

Patty Sheehan's,
Lesson Plan for COSEE-West Climate Change Workshop Nov 2008

Background: I am using a lesson plan from a webpage I found in the Resource room under Websites. The webpage is from **The New York Times** on the Web, LearningNetwork Grades 3-12; Connections for Students, Teachers and Parents. www.nytimes.com/learning/teachers/index/html

I chose my lesson from a current event activity for grades 3-5 called **News Snapshot** (Developed in Partnership with the Bank Street College of Education in NYC) Every Monday through Friday, News Snapshot features a newsworthy and provocative photo from The New York Times, along with the basic set of questions answered by journalists when relaying the news-- who, what, where, when, why and how.

I went to the archives to find a lesson related to information I learned from the Climate Change Workshop. I chose the article called Hurricane Season from September 2, 2008. This article ties in with Dr. Chao's lecture on climate change. Dr. Chao used hurricanes as an example of extreme weather events.

I teach the Life Skills class consisting of six 9-12 grade students with various degrees of mental retardation. They read between kindergarten and 5th grade level; which is why, although I am a secondary teacher I chose the lesson plan for grades 3-5. Although their cognitive abilities are much lower than their high school peers they have the same feeling, wants and needs as any typical high school teenager. They do not like to be "talked down" to. I keep this in mind when I adapt a lesson to their functional reading ability.

The Hurricane lesson with the use of the online newspaper ties in nicely with several aspects that are currently going on with my class. We have the local newspaper delivered to our classroom. I'm trying to encourage my students to read everyday and more than just the weather, our school's sports and see whose relatives are in jail.

I like that the lesson starts with a photo because my students are not good readers and don't have a lot of confidence when they see a lot of text. So the photo will get their interest, then after discussing the photo they will be more willing to tackle reading a "long" text. Also, using the "W" questions while reading gives them a purpose for reading and a strategy for increasing their reading comprehension. This strategy can then be used for other readings.

Although we live in western PA the hurricanes have directly affected my students. This makes the article relevant and more meaningful to them. When the last hurricane came through several months ago we had 80 mph winds and some people's electricity was out for 5 days throughout the county! In the past few years we have also had flooding from rain from the hurricanes. This last time

I joked with my students that perhaps we live too close to the coast and we might have to consider moving north closer to Canada! I see this as an opportunity to introduce them to climate change and global warming and how it could affect us. My students are capable of learning a great deal but it has to be broken down into very, very small steps.

Grades: 3-5

Subjects: Science, Technology, Language Art

Overview of Lesson Plan: Using an article about hurricanes from the New York Times on the web the students read and learn to answer who, what, why, when and where questions.

Suggested Time Allowance: 1 hour

Objectives:

Students will:

1. Look up on the Internet a daily newspaper.
2. As a class, learn about current weather phenomena by reading and discussing the article "Hurricane Season" from the New York Times.
3. Learn to look for answers to "W" questions when reading.
4. Individually, write answers to "W" question on student's handout.

Resources / Materials:

- The New York Times on the Web [www.nytimes.com/learning/teachers/index/html](http://www.nytimes.com/learning/teachers/index/html-pens/pencils)
- pens/pencils
- highlighters
- student handout and Hurricane article

Activities / Procedures:

1. Print out copies of the [student handout](#) and Hurricane article. (1 per pupil).
2. Print out the [teacher's page](#), which includes answers to the News Snapshot questions and a link to the related article.
3. Tell the class, "You know how we get the Beaver Valley Times Newspaper delivered to us every day. Did you know you can also read newspapers for *free* online?" Today we are going to read an article about Hurricanes from a newspaper article I printed from the internet. "Ask the class, "Remember last fall when Tayshika and other people in our school didn't have any electricity at home for several days? It was because of the after effects of Hurricane Ivan. Why do you think hurricanes are affecting us here in PA now?"
3. On the classroom computer have students look up the New York Times on the web at www.nytimes.com/learning/teachers/index/html to see where their handouts are coming from.
4. Distribute the student's page, the Hurricane article and highlighter to each student. Ask students to use their knowledge of current events, the picture and the quotation as clues to answer the questions on the page.

5. As a class, look at the photo together. Ask students what they see in the photograph. Then read the questions to be answered on the student page. Read the Hurricane article aloud stopping to highlight answers to the questions.

