About the Education Center:

The HistoryMiami Museum Education Center’s mission is to share and interpret Miami’s stories through meaningful and engaging educational programs. The Center is committed to serving South Florida’s students, teachers and adult learners through dynamic and innovative programs that promote critical thinking while creating an open environment to share and interpret our community’s stories. Our goal is to foster an understanding of the key role each one of us has in our community while building an environment for lifelong learning. All programs correlate with the Next Generation Sunshine State Standards, as well as Language Arts, Social Studies and Fine Arts Standards.

About HistoryMiami Museum:

HistoryMiami Museum, a Smithsonian Affiliate, is a premier cultural institution committed to gathering, organizing, preserving and celebrating Miami’s history as the unique crossroads of the Americas. We accomplish this through exhibitions, city tours, education, research, collections and publications. HistoryMiami advocates for helping everyone understand the importance of the past in shaping Miami’s future. We are the largest non-profit private history museum in Florida.
School programs at a glance:

_A Day at the Museum_: Immerse your class in a meaningful, hands-on, guided museum experience as you explore our collection and galleries. Students will engage with our teaching collection objects, while discovering, and in some cases re-enacting, the stories that shape Florida’s past. Programs are two hours in length for grades 3-12 and one hour in length for grades Prek4-2nd. _Little Stories · History Mysteries · We the People · Making Miami Home · Customize a Program · Self-guided Program_

_Museum on the GO!:_ Let us come to you! Students will explore the history of our community, our region, and our world through interactive hands-on experiences. Build the connection between the past, present and future with these dynamic and portable programs: _Florida Map · Latin America Map · World Map · Miami Expressions_

_Around Town:_ Explore your community and immerse yourself in the past. Enjoy the sights and sounds of our local history at one of the following historic sites: _Cape Florida Lighthouse, Key Biscayne · Miami-Dade County Courthouse, Downtown Miami · Virginia Key Beach, Key Biscayne_

_Teachers and Educators:_ HistoryMiami Museum offers professional development workshops, online activities and resources as well as FREE membership benefits to help teachers achieve their goals in the classroom.

_For Teachers & Educators:_

_K-12 Educator Workshops:_ HistoryMiami Museum offers year-round teacher workshops to enhance teaching and learning in and out of the classroom. Workshops are designed to make our community’s history accessible to your specific learning environment. Workshops are available at the Museum and off-site. Topics may include: Primary sources in the classroom, object-based learning, visual literacy, folklife. To schedule email education@historymiami.org
**Educator's Circle:** This membership* is free for Miami-Dade and Broward County public, private and homeschool teachers for one year and offers you countless ways to explore and experience history. Join now and receive a full year of Basic Membership Benefits for one adult. The FREE Educator’s Circle Membership gives you:

- *Free year-round admission to the Museum and Archives and Research Center*
- *Invitations to member exhibition opening receptions*
- *Discounted or free admission to special events and programs*
- *Member discount on City Tours*
- *Discounted admission to the Miami International Map Fair*
- *Electronic subscription to Tequesta, the scholarly journal of HistoryMiami Museum*

**Online Resources:** The museum website (historymiami.org) includes an array of educational resources, which you can use for pre-and-post-visit activities, and in-class projects.
Hurricane Andrew: 25 Years Later

Thursday Jun 1, 2017 - Monday Jan 15, 2018

On August 24, 1992, Hurricane Andrew made landfall in South Florida and devastated our community. At the time, "The Big One," as the storm came to be known, was the most destructive hurricane in U.S. history. This year marks the 25th anniversary of the storm, and HistoryMiami Museum will recognize this seminal moment through a major 5,000 sq. ft. exhibition that chronicles the story of the hurricane from its formation to its legacy. Our guest curator is Meteorologist, Bryan Norcross.

The exhibition will explore the topic through eyewitness, first-person storytelling, historical footage, documentary photography, artifacts, and Hurricane Andrew-inspired art work, with the goal of connecting visitors to the emotion of the moment. The Museum will also offer educational programs for the general public and school audiences. Altogether, the exhibition and programming will engage visitors not only in learning about the storm’s impact on Miami, but also in remembering and commemorating this milestone in our community’s history.

