20 Ways to Teach About the Disaster in Japan Across the Curriculum

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Since the earthquake and tsunami hit Japan, we have been updating a list of teaching and learning resources, including articles, interactive features, past lessons, photo galleries and videos.

Below are 20 more activity ideas for ways to use The Times to teach about what’s happening as the story continues to unfold.

See also the teaching ideas posted by other teachers — and please add your own, either on that post or below. We hope to post ideas from our readers later this week.

Understanding the Basics

What happened in Japan? Show video clips documenting the moments that the earthquake and tsunami hit Japan and before-and-after photographs to help students begin to grasp the extent of the damage. As a class, read the basics about the devastation caused by these natural disasters. To focus your discussion of the news, use the questions posed in our 6 Q’s about the News installment “The Devastation in Japan.” Finally, students respond by creating a One Pager (PDF) about what they learned.

Following the Story

How are the events in Japan unfolding? Follow the news on a daily basis by checking the New York Times homepage or the Lede blog. As a class, create a timeline keeping up with the chain of events. Encourage students to bring in outside resources to add to the timeline.

Mapping the Destruction

Where was the earthquake’s epicenter? Where exactly in Japan did the tsunami hit? Which towns and cities have been affected most? Explore the interactive map showing the damage from various perspectives, including structural damage and the human toll. Then put it into larger context using maps of Asia and the world (PDFs).

Putting a Human Face on the Disaster

Are students having trouble comprehending the magnitude of what happened, and is happening, in Japan? One way to help them understand is by sharing individual stories, like those by Sandra Barron, David S. Abraham and Kumiko Makihara, along with the article “Quake Survivors Face a Landscape of Loss.” Students then write letters or postcards addressed to one of the disaster survivors they read about.

Responding to Photographs
What does it look like in Japan following these natural disasters? Show photographs of the aftermath from the slide show “The Aftermath in Japan” and then zoom in on some photographs to get a closer look of the devastation. Afterward, students respond in writing to the image of their choice.

**Considering How the Story is Told**

What challenges and dangers are journalists facing as they try to report on what is happening in Japan? How are ordinary citizens themselves helping to capture the events and tell the story? After perusing the coverage on the Lede blog or reading one or more news articles, students discuss how the reporters have been shooting the footage, taking the photographs and reporting the facts. They might also compare and contrast photojournalists’ work with photographs submitted by readers. Student journalists can consider how to localize the story for school readership, perhaps using ideas gleaned from the stories written by the Scholastic Kids Press Corps.

**Timelining Japan’s History**

Students put the 2011 earthquake and tsunami into historical context, focusing on disasters in Japanese history. Resources might include historic Times articles about the bombings of Hiroshima and Nagasaki as well as modern reflections on those bombings, along with other human-caused and natural disasters, notably the 1995 Kobe earthquake. They create a timeline including snippets from news articles, photographs and illustrations, focusing on how Japan recovered from each disaster.

**Recalling Past Nuclear Reactor Crises**

How does the nuclear crisis in Japan compare with past nuclear disasters? Students read archival Times articles about Chernobyl and Three-Mile Island. They then draw up charts comparing and contrasting the reactor problems at the Fukushima Daiichi power plant in Japan with other nuclear plant accidents. How is it similar? How is it different? What can we expect for the future, based on what we have learned from past nuclear accidents?

**Debating Nuclear Power**

Students read about how the current crisis is renewing fears about nuclear energy in Europe, the United States and elsewhere. How comparable are the risks posed by reactors around the world? What lessons are other countries learning from watching the nuclear crisis unfold in Japan? Do the benefits of nuclear power outweigh the risks, or vice versa? What implications do the events in Japan have on the United States nuclear energy program? Hold a debate in which the groups present the opinions that they read. Afterward, students write letters to their representatives expressing their views on nuclear safety.

**Understanding Nuclear Meltdowns**

What is a nuclear meltdown, and what dangers does it pose? Students watch this video, use the interactive feature “How a Reactor Shuts Down and What Happens in a Meltdown” and read the article “A Look at the Mechanics of a Partial Meltdown.” They then create podcasts explaining the meltdown process in audio. How can they make the information clear to a listening audience, without visual aids?