6. Each student answers the questions in writing on the student's page using the highlighted article.

7. Review the answers as a class.

Further questions for discussion:

-Can you think of other times hurricanes have affected our weather here in PA?

-Have students ask older staff members at school that have lived in Aliquippa all their lives if they can remember this happening when they were my students' ages.

-Ask why do they think this is happening now? (planting interest in learning about weather/climate, eventually global warming in the near future)

Evaluation/Assessment:

Students will be evaluated based on appropriate participation in class discussions, looking up the internet address, the written response to the "W" questions on the student handout.

Vocabulary:

internet, "W" questions, weather, climate change, flooding, wind storms, New York, The New York Times

Extension Activities:

-Can you think of other times hurricanes have affected our weather here in PA?

-Have students ask older staff members at school that have lived in Aliquippa all their lives if they can remember this happening when they were their ages.

-Ask why do they think this is happening now? (Teacher Intro to explaining we will learn about weather/climate, eventually global warming in the near future.)

Content Standards: I am using the National Standards that Nicole LeRoux compiled for Dr. Yi Chao's presentation. (Thank you Nicole!) The follow standards are an outline. Nicole's complete list is attached as a word document.

U.S. Science Standards (National)

<http://www.education-world.com/standards/national/science/index.shtml>

Science and Technology: Content Standard E.

History and Nature of Science: Content Standard G.

Science and Technology: Content Standard G.

Ocean Literacy

http://www.coexploration.org/oceanliteracy/documents/OceanLitConcepts_10.11.05.pdf

3. The ocean is a major influence on weather and climate.

6. The ocean and humans are inextricably interconnected.

7. The ocean is largely unexplored

U.S. Technology Foundation Standards for Students

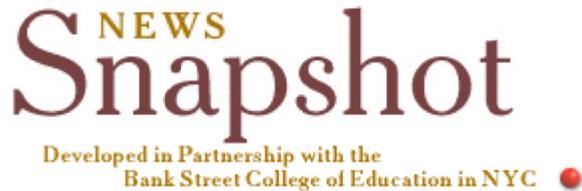
http://www.education-world.com/standards/national/technology/k_12.shtml

1. Basic operations and concepts

4. Technology research tools

5. Technology research tools

Handouts:



A CURRENT
EVENTS
ACTIVITY FOR
GRADES 3-5

September 2, 2008

Hurricane Season

Every Monday through Friday, News Snapshot features a newsworthy and provocative photo from The New York Times, along with the basic set of questions answered by journalists when relaying the news-- who, what, where, when, why and how.

PROCEDURES FOR CLASSROOM USE

1. Print out copies of the [student handout](#) for your class (1 per pupil).
2. Print out the [teacher's page](#), which includes answers to the News Snapshot questions and a link to the related article.
3. Distribute the student's page, and ask students to use their knowledge of current events, the picture and the quotation as clues to answer the questions on the page.
4. Review the answers as a class.

SUGGESTED ACTIVITIES

There are many ways that you can extend the use of News Snapshots in your classroom. Try some of the suggested activities below:

TODAY'S PHOTO



Tyler Hicks/The New York Times

TODAY'S QUESTIONS

WHO fled the Gulf Coast in anticipation of Hurricane Gustav?

WHAT damage did Gustav do in New Orleans on Monday?

WHERE else in the Gulf did Gustav do damage?

WHEN do forecasters believe

PROCEDURES FOR CLASSROOM USE

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3. Distribute the student's page, and ask students to use their knowledge of current events, the picture and the quotation as clues to answer the questions on the page.
4. Review the answers as a class.

WHEN do forecasters believe the next hurricane brewing this season will hit land?

WHY will New Orleans still have problems to contend with?

HOW much do you remember about the destruction and aftermath of Hurricane Katrina three years ago?

PAST SNAPSHOTS

- [Archive](#)

SUGGESTED ACTIVITIES

There are many ways that you can extend the use of News Snapshots in your classroom. Try some of the suggested activities below:

- Read and discuss a [New York Times article](#) related to that day's Snapshot.
- Create a weekly News Snapshot bulletin board in the classroom.
- Use the Snapshots to create a weekly news quiz.
- Have each student select the most interesting News Snapshot from that week and follow the story for another week, creating a poster for the classroom using important photos, headlines and phrases from these news stories.
- Have each student create his or her own News Snapshot by choosing an interesting photograph from the newspaper, reading the related article, and creating a series of questions and answers based on the photograph. Students can also find Web sites related to the Snapshots chosen.