Table of Contents:

1. Hurricane Andrew – An Introduction
2. What is a hurricane?
3. Tracking a hurricane
4. Legacy
5. Visual Literacy
6. Impact of the storm
7. Bibliography
Lesson 1: Hurricane Andrew – An Introduction

Florida State Standards:

LAFS.412.W.3.7: Conduct short research projects that build knowledge through investigation of different aspects of a topic.

LAFS.412.RL.1: Key Ideas and Details

SC.6.E.7.7: Investigate how natural disasters have affected human life in Florida.

SC.6.E.7.8: Describe ways human beings protect themselves from hazardous weather and sun exposure.

SC.912.E.7.8: Explain how various atmospheric, oceanic, and hydrologic conditions in Florida have influenced and can influence human behavior, both individually and collectively.

SS.4.A.1.1: Analyze primary and secondary resources to identify significant individuals and events throughout Florida history

SS.4.A.1.2: Analyze primary and secondary resources to identify significant individuals and events throughout Florida history.

SS.4.G.1.3: Identify effects of weather in Florida, such as hurricanes, thunderstorms, drought, and mild climate

Essential Question(s):

- What impact did Hurricane Andrew have on South Florida?

Materials:

- Background on Hurricane Andrew
- Oral History Guides
  The first-person accounts collected from people who experienced Hurricane Andrew are an important way of understanding the lasting impact of this storm. City Lore’s oral history guide helps teachers and students prepare to speak with classroom guests and community members. It includes listening and note-taking
exercises and suggestions for conducting an excellent interview; a must for teachers interested in having their students conduct community-based fieldwork.

- [http://locallearningnetwork.org/education-resources/local-learning-toolbox/interview-basics/](http://locallearningnetwork.org/education-resources/local-learning-toolbox/interview-basics/)

**Background Information:**

Hurricane Andrew made landfall in Homestead, Florida on the morning of August 24, 1992 as a Category 5 storm.

The *tropical wave* that would become Hurricane Andrew formed off the western coast of Africa on August 14, 1992. It traversed the Atlantic and developed into a *tropical depression* and then a named *tropical storm*. By the time the storm reached hurricane force winds on August 22, the Bahamas were a target. After passing over the southern tip of Florida, Andrew weakened to a Category 3 before entering the Gulf of Mexico. Ideal conditions led to Andrew re-intensifying to a Category 4 storm as it made its way towards Louisiana. On August 26 Hurricane Andrew made landfall in Louisiana and quickly lost energy, downgrading to a tropical depression.

Damage from Hurricane Andrew in South Florida was mostly due to the severe winds at landfall. In addition, a large *storm surge* was recorded in Biscayne Bay. Sensitive environmental areas like the Everglades sustained significant damage and poor construction led to devastation in several urban and rural areas.¹ Hurricane Andrew is blamed for 44 deaths in Florida, 15 directly and 29 indirectly.²,³

The damage caused by Hurricane Andrew in Florida is estimated at $22 billion. Over 125,000 homes were damaged and about 250,000 people were left homeless in southern Miami-Dade County.⁴,⁵ Building codes changed after Hurricane Andrew because so much of the damage was linked to shoddy construction work.⁶

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Reporting on and tracking a storm has improved since the days of Hurricane Andrew. Improvements include forecasts that are 5 or more days out from the estimated date of impact, more tools for observing like satellites and more powerful computers for analyzing the data collected.7

**Key Vocabulary:**
Tropical Wave, Tropical Depression, Tropical Storm, Storm Surge, environmental impact, interview, first-person account.

**Educational Strategies/Instructional Procedures:**
- Read the article provided. This article documents the Hurricane Andrew experience of a family living in Southeast Dade.
  - Ask students to think about the kinds of questions the participants answered when being interviewed for this article.
- Conducting an interview allows students to learn about a person and their experiences first-hand.
  - Ask students to share what they know about interviews and to cite examples
  - Ask students to brainstorm in groups about who to interview, what questions to ask. They may choose to interview a family member, community member, school member, etc.
- Ask students to interview their chosen candidate and then share their work with their classmates.

