Birdseye View of Dock Front, Galveston

https://texasarchive.org/2006_00112

RESOURCES

Hale, Marian. *Dark Water Rising*, MacMillan: New York, 2010.

Larson, Erik. *Isaac's Storm: A Man, A Time, and the Deadliest Hurricane in History*. Random House: New York. 1999

Green, Nathan C. *Story of the Galveston Flood: Complete, Graphic, Authentic*. Cosimo Classics: New York. 2005

A presentation of the Galveston County Daily News, <http://www.1900storm.com/>

Exhibit from Galveston and Texas History Center at the Rosenberg Library, <https://rosenberg-library.org/special-collections/the-1900-storm-a-slideshow/>

Galveston 1900: Storm of the Century, the Portal to Texas History, <https://education.texashistory.unt.edu/lessons/psa/Galveston1900/>

TEKS

US History Studies Since 1877

28A - Analyze how scientific discoveries, technological innovations, and the application of these by the free enterprise system, including those in transportation and communication, improve the standard of living in the United States

World History Studies

15B - Analyze and compare geographic distributions and patterns in world history shown on maps, graphs, charts, and models

16B - Analyze the influence of human and physical geographic factor on major events in world history, including the development of river valley civilizations, trade in the Indian Ocean, and the opening of the Panama and Suez canals

World Geography Studies

5A - Analyze how the character of a place is related to its political, economic, social, and cultural elements

6B - Explain the processes that have caused changes in settlement patterns, including urbanization, transportation, access to and availability of resources, and economic activities



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8A - Compare ways that humans depend on, adapt to, and modify the physical environment, including the influences of culture and technology

8B - Describe the interaction between humans and the physical environment and analyze the consequences of extreme weather and other natural disasters such as El Niño, floods, tsunamis, and volcanoes

19B - Analyze ways technological innovations such as air conditioning and desalinization have allowed humans to adapt to places

STAAR

U.S. History

12A - Analyze the impact of physical and human geographic factors on the settlement of the Great Plains, the Klondike Gold Rush, the Panama Canal, the Dust Bowl, and the levee failure in New Orleans after Hurricane Katrina

14A - Identify the effects of population growth and distribution on the physical environment

29A - Use a variety of both primary and secondary valid sources to acquire information and to analyze and answer historical questions

29B - Analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing and contrasting, finding the main idea, summarizing, making generalizations, making predictions, drawing inferences, and drawing conclusions

29D - Use the process of historical inquiry to research, interpret, and use multiple types of sources of evidence