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Student Handout:

September 2, 2008

Hurricane Season



Tyler Hicks/The New York Times

“We’ve gotten no word of real flooding in the city. We’re not getting any major destruction...Right now, it’s looking pretty good for us.” Col. Jerry Sneed, the emergency preparedness director for New Orleans, about the downgrading of Hurricane Gustav Monday afternoon. This photo shows men walking in the French Quarter of New Orleans Monday afternoon.

QUESTIONS:

WHO fled the Gulf Coast in anticipation of Hurricane Gustav?

WHAT damage did Gustav do in New Orleans on Monday?

WHERE else in the Gulf did Gustav do damage?

WHEN do forecasters believe the next hurricane brewing this season will hit land?

WHY will New Orleans still have problems to contend with?

HOW much do you remember about the destruction and aftermath of Hurricane Katrina three years ago?

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Teacher's page:

- **ANSWER KEY** to [Student Worksheet](#)

WHO fled the Gulf Coast in anticipation of Hurricane Gustav?

Nearly two million people from Texas to Alabama fled the Gulf Coast on Sunday, anticipating that Hurricane Gustav could rival Hurricane Katrina in its destructive power.

New Orleans was largely emptied of its residents after a mandatory evacuation order, as hurricane-force winds extended out from the center of the storm for up to 70 miles. The police department reported only one looting arrest.

WHAT damage did Gustav do in New Orleans on Monday?

Despite fears that it could be nearly as devastating as Katrina, Hurricane Gustav unleashed powerful winds and heavy rains on Monday, but it appeared to leave only minimal damage in New Orleans as it swept past the city.

The storm struck the Gulf Coast about 70 miles southwest of New Orleans on Monday morning and moved inland, losing strength along the way. By Monday afternoon, the National Hurricane Center said Gustav had weakened to a Category 1 hurricane, with speeds of 90 miles per hour. Earlier in the day, it had been downgraded to a Category 2 hurricane from a Category 3.

In its trail, Gustav left downed trees and flooded streets in many parts of New Orleans. But some neighborhoods that had been devastated by Katrina three years ago remained dry, and water in the various drainage canals that flooded so disastrously three years ago was well below critical levels on Monday night.

WHERE else in the Gulf did Gustav do damage?

The situation in many other parts of the Gulf Coast was still not clear. Late Monday afternoon, officials in Plaquemines Parish in southern Louisiana began a new round of evacuations as they struggled to secure a levee that had water flowing over the top in Braithwaite, about 20 miles southeast of New Orleans. And Gov. Bobby Jindal of Louisiana warned earlier that it would be 24 hours before threats of tornados and tidal surges had subsided.

“People shouldn’t think just because the storm has passed that the worst is over,” Mr. Jindal said. “The worst flooding could potentially be on the backside of this storm.”

The center of the storm initially struck land at Cocodrie, La., around 9:30 a.m. Central time. As the hurricane moved inland, the National Hurricane Center showed it cutting a broad swath that included the towns of New Iberia, Baton Rouge, Houma, Morgan City and Thibodaux.

In Terrebone and Lafourche, two parishes in southern Louisiana that were in Gustav’s path, streets were flooded, thousands of homes and buildings had lost power, and people who had missed the last city buses out of town on Sunday were hunkering down in shelters.

WHEN do forecasters believe the next hurricane brewing this season will hit land?

Forecasters noted, too, that even as they were tracking Gustav’s movements along the coast, the fourth hurricane of the season, Hanna, had arrived, and was slowly gaining strength, rising from a tropical storm to a Category 1 hurricane Monday afternoon as it bore down on the Bahamas.

WHY will New Orleans still have problems to contend with?

In a news briefing on Monday, Mayor C. Ray Nagin of New Orleans said that in another 24 hours he expected to begin planning for some of the tens of thousands of residents who fled the city to return. “We’ll let people drive in, then coordinate train and bus entrance after that,” he said.

