Volunteers & Careers

Inspiring young children to love science

By Lyndi Schrecengost

It was a frigid, finger-numbing Thursday in January when astronomer Dr. Nancy Grace Roman arrived at Shepherd Elementary School in the District for her weekly volunteer session. The heat in the classroom was a little unpredictable that afternoon, but nothing could chill the enthusiasm of Timothy Leonard's 5th-grade class.

After making their own star clocks, which use the location of the stars at night to tell time, the class was invited to ask Roman questions. Half a dozen hands stretched skyward.

"Is it true if you look at the North Star, you'll know where North is?" "Why are stars in different places in the sky?"

Students were able to answer most of the questions themselves, with a little helpful prompting from Roman. But some of their answers were truly original.

When Roman asked the class "What are some of the other ways to tell time?" one enterprising student suggested you could measure time by "how long it takes to cook a chicken."

Roman, an astronomer formerly with NASA, has learned to field such creative responses with cheerful good humor during her three semesters working in the classroom. In fact, it's the children's unique reactions and provocative questions that she enjoys most about her volunteer work with ReSET, which stands for Retired Scientists, Engineers and Technicians.

From lab to classroom

The organization is in its 15th year bringing retirees into elementary schools for six one-hour class visits each semester. ReSET volunteers include men and women ranging in age from 62 to 85.

Representing a wide range of professions, from aerospace engineers and statisticians to astronomers and biologists, most are former researchers who have enjoyed successful careers in the private or public sectors.

Almost none of them has experience teaching elementary school. Instead, they bring professional expertise, enthusiasm, patience and a desire to make a positive contribution to children's lives.

As volunteer and mechanical engineer Robert Blumberg puts it, "Initially it was a little daunting. I didn't know what I was going to do or say over the course of six hours."

"But I'm a ham in terms of standing up in front of people. So, I got over my fears quickly. The children are a very pleasant, non-threatening audience," Blumberg said.

Each session concludes with a field trip. Volunteers develop their own classroom curriculum and experiments, guided by the teacher with whom they partner.

Inspiring future scientists

The brainchild of Dr. Harold Sharlin, a former electrical engineer and history of science professor, ReSET has a mission to motivate children to discover and explore the worlds of science, math and technology, and to encourage them to consider future careers in one of these fields.

"Something very special happens when seniors and children learn together," Sharlin said. "It's about building a lasting legacy in the community — incremental, subtle improvements in the attitudes children have about math and science that they will carry with them into the future."

ReSET volunteers become acclimated to their volunteer experience through teacher consultations, participation in volunteer orientation sessions and monthly networking meetings.

"My students are consistently in awe of the fact that they are actually meeting and being taught by real-life astronauts, chemists, and physicists," said Leonard, the 5th-grade teacher. "The senior scientists are directly on hand to answer questions the children might have. This something that a textbook cannot give them."

ReSET is backed by corporate and foundation funding, and has worked with a variety of schools in Washington, D.C. and Montgomery County, including Orr, Page, Bunker Hill and Malcolm X elementary schools.

To learn more about ReSET and how to become a ReSET volunteer, contact Harold Sharlin at (202) 966-2122, or e-mail him at harold.sharlin@verizon.net. ReSET's Web site is www.resetonline.org.

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