**Additional Resources:**
To learn more about first person accounts and to read some examples, use this resource:
[http://memory.loc.gov/ammem/awhhtml/awgc1/first_person.html](http://memory.loc.gov/ammem/awhhtml/awgc1/first_person.html)

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For a simple step-by-step plan for conducting a journalistic interview, check out this page: https://www.scholastic.com/teachers/articles/teaching-content/how-conduct-journalistic-interview/

To hear from an expert on conducting a good interview, watch this video of Katie Couric: https://www.youtube.com/watch?v=4eOynrI2eTM
NOORINA MIRZA
Text

MAUSUD QURAISHY
Photographs by

1992

HURRICANE ANDREW
BEFORE and AFTER
A Community's Story
The development of the neighborhood is part of a broader strategy to revitalize the area, which has seen significant economic growth in recent years. The new complex, located on the former site of an industrial park, is expected to create over 2,000 jobs and attract new businesses to the region.

The project is also designed to accommodate the natural beauty of the area, with green spaces and water features that will enhance the aesthetic appeal of the neighborhood. The developers have worked closely with local residents and environmental groups to ensure that the project is sustainable and environmentally friendly.

In addition to the commercial and residential components, the development will also include a new public transportation hub, making it easier for residents to access other parts of the city. The project is expected to be completed by the end of the year, and the developers are already receiving positive feedback from the community.

For more information about the development, visit www.communitythestory.com.
A COMMUNITY'S STORY

Hunters in the Empty Places

The hunters from the town have gathered in the old barn, the flapping walls lending an air of mystery to their gathering. The sky above them is a vast expanse of blue, dotted with fluffy white clouds. The air is crisp, carrying the scent of freshly cut grass and a hint of dew from the morning's rain. The hunters are a diverse group, each with their own stories and experiences, but they are united by their passion for the wild.

The first to speak is Old Tom, a wise old hunter with deep wrinkles etched into his face. He begins, "The land we call home is our sanctuary. It is where we find solace and strength. It is our legacy, our legacy to the future generations. But lately, things have been different. The animals are disappearing, and the woods are silent. It is as if the spirits have abandoned us.

"What do we do, Old Tom?" asks Jack, a young hunter with a passion for adventure. "We must find a way to protect our home."

Old Tom nods, "We will start by strengthening our bond with the land. We will perform a ceremony, a rite of passage, to reawaken the spirits of the forest."

The hunters nod in agreement, and they begin to prepare the sacred space. They gather around a circle, each offering a prayer and a token of their respect to the land. The air is thick with the sound of nature, the rustling of leaves and the chirping of birds.

"We are the caretakers of this land," Old Tom continues, "We must ensure that it remains a safe and healthy place for all creatures to thrive."

The hunters stand together, their faces etched with determination. They know that the task ahead is not easy, but they are ready to face it. They are the hunters, guardians of the land, and they will not let the wilderness fade away.

The sun begins to set, casting a warm glow over the barn and the surrounding fields. The hunters close their eyes, their spirits uplifted by the ceremony. They know that they are not alone. The land is watching, the spirits are listening. Together, they will protect the wilderness, for it is their home, and their legacy to the future generations.
A COMMUNITY STORY

Cross River leaves are dyed by large numbers of volunteers from churches. The red then directs the funds to areas where people may be in greater need. The red

The American Red Cross sends aid to communities where relief is needed. The American Red Cross sends aid to communities where relief is needed.

The Red Cross sends aid to areas where people may be in greater need. The red

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These aid to areas where people may be in greater need.
A Community's Story

In her book "Miami USA," Helen Mur describes the soul of Miami. It is a soul wounded by the Hurricane Andrew's devastation, which continued into the first decade of the new century.

The hurricane, one of the most destructive ever recorded, struck South Florida on August 24, 1992. The storm caused widespread destruction, with an estimated value of $120 billion in damage, including destruction of homes, local parks, and marine life, and a loss of 67,543 jobs.

The soul of Miami, despite the devastation, continues to be resilient. The city and its people have risen from the ashes, rebuilding and restoring what was lost. The spirit of Miami is one of determination and perseverance, a testament to the community's strength and spirit.
Lesson 2: What is a hurricane?

Florida State Standards:

SC.4.N.3.1: Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.

SC.6.N.3.4: Identify the role of models in the context of the sixth grade science benchmarks.

SC.7.N.3.2: Identify the benefits and limitations of the use of scientific models.

SC.912.N.3.5: Describe the function of models in science, and identify the wide range of models used in science.

SS.4.G.1.4: Interpret political and physical maps using map elements (title, compass rose, cardinal directions, intermediate directions, symbols, legend, scale, longitude, latitude)

SS.4.A.1.1: Use primary and secondary resources to obtain information about important people and events from Florida history

Essential Question(s):

- How are hurricanes formed and classified?
- What are the characteristics and dangers of a hurricane?