But he warned that there were still a number of issues to contend with. New Orleans is likely to experience sustained tropical force winds and as much as 20 inches of rain in the next 24 hours, he said. On top of that, piles of debris must be removed, power outages must be fixed, and numerous levees and canals must be monitored.

“Let’s resist the temptation to say we’re out of the woods, because we’re not,” he said.

It is still likely that the hurricane’s intense rainfall could still set off some flooding throughout the city, said General Van Antwerp, since much of the city is below sea level, and can be compared to a bathtub.

“Now it’s about draining the bathtub,” he said. Nearly two million people from Texas to Alabama fled the Gulf Coast on Sunday, anticipating that the storm could rival Hurricane Katrina in its destructive power.

HOW much do you remember about the destruction and aftermath of Hurricane Katrina three years ago?

Answers will vary.

Article to give to students:

September 2, 2008

Downgraded Hurricane Gustav Hits West of City

By ADAM NOSSITER and ANAHAD O'CONNOR

 SEND A LETTER
TO THE EDITOR

Knowledge
Tools

Turn [Vocabulary On](#): Link words to the Merriam-Webster Collegiate® Dictionary.

Turn [Geography On](#): Link countries and states to the Merriam-Webster Atlas®

NEW ORLEANS — Despite fears that it could be nearly as devastating as Katrina, Hurricane Gustav unleashed powerful winds and heavy rains on Monday, but it appeared to leave only minimal damage in New Orleans as it swept past the city.

The storm struck the Gulf Coast about 70 miles southwest of New Orleans on Monday morning and moved inland, losing strength along the way. By Monday afternoon, the National Hurricane Center said Gustav had weakened to a Category 1 hurricane, with speeds of 90 miles per hour. Earlier in the day, it had been downgraded to a Category 2 hurricane from a Category 3.

In its trail, Gustav left downed trees and flooded streets in many parts of New Orleans. But some neighborhoods that had been devastated by Katrina three years ago remained dry, and water in the various drainage canals that flooded so disastrously three years ago was well below critical levels on Monday night. The relief was palpable in places like the Upper Ninth Ward and Broadmoor, neighborhoods with fresh memories of Katrina's destruction that managed to escape Gustav largely unscathed.

"We've gotten no word of real flooding in the city," Col. Jerry Sneed, the emergency preparedness director for New Orleans, said in an interview at City Hall. "We're not getting any major destruction."

"Let's face it: We needed this," he added. "Right now, it's looking pretty good for us."

But the situation in many other parts of the Gulf Coast was still not clear. Late Monday afternoon, officials in Plaquemines Parish in southern Louisiana began a new round of evacuations as they struggled to secure a levee that had water flowing over the top in Braithwaite, about 20 miles southeast of New Orleans. And Gov. Bobby Jindal of Louisiana warned earlier that it would be 24 hours before threats of tornados and tidal surges had subsided.

"People shouldn't think just because the storm has passed that the worst is over," Mr. Jindal said. "The worst flooding could potentially be on the backside of this storm."

Forecasters noted, too, that even as they were tracking Gustav's movements along the coast, the fourth hurricane of the season, Hanna, had arrived, and was slowly gaining strength, rising from a tropical storm to a Category 1 hurricane Monday afternoon as it bore down on the Bahamas.

In New Orleans, water continued to lap at the tops of the levee walls, though officials at the Army Corps of Engineers said they still did not think the walls would be breached. By late Monday afternoon, the center of the hurricane was more than 100 miles northwest of New Orleans, and more than 15 miles north of Lafayette, the fourth largest city in Louisiana.

The center of the storm initially struck land at Cocodrie, La., around 9:30 a.m. Central time. As the hurricane moved inland, the National Hurricane Center showed it cutting a broad swath that included the towns of New Iberia, Baton Rouge, Houma, Morgan City and Thibodaux.

In a news briefing on Monday, Mayor C. Ray Nagin of New Orleans said that in another 24 hours he expected to begin planning for some of the tens of thousands of residents who fled the city to return. "We'll let people drive in, then coordinate train and bus entrance after that," he said.

