

OKLAHOMA EPSCoR

A NSF EPSCoR-FUNDED SUCCESS STORY | SPRING 2016

NATIONAL SCIENCE FOUNDATION
EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH



Girl Scouts of Western Oklahoma STEM Initiative

Although gains have been made, women are still underrepresented in America's science and engineering workforce, holding just 28 percent of S&E jobs, according to a report released by the National Science Board in 2014.

Oklahoma EPSCoR is influencing the next generation's participation in this sector through a strategic partnership that was forged with the Girl Scouts of Western Oklahoma (GSWO) last year. Through the EPSCoR-GSWO STEM Initiative, young girls are becoming more confident in their ability to participate in science, technology, engineering and math (STEM).

Through Oklahoma EPSCoR grant funding, GSWO now has a STEM coordinator whose singular role is to help the organization's Scouts and troop leaders discover STEM.

Coordinator Chris Simon, with support from EPSCoR researchers, Drs. Renee McPherson and Jody Campiche, developed hands-on environmental science kit curriculum for all ages of Scouts.

The original curriculum has been partnered with newly developed STEM kits-in-a-box to complement the Girl Scouts It's Your Planet—Love It! Leadership Journey books. Through these specialized kits, Daisy, Brownie, Junior, Cadette,

GSWO has a strong, established network in Oklahoma, with approximately 12,000 girls participating in the program each year. The group's territory covers more than half of the state's 77 counties.



Senior and Ambassador Scouts explore topics that range from discovering plant structure and function to engineering an aqueduct. All of the supplies that troops need to perform the experiments are provided, as are easy-to-follow guides that convey clear understanding of the scientific process.

The materials were recently presented to attendees at the Girl Scouts National Convention in Salt Lake City, Utah.



"The response from troop leaders and CEOs at the convention was one of elation and excitement because nothing like this exists anywhere else in the country."

—Chris Simon, Project Coordinator

Before experiencing the EPSCoR kits, only 47 percent of Scouts surveyed indicated that they could see themselves working in a science or engineering field. After participating in the project, those same Scouts' confidence levels soared to 83 percent.

Over 7,000 Scouts have explored STEM through these unique environmental science-themed kits since they were first made available in 2013.

As Scouts complete the curriculum, they earn EPSCOR STEM badges that can be proudly displayed on their uniforms as proof of their accomplishments. More than 3,000 Scouts have earned badges to date.

The EPSCoR/GSWO partnership will provide long-term benefits for troop members, as GSWO has committed to sustaining the STEM coordinator position and science kits post-grant award.