Materials:

- Suggested arts and crafts supplies for a 3D model or diorama of a hurricane: paper, pencils, markers, cotton, glue, etc.
- Radar images of Hurricane Andrew
  - https://www.weather.gov/images/mfl/events/andrew/andnewradar.JPG
  - http://www.photolib.noaa.gov/nws/andy1.html
- Aerial views of Hurricane Andrew
  - http://photos.state.gov/libraries/amgov/3234/week_2/04132012_goes7_andrew-600.jpg
  - http://waves.marine.usf.edu/oceans_menu/satellites/3_StormSeaLevel/3a_hurricane-andrew.JPG
- Library of Congress Photo Analysis Worksheets (attached)
- National Weather Center Color Codes Chart
  - https://www.weather.gov/bro/mapcolors
Background Information:

A hurricane can form at any time of year, but the typical “season” runs from June 1st through November 30th. During this time, the conditions are ideal for the formation of a system that can develop into a hurricane. Usually, these tropical cyclones begin as tropical waves and, if the conditions are right, evolve into tropical depressions, tropical storms and then hurricanes.

Tropical cyclones depend on warm and moist air for fuel. These storms form over the ocean as warm air at the surface of the water rises. This leaves a low pressure area above the water’s surface. The air surrounding this area will have a higher pressure and pushes into the low pressure area and warms. The process begins again, creating a rotating column of air. As the air rises and cools, clouds form and continue spinning. As the system continues to rotate, an eyewall will form in the center. The eye of a storm is very calm with low pressure.9 In addition to an eye and eyewall, tropical cyclones consist of rain bands that spiral out from the center of the storm. Storms can vary greatly in size. The largest storm on record was Typhoon Tip with a 675 mile radius and the smallest was Tropical Cyclone Tracy with a 30 mile radius.9

Storms are also categorized based on wind speed using the Saffir/Simpson Scale. A tropical storm will have sustained winds of 39mph or higher. When those sustained speeds reach 74mph, a hurricane has officially formed.10 As the wind speeds increase, the intensity and severity of the storm also increases. A Category 1 storm has sustained winds between 74-95mph. Category 2 storms have speeds from 96-110mph. Major storms begin at Category 3 with sustained winds of 111-129mph. Category 4 and 5 storms have sustained wind speeds of 130-156mph and 157mph or higher, respectively.11

Key Vocabulary:
Hurricane, tropical cyclone, tropical wave, tropical depression, tropical storm, pressure, eye of the storm, eye wall, rain band, typhoon, radius, diameter, Saffir/Simpson Scale, sustained winds, diagram.

Educational Strategies/Instructional Procedures:

- Review the images and discuss. Some ideas for discussion:
  - Orient the images
    - Find north, south, east and west.
    - Locate features you can identify like cities, bodies of water, etc.
  - What do the different colors on radar images tell us? Can you use your prior knowledge of hurricanes to determine what the colors might mean?
  - What structures and shapes are visible in the satellite images? What structures are not visible?

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9 https://spaceplace.nasa.gov/hurricanes/en/
9 http://www.srh.noaa.gov/srhjstream/tropics/tc_structure.html
10 https://spaceplace.nasa.gov/hurricanes/en/
11 http://www.nhc.noaa.gov/aboutshws.php
Use the National Weather Center Color Codes Chart to learn more about how colors are used to visualize weather events.

- Review the background information. Ask students to conduct more research about hurricanes. Their research should include information and images that will help them design, build and then share a 3D model or diorama
  - Optional format for group research:
    - Separate students into groups.
    - Assign each group to research a specific topic. These may include technologies used to track and study hurricanes, how are hurricanes formed, hazards such as storm surges, wind damage.
    - Each group then teaches the rest of the class.
    - Students should take notes during each presentation for use in designing and building their model.
- Ask students to create a diagram of a tropical cyclone and include labels of all the parts. To show the interior, create a cross-section diagram.
- Provide varied materials and ask students to build detailed 3D models or dioramas of a hurricane using their diagrams. They should include a cross section to show internal structures.