Note: For addressing the issues of nuclear energy, nuclear power plants and reactors, meltdowns, radiation and related topics, see our lesson “Crisis in Japan: Understanding Nuclear Energy and Reactors.”
Understanding Earthquakes

What causes earthquakes and tsunamis? Students explore the interactive feature “How Shifting Plates Caused the Earthquake and Tsunami in Japan,” and then create three-dimensional models showing the movement of tectonic plates that led the earth to shake and the water to rise.

Understanding Tsunamis

How can a wave cause so much destruction? Have students read and discuss the article “The Destructive Power of Water.” Then, using our lesson “It Comes in Waves,” students learn about the behavior and different origins of tsunami waves, and they then research and chart the path of certain tsunamis from recent history.

Looking at Earthquake and Tsunami History

How strong was the 9.0 Sendai earthquake compared with other disastrous earthquakes, like those that hit Haiti and Chile last year? What are the most destructive earthquakes — and tsunamis — in human history? How does the 2011 Japanese tsunami and its impact compare with that of the 2004 tsunami in South Asia? What can be learned from those events that is applicable here? What do we still need to strive to understand? Students create an informative illustrated slide show of earthquake and tsunami history answering these questions.

Reflecting on Disaster Preparedness

What roles did building codes and disaster drills have on the extent of the devastation in Japan? How are structures built so they can withstand an event like a major earthquake? Students design, build and test model high-rises. For example, they might build one affixed to a base and another affixed to rubber pads glued to the base. They test their structures using our lab experiment organizer (PDF) to document what happens to each model when they shake the base to simulate the motion of the ground in an earthquake. Alternatively, they review the United States earthquake and tsunami warning systems and suggest ways to disseminate information quickly to citizens in the event of any serious disaster, natural or caused by humans.

Examining Life After the Destruction

What has life been like for survivors in the days following the disaster? What will come next for the people of northern Japan? Students read about what life has been like for residents of Sendai in the days following the earthquake and tsunami and about what residents of Natori returned to find in the wake of the devastation. They then create found poems or haiku about life after the disaster using choosing words and phrases from these articles. As a class, discuss how it would feel to return to your hometown after this kind of devastation.

Understanding the Economic Impact

How is Japan's economy threatened by the devastations and resulting disruptions to power and water supplies? How is the Bank of Japan responding? What impact has the disaster had on the Japanese stock market? How much is the disaster expected to cost, all told? Students use our Cause and Effect graphic organizer (PDF) to explain how this disaster had translated to economic trouble.

Exploring the Language of Disaster

In early 2005, in the aftermath of the earthquake and tsunami in South Asia, William Safire devoted an
On Language column on the use of terms associated with the event, like “tsunami” and “disaster.” Students read that column and then create word web posters based on key terms used in articles they have read on the Japan disaster, including clips from those articles.

Forging Connections Between Literature and Life

As students read a relevant novel set in Japan, like Yukio Mishima’s “Sound of Waves” or Haruki Murakami’s “After the Quake,” they keep a double-entry journal, entering their response to the text on one side and connections to news coverage of the earthquake and tsunami on the other. This activity could also be done with shorter pieces, like Haruki Murakami’s story about a boy carried out to sea by a wave (also available as a Selected Shorts podcast) or haiku by the seminal Japanese poet Basho. Alternatively, student readers express their thoughts in the form of a Twitter novel, a Japanese fad.

Considering the Healing Power of the Arts

Students read about the Carnegie Hall Japanese cultural festival and discuss why an event like this might take on new importance in light of recent events. As a class, plan your own arts fund-raiser that both celebrates Japanese culture and raises money for the relief efforts. To decide how to donate the funds you raise, see the activity below.

Planning Ways to Help

How can we help? What kinds of aid will help the most now and in the long term? Find out how specific aid organizations, like the American Red Cross, AmericCares, CARE and Doctors Without Borders, raise money and provide aid for disasters like the one in Japan as well as provide ongoing support around the world. Students then choose one organization and hold a fund-raiser or create a service learning project to support relief efforts in Japan.