A close-up photograph of a hand holding a globe. The hand's fingers are wrapped in tan adhesive bandages, suggesting injury or damage. The globe shows a map of the world, with labels for 'NORTH ATLANTIC', 'MOROCCO', 'ALGERIA', 'SAHARA', and 'MAURITANIA'. The background is a dark blue gradient.

CHANNELING KIDS' CLIMATE CONCERNS

*USE REAL-WORLD EXAMPLES TO SHOW STUDENTS THEY CAN HAVE AN
IMPACT ON THE ENVIRONMENT.*

BY LAUREN CAPOLUPO

EDUCATOR SPOTLIGHT

Lucille Case

Science teacher, grade 6
Rock Lake Middle School

Longwood, FL
Cable provided by Bright House

Jennifer Hoof

Science teacher, grade 10
Farrington High School

Honolulu, HI
Cable provided by Time Warner

Havena Marks

Teacher, grades 2/3 multi-age
Adobe Bluffs Elementary School

San Diego, CA
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Amanda Nobles

Teacher, grade 3
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Cable provided by Time Warner

LOOKING THROUGH THE LOCAL LENS

At Farrington High School in Honolulu, Hawaii, Jennifer Hoof's tenth grade science students explored familiar territory from a new angle to learn about environmental issues. Hoof, another Time Warner 2008 National Teachers Award winner, had students conduct Internet research on native Hawaiian species and compare current Google Earth images of various sites to archival photographs to identify areas of change. Next, students conducted fieldwork in three very different environments: a valley, an urban area, and an offshore island.

After examining erosion, water quality, invasive species, biodiversity, and related topics, students uploaded data to an online Intelesense portal where they could discuss their findings. In addition to allowing students to think critically about their data, Hoof says using this portal helped abbreviation-addicted students communicate appropriately via all forms of technology.

The hands-on exploration and research helped students to understand the direct impact their actions have on the environment, and Hoof says activities such as calculating

their ecological footprints and cleaning up a nearby waterway students once referred to as the Dirty River gave them a "sense of ownership." In addition, students shared their data with community organizations, which helped them see that their work was important outside their classroom.

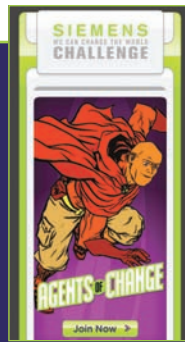
"I think it's easier to care about someplace that's right in your backyard than it is to read about someplace far off," says Hoof. "But to take that information

and tie it into ... how we only have one Earth and what we do here impacts others, they can see that everything's connected.

"If we take care of [our environment]," Hoof adds, "we can see improvements elsewhere."

Month	Camera Location 3
October 2007	
November 2007	
February 2008	

Hawaii high-schoolers documented the progress of their environmental restoration projects.



HELP CHANGE THE WORLD

To help students become agents of environmental change, the Siemens Foundation, Discovery Education, and the National Science Teachers Association have launched the only national K–12 sustainability-education initiative aligned to education standards. The Siemens We Can Change the World Challenge encourages teams of sixth through eighth graders to identify and research a local environmental issue and create a green solution. Participating students have a chance to win a \$5,000 savings bond, a Flip camera, and a Discovery Adventure trip. The first place team also will appear on Planet Green, the 24-hour eco-lifestyle television network. Applications are being accepted through March 15, 2009, at www.wecanchangetheworldchallenge.com.

EXAMINING ALTERNATIVES

Lucille Case's sixth-grade students at Rock Lake Middle School in Longwood, Fla., explored ways to assuage another hot-button environmental issue: fossil-fuel consumption. Students viewed programming from The Science Channel and History on renewable energy, alternative fuels, and global warming, then conducted research on some of the featured methods. "We attacked this from the point of view that we had better do something about the environment or it won't be there for future generations," says Case, whose project, Energy Quest: For Earth and Beyond, earned her a 2008 Star Teacher Award from Bright House Networks.

Students conducted experiments with solar cells and explored the energy given off by various biomasses, then put their findings into practice, building model homes that showcased renewable energies, including wind and geothermal power.

Case says the students' creativity was sparked by the cable programming they viewed. "They could have read about some of these fuels on the Internet or in a book, but they might think of a little windmill in Holland," she explains. "When I put them on a screen and they saw giant wind turbines with blades as wide as a football field, it really hit home that there are some great alterna-



After learning about fossil fuel, Florida middle-schoolers built model homes that showcased eco-friendly solutions.

tives in this country and we're just not tapping them yet."

The timeliness of the project, combined with its creative aspects, helped Case connect with all her students. "I think they had fun learning science with this," she says. "Getting that motivation from some kids who don't care about school was priceless."

Projects like these help students realize that they can have an impact on the environment, whether it's on a small scale or a large one. More important, they can inspire students to continue thinking about climate change and conservation. As Case says, "These are the kids who, when they grow up, might be able to solve the mess our world is in." ■

Lauren Capolupo is senior associate editor of Cable in the Classroom Magazine.

RELATED RESOURCES

Adobe Bluffs Elementary School
powayusd.sdcoe.k12.ca.us/pusdabes

Intelesense Technologies
www.intelesense.net

Habbo Teens Climate Change Survey
www.greenpeace.org/international/press/reports/habbo