**Additional Resources:**

Simulating ideal conditions for a hurricane

Atmospheric or Barometric Pressure

Naming protocols

Making a simple diorama

“Wall of Wind”

Modeling a tornado
Help students to identify questions applicable for further investigation and to develop a research strategy for finding answers.
Lesson 3: Tracking a hurricane

Florida State Standards:

SS.4.G.1.4: Interpret political and physical maps using map elements (title, compass rose, cardinal directions, intermediate directions, symbols, legend, scale, longitude, latitude).
SS.5.G.1.2: Use latitude and longitude to locate places.
SS.6.G.1.1: Use latitude and longitude coordinates to understand the relationship between people and places on the Earth.

Essential Question(s):
How do you track a hurricane?

Materials:
- Blank map of the Atlantic and Caribbean
- Hurricane data set including Date, Latitude and Longitude
- Graphic organizer

Background Information:
Lines of latitude are imaginary horizontal lines on the surface of the earth that help us to measure the angular distance north or south from the earth’s equator. Lines of longitude are imaginary vertical lines that extend from the North pole to the South pole across the surface of the earth. These lines are also used to measure angular distance, but the prime meridian is the designated starting point.

Hurricanes travel across the surface of the earth and their position at any given time is described using latitude and longitude. Both are written using degrees and minutes. For latitude, degrees run from 0° at the equator to 90° at the poles and distinguished by an N for North and an S for South. Each degree can be broken down into 60 minutes,

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12 https://www.merriam-webster.com/dictionary/latitude
13 http://www.kidsgeo.com/geography-for-kids/0015-longitude.php
symbolized by an apostrophe (') next to the number. Longitude is also measured in degrees and begins with 0° at the prime meridian. Heading east there are 180° E and heading West there are up to 180° W. These horizontal degrees can also be broken down into minutes and are symbolized by the same apostrophe ('). Finally, each minute can be broken down into seconds, symbolized using ("). As an example, HistoryMiami Museum is located at 25° 46' 28.5312" Latitude and 80° 11' 48.3792" W Longitude.14

Key Vocabulary:
Latitude, longitude, horizontal, vertical, angular distance, equator, North pole, South pole, prime meridian, degrees, minutes.

Educational Strategies/Instructional Procedures:
• Share the essential questions with your students
• Instruct the students to take notes with the graphic organizer to help them prepare for their discussions.
• Review Latitude and Longitude as well as how to plot on a 2-dimensional map. Use the one provided or create your own.
• Provide students with the Hurricane Andrew preliminary best track data set and plot one or two data points as a group. Ask them to continue plotting the points on their own or in groups.

Additional Resources:
• For younger students, try this resource all about hurricanes:
  o http://weatherwizkids.com/weather-hurricane.htm
• For information about some of the technology used to track hurricanes, try these resources:
  o http://www.usatoday.com/story/weather/2016/02/22/supercomputer-reston-noaa-cray-ibm/80290546/

14 http://www.latlong.net/
Ocean currents affect the route and strength of hurricanes. To learn more, try some of these resources:

- [http://oceanservice.noaa.gov/education/tutorial_currents/welcome.html](http://oceanservice.noaa.gov/education/tutorial_currents/welcome.html)

News reports often include the “Cone of Uncertainty” and various “Models” when discussing hurricanes. To learn more, try some of these resources:

- [http://www.nhc.noaa.gov/aboutcone.shtml](http://www.nhc.noaa.gov/aboutcone.shtml)
# Hurricane Andrew

**Essential Question:** How do you track a hurricane?

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15 Table 1 from [http://www.nhc.noaa.gov/1992andrew.html](http://www.nhc.noaa.gov/1992andrew.html)
Lesson 4: Legacy

Florida State Standards:

LAFS.K12.R.1 (Key Ideas and Details)
LAFS.68.RST.1.1 (Cite specific textual evidence to support analysis of science and technical texts)
LAFS.K12.R.3 (Integration of Knowledge and Ideas)
LAFS.68.WHST.3.9 (Draw evidence from informational texts to support analysis reflection, and research)
SC.6.E.7.7 (Investigate how natural disasters have affected human life in Florida)
SC.6.E.7.8 (Describe ways human beings protect themselves from hazardous weather and sun exposure)

Essential Question(s):
- What was the emotional and economical impact of the storm on South Florida residents?
- Did South Florida adjust the way it prepares its residents for a storm after Andrew? What was learned from Andrew?
- How did various communities react to the aftermath of the storm?

