Girl Scout Program Introduces Preschoolers to Science through Peer Mentoring

Research has shown that one of the best ways for children to learn is through peer modeling and mentoring. RESET’s new after-school program does just that by introducing 4- and 5-year-olds to science through older peers—10- and 11-year-old Girl Scouts. These young “teachers in training” broaden their own interest in science subjects, while earning a STEM merit badge along the way.

Sandra Hernández, who took the lead on this project, is in her second year as a RESET volunteer. She has a doctorate in Chemical Engineering and currently works at the Naval Research Lab in Washington, D.C. as a researcher in surface modification and chemical sensors.

Sandra wanted to see more hands-on science in her daughter’s elementary school curriculum. “I came across RESET around the same time my daughter was in first grade. John Meagher told me about RESET’s new preschool outreach program and it occurred to me that Girl Scouts might be able to teach preschoolers, with a little bit of help.”

Sandra put together a 5-step program that would allow the Scouts to earn self-designed STEM badges. The girls had to accomplish all five tasks to earn their badge. Their first task was to learn hands-on science topics. Task 2 was to come up with their own demonstration of an experiment. Task 3 was to educate children in hands-on science. Task 4 was to give back to the community. And the final task was to build their communication and presentation skills.

Because of scheduling challenges, Sandra’s troop chose to deliver the program during a Fairfax County teacher workday, a day when FCPS schools are closed. The girls decided they would host a “Science Day” at nearby daycare center (A Child’s Place), organized around four different topics—lights & prisms, electrical circuits, magnification, and magnets.

The results of the program have been gratifying to parents, teachers, preschoolers, and Girl Scouts alike. Troop parent Virginia Ruiz felt it was a very “interactive and educational event.” And Sandra was pleased to see Scout Dads and Moms working with their daughters, providing guidance and support.

Volunteers Needed at Martha’s Table

RESET will present programs again this summer for children at the community service organization Martha’s Table (2114 14th Street, NW DC, 20009)

If you would like to volunteer or learn more, please contact John Meagher at reset@resetonline.org or 703-250-0236.

Congratulations!! to the Society of Hispanic Professional Engineers

RESET team from the U.S. Patent and Trademark Office, which was recently honored by Alexandria City Public Schools as “2016 Corporate Outstanding Volunteer of the Year” for their work at Cora Kelly Elementary School.

Science Quiz Answer:

1.3 billion years ago. About three times the mass of the sun was converted into gravitational waves in a fraction of a second.
How long ago was the event that produced the gravitational waves of recent scientific discovery?

. . . See inside for the answer

(“Girl Scouts Peer to Peer Mentoring . . .” continued from front)

“There was some concern about how it was all going to work with 32 Pre-K kids at one time, but it was just amazing,” shared Sandra. The troop found the experience very exciting and Sandra could see that their interest in science had grown as a result. “The second time I came to work with them, I could already see that the Scouts were really eager to continue the project.” The Pre-K class sent the troop a stack of thank you letters afterwards, with one 4-year-old sharing: “I loved using the microscope to look at ants! Microscopes make things look bigger!”

Pre-K teacher, Ms. Swenson, was even more enthusiastic. “I want to do this every year!” she exclaimed to Sandra afterwards. Such positive feedback has set a fire under Sandra, who has three more troops lined up and is on the lookout for more preschools to become RESET partners. “I think it is particularly powerful for preschoolers to get hands-on science demonstrations and be taught by their slightly older peers (female peers that is)!” shares Sandra. “It's an activity that incorporates STEM, outreach, community—all the while generating excitement for science.”