

EDUCATION, INSPIRATION



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UP-CLOSE SCIENCE: Area elementary school teachers Donna Blackburn, left, and Debbie Ellis, test the effect of blown air on a night crawler during a science workshop Thursday.

Teachers find science in literature for kids

■ Clever fiction can help students with chemistry, physics concepts

By JENNIFER RADCLIFFE
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Reading colorful children's books aloud as students sit cross-legged at their feet comes naturally for most teachers of the 7-and-under set.

A passion for science, on the other hand, is more of a rarity in this breed.

Getting teachers up to speed in the subject is a pressing issue in Texas and across the nation. Science scores across Texas lag behind math and reading. Only 65 percent of 10th-graders statewide — and 56 percent in the Houston ISD — passed the science portion of the Texas Assessment of Knowledge and Skills in 2007-08.

Some experts argue that U.S. students struggle with science because they aren't given a strong foundation early in their educations. To help shore up teachers' skills, Harris County Department of Education consultant Lisa Felske secured about \$215,000 in grants to create "Science Fiction" workshops.

During the free classes, Felske, a former science teacher at HISD's High School for the Performing and Visual Arts, shows prekindergarten-through second-grade teachers how to use children's literature to introduce physics and chemistry concepts.

Pages of children's books, Felske noted during a chemistry workshop Thursday with about 25 teachers, contain countless scientific lessons.

Take a book called *Two Bad Ants* by Chris Van Allsburg, which documents the adventure of two runaway ants who are forced to dodge

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the dangers of a kitchen during an outing to find sugar for their queen.

"It's a wonderful story. It's beautifully written," said Felske, who quickly confessed that it was potential lessons about solubility, not the prose, that stuck with her.

Learning about crystals

The book provides instructors a perfect opportunity to teach children about crystals. Students can study salts and sugars with a magnifying glass. They can then conduct experiments to test how crystals dissolve in different liquids.

She gave teachers a quick overview of crystals so they would have the courage to field any question that their children throw at them. That's a key part of nurturing children's curiosity.

"Kids who believe they are good at science — that doesn't ever end, if it gets sparked. To spark it, one needs confident teachers — but few elementary school teachers are confident in science. Cure that, and one creates whole universes of potential," said Doug Kleiner, president of the Education Foundation of Harris County, which oversees the grants for Felske's programs.

In that class, Felske uses Eric Carle's *Ten Little Rubber Ducks* — among other titles — to cover topics including mass, buoyancy and density.

Teachers leave the workshops armed with the chil-

dren's books, as well as many of the materials to conduct experiments. The training and materials are financed through grants from Apache, the American Honda Foundation, the Boeing Company and the Camille and Henry Dreyfus Foundation.

Donna Blackburn, a science teacher at the Presbyterian School, has conducted a float-or-sink activity with her students. She attended the physics workshop in December and found it so useful that she returned Thursday for the chemistry workshop.

"What they offer here is just wonderful," Blackburn said. "The literature connection is great. It inspires them."

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