Materials:
- Graphic Organizer
- Site: http://flashbackmiami.com/2016/08/23/hurricane-andrew/
Oral History Guides

City Lore’s oral history guide helps teachers and students prepare to speak with classroom guests and community members. It includes listening and note-taking exercises and suggestions for conducting an excellent interview; a must for teachers interested in having their students conduct community-based fieldwork.

https://www.slideshare.net/citylore/city-lore-interviewing-guide?from=ss_embed

Background Information:
The article discusses the impact of the storm on the lives of Miamians. The author also explores cause and effect.

Key Vocabulary:
Hurricane, Hurricane Andrew, meteorology, meteorologist, natural disaster, forecast, Florida, Miami, text complexity, informational text

Educational Strategies/Instructional Procedures:

- Share the essential questions with your students
- Have students read the NPR article and explore the Flashback Miami Hurricane Andrew site
- Instruct the students to take notes with the graphic organizer to help them prepare for their discussions
- Effective text dependent questions encourage students to spend time lingering over a specific portion of the text looking for answers instead of just a cursory look to get the gist of what is meant.
- In groups, have students discuss the following:
  - Ask why the author chose the title "Like a Bomb in Florida"
  - Analyze how portions of the text relate to each other and the whole
  - Notice what’s missing or understated
  - Investigate beginnings and endings of texts
  - Have students answer/discuss the essential questions and utilize the various texts to support their answers
• Have students report and share out their findings/analysis

• Assign students the task of interviewing a family member, community member, school member, etc. that experienced Hurricane Andrew
  ▪ What impact did the storm have on their lives?
  ▪ How was their community impacted?
  ▪ What should Miamians do differently to prepare for a storm?

Additional Resources:

http://www.readwritethink.org/classroom-resources/lesson-plans/introducing-each-other-interviews-17.html

# Hurricane Andrew

**Essential Question:** What was the emotional and economical impact of the storm on South Florida residents?

<table>
<thead>
<tr>
<th>What I think I know</th>
<th>What I wonder</th>
<th>Facts learned &amp; responses</th>
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Questions for Analyzing Primary Sources

Adapted from the Library of Congress

Process
1. Who created the source and why? How do you think it was created: spur of the moment act, routine transaction, or a thoughtful, deliberate process?
2. What is the author's intent in creating this document? What is its purpose? Did the author produce the document for personal use, for one or more persons, or for a large audience? Was the document meant to be public or private?
3. Was the information recorded during the event, immediately after the event, or after some lapse of time? How large a lapse of time?

Bias, Perspective, Interpretation
4. Did the author have firsthand knowledge of the event or did the author report what others saw and heard?
5. Was the author a neutral party or did the author have opinions or interests that might have influenced what was recorded? Did the author wish to inform or persuade others? Did the author have reasons to be honest or dishonest?
6. What does this document tell us about the social and political climate of the particular period when it was produced?

Cross-checking
7. How does this document support and/or conflict with what you've read in other sources? Was this document addressed in other sources, such as a textbook? If not, why do you think it wasn't included?
8. Briefly explain your response to this document. How do the issues addressed in this document relate to our current social/political environment?
9. Write a question to the author that is left unanswered by the document.
Lesson 5: Visual Literacy

Florida State Standards:
SS.4.C.2.1: Discuss public issues in Florida that impact the daily lives of its citizens
LAFS.K12.R.3.7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words
LAFS.K12.R.3.9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take
VA.3.C.3.2: Describe the connections between visual art and other contexts through observation and art criticism
VA.68.C.3.3: Use analytical skills to understand meaning and explain connections with other contexts
SS.4.A.1.1: Use a primary and secondary resource to obtain information about a famous person or event from Florida history.

Essential Question(s):
- What stories do the images tell? How is the storm documented? From whose perspective?
- How do photographs affect the stories they represent?

Materials:
- Photographs from HMM Archives
- https://www.facinghistory.org/resource-library/teaching-strategies/fishbowl
- Visual Literacy document/example
- Analyzing Photographs Tool
- Primary Source Analysis Tool

Background Information: Refer to Lesson 1
Key Vocabulary:
Perspective, Primary Source, Impact, Visual Literacy

Educational Strategies/Instructional Procedures:

- Teaching visual literacy through primary sources and photography.
- Introduce the Essential Questions to the students.
- Divide participants into groups and distribute photographs for the groups to examine and discuss.
- Share analysis tools with each participant to use as they analyze their photographs.
- In a large group discussion, have participants share observations and conclusions.
- Share photographs and analyze them as a group. What is the photograph documenting? How do you make meaning of the composition and photograph? What information is used?