But he warned that there were still a number of issues to contend with. New Orleans is likely to experience sustained tropical force winds and as much as 20 inches of rain in the next 24 hours, he said. On top of that, piles of debris must be removed, power outages must be fixed, and numerous levees and canals must be monitored.

"Let's resist the temptation to say we're out of the woods, because we're not," he said.

In Terrebone and Lafourche, two parishes in southern Louisiana that were in Gustav's path, streets were flooded, thousands of homes and buildings had lost power, and people who had missed the last city buses out of town on Sunday were hunkering down in shelters.

One man, Earl P. Johnson Sr., who lives just north of Thibodaux, a city of 14,000 people in Lafourche, said he had initially decided to ride out the storm as he had during Katrina. But after watching news coverage of the hurricane late Sunday night, he walked outside, flagged down a police car, and was taken to a local high school with other slow-moving evacuees.

"I wanted to see what's going to happen first," he told The Courier, the daily newspaper in Houma. "After they said all that was coming, I said 'I'm going to get out.'"

The atmosphere for most of the day in the emergency operations center in New Orleans was tense. Workers on the Inner Harbor Navigation Canal — considered a particularly weak link in the city's levee protection system — said there was some reported spillover at the west floodwall, although by Monday afternoon, water gauges showed that the water level was beginning to drop.

"That's what we want to see," said Lt. Gen. Robert L. Van Antwerp, the commanding general for the Army Corps, who was stationed at the operations center.

It is still likely that the hurricane's intense rainfall could still set off some flooding throughout the city, said General Van Antwerp, since much of the city is below sea level, and can be compared to a bathtub.

“Now it’s about draining the bathtub,” he said. Nearly two million people from Texas to Alabama fled the Gulf Coast on Sunday, anticipating that the storm could rival Hurricane Katrina in its destructive power.

Shortly after making landfall, Gustav barreled through small, rural communities like Morgan City, a town of about 10,000 that was rocked by severe flooding when Hurricane Rita struck three years ago. Most of the city’s buildings were fortified over the weekend with sandbags and plywood boards, and even police officers were pulled off the streets early Monday morning as heavy winds and rain began to batter the area. By midday, the city was almost deserted, but a few holdouts remained.

“I’ve been here for four hurricanes including Betsy and Hilda and I’m not planning on leaving now,” one resident, Eva Jones, 77, told The Advocate, a local newspaper. “The only damage I’ve ever had was when a window blew out and sucked out my sewing machine.”

New Orleans was largely emptied of its residents after a mandatory evacuation order, as hurricane-force winds extended out from the center of the storm for up to 70 miles. The police department reported only one looting arrest.

“It’s been explained to me by the police that it’s a graveyard out there,” said Colonel Sneed, the emergency preparedness director

The city’s drainage work is being handled by the New Orleans sewerage and water board, which mans a set of 30 pumping stations around the city. Those stations have a combined capacity to drain an Olympic-sized swimming pool in a couple of seconds. But even so, the pumping can only lower floodwater levels in the city by a six inches an hour once pumping is fully under way.

Army Corps officials are monitoring water levels throughout the city, and especially the Inner Harbor Navigation Canal, a waterway that is often referred to as the “Achilles heel” of the system until gate structures can be built to block storm surges there.

The storm had already brought a significant storm surge to Mississippi, forcing state officials to close Highway 90, the main road running along the coast from Louisiana to Alabama.

Katherine Crowell, a spokeswoman for the Mississippi Emergency Management Agency, reported that at least 2,290 customers in Waveland, Miss. were without power early Monday, with many more outages expected.

“We’re definitely already feeling the impact of Hurricane Gustav,” she said. “All of the schools for south Mississippi are going to be closed tomorrow.”

Back in New Orleans, city councilwoman Stacy Head, who represents a broad swath of New Orleans, from Uptown to Central City, described the damage from Gustav as “minimal.”

“Some trees that were already sickly are down,” she said. “A few signs have flown around. Nothing else.”

Otherwise, the wind blew through the deserted streets, which yielded a harvest of strange scenes. A group of 15-odd bored police officers sat on rolling office chairs outside on Tchoupitoulas Street, watching a

few of their colleagues “wind surf” down the long thoroughfare, as one of them explained. Two officers would hold up opposite ends of a sheet and wait for the gusts to blow them down the traffic-less street on their rolling chairs.

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