Additional Resources:
https://www.edutopia.org/pdfs/coop_math_bowman/bowman_fishbowl_method.pdf
http://www.gettyimages.com/photos/hurricane-andrew?excludenudity=true&sort=mostpopular&mediatype=photography&phrase=hurricane%20andrew
https://www.archives.gov/education/lessons/worksheets/photo.html
https://florida.pbslearningmedia.org/resource/visual-literacy/visual-thinking-strategies/#.WNShkRjMySM
Photo Analysis Worksheet

Step 1. Observation

A. Study the photograph for 2 minutes. Form an overall impression of the photograph and then examine individual items. Next, divide the photo into quadrants and study each section to see what new details become visible.

B. Use the chart below to list people, objects, and activities in the photograph.

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<th>Objects</th>
<th>Activities</th>
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Step 2. Inference

Based on what you have observed above, list three things you might infer from this photograph.

Step 3. Questions

A. What questions does this photograph raise in your mind?

B. Where could you find answers to them?
Help students to identify questions appropriate for further investigation and to develop research strategies for finding answers.

FURTHER INVESTIGATION

What other details can you recall?
Details that you have no record of?
What are the differences?
How did you understand the text?
What do you think this means?
What do you notice?
How do you think this is significant?
What do you notice?
How are they different?
What do you notice?
What do you notice?
What do you notice?
Title: Hurricane damaged subdivision in South Dade
Date: 1992
Description: Shows aerial view of a subdivision that was severely damaged by Hurricane Andrew. Phys. Desc: 1 slides : col. ; 35mm.
ID: 2005-387-1-6-1
Repository: HistoryMiami Archives & Research Center
Creators: Ouraishy, Masud

http://historymiamiarchives.org/guides/
Lesson 6: Impact of the Storm

Florida State Standards:
LAFS.K12.R.1 (Key Ideas and Details)
LAFS.K12.R.3 (Integration of Knowledge and Ideas)
LAFS.68.WHST.3.9 (Draw evidence from informational texts to support analysis
reflection, and research)
SC.6.E.7.7 (Investigate how natural disasters have affected human life in Florida)
SS.4.A.1.1: Use a primary and secondary resource to obtain information about a famous
person or event from Florida history.

Essential Question(s):
• What have we (Miamians/South Floridians) learned from Hurricane Andrew?
• What would we do differently?

Articles below:
• https://www.bebr.ufl.edu/sites/default/files/Research%20Reports/1996%20Demo-
g%20(Hurr%20Andrew).pdf
• http://www.hurricanescience.org/history/storms/1990s/andrew/
• http://www.fireengineering.com/articles/print/volume-165/issue-2/features/the-
evolution-of-federal-emergency-response-since-hurricane-andrew.html
• http://www.huffir.gtonpost.com/2012/08/21/20-facts-hurricane-andrew-
anniversary_n_1819405.html
• http://www.miamiherald.com/news/special-reports/hurricane-
andrew/article1940341.html
• http://www.photolib.noaa.gov/htmls/wea00579.htm
Background Information:
See articles listed above and Lesson 1 of this Resource Guide.

Key Vocabulary:
Impact, demolished, property tax values, Public Service Announcement, persuasion

Educational Strategies/Instructional Procedures (multiple days):
- Review the essential questions with your students
- Choose one or two articles to read as a class and have students use the Document Analysis Organizer in pairs or small groups to prepare for a Socratic Seminar
- [https://www.edutopia.org/blog/socratic-seminars-culture-student-led-discussion-mary-davenport](https://www.edutopia.org/blog/socratic-seminars-culture-student-led-discussion-mary-davenport)
- Use the information gathered from the document analysis and the Socratic Seminar to work in small groups and/or as a class to create/produce a PSA to address community concerns, needs, and preparedness for a disaster

Additional Resources:
Destruction at dawn: What Hurricane Andrew did to South Florida 24 years ago
**Document Analysis Organizer**

**Article:**

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<th>Impact</th>
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In reflecting on the article(s) and essential questions, what are some suggestions to support communities all over to address a natural disaster?

What are some tactics a community can utilize to affect social change and combat the negative impact of a natural disaster?
Bibliography


