# A STEM Gem, The Santa Fe Alliance for Science

***Did you know*** that the Santa Fe Alliance for Science is a STEM gem? Its goal is to inspire and support the inner scientists in all students, so that they will be "STEM ready" to thrive in today's world. The goal is to excite students by having them know that science is everywhere.

When the SF Alliance for Science was incorporated 19 years ago, the mission was to "help improve K-12 science education in Northern New Mexico." Our Alliance volunteers have done just that by bringing scientists, engineers, and educators together, to judge students' science fair projects, provide more in-depth support for high school students' capstone projects, make classroom presentations, participate in STEM/STEAM Family Nights, mentor students to sharpen their ideas about initiating and carrying out science investigations, or to share their expertise at the newly initiated After-School Science and Tech Club.

All of these endeavors are designed to expand STEM learning opportunities that "improve K-12 education" for students, teachers, and families. They provide resources for more in-depth science fair prep by having a stocked "STEM Resource Closet" for teachers and volunteers to use and funds for materials required for science fair and high school engineering projects. The Alliance wants all students to be on a level playing field when it comes to necessary materials and the money to purchase them. The Alliance has been able to help students who need funds for equipment and supplies for their individual or group projects. With a grant from the SF Community Foundation, the Alliance has been able to help balance economic diversity across and within the schools. Students fill out a brief application about their project, have it signed by a parent or guardian, and return it to their school's science coordinator. The Alliance then provides the funds via the school coordinator who is in charge of signing for the funds and delivering them to the student(s).

These undertakings would not have been possible without the close collaboration between the Santa Fe Public Schools and the Santa Fe Alliance for Science. Our first connection with SFPS is through their Volunteer Coordinator, Sabra Romero, who ensures that all volunteers are properly vetted, and all paperwork is complete. "Pedaling Power to Volunteerism," an article in the August 2024 *SFPS Volunteer Newsletter* called attention to the Alliance's work in expanding STEM learning in our schools.

The collaboration with SFPS to broaden access to academic and material resources for students and teachers does not stop there. The involvement and support from the SFPS STEM Coordinator Arturo Luján who has worked side-by-side with us during the science fair seasons.

Volunteering is not a one-way street, there are benefits for volunteers as well, first and foremost by valuing people's past professional life experiences. Volunteers connect with like-minded people who cultivate a sense of community by expanding their knowledge, contributing to a greater sense of fulfillment. This public engagement with our youth increases awareness and teamwork that deepens understanding of the many scientific issues and educational challenges that our community faces.

The Alliance has had a positive impact on students in ways that put their curiosity to work and explore problems of interest to them. Whatever the STEM topic, the research and scientific process of testing and investigating questions and collecting and analyzing data from various sources go on.

The Alliance's mission continues to grow and support students, teachers, and parents every day, communicating the message that the *STEM journey* begins with one step. The Alliance is the catalyst for supporting them to take the first step in realizing that the final products or getting right answers are mere markers along the well-traveled science road, that is ongoing.

So, what are our outcomes from this past year of collaborative activities? Let's look at 2024-2025 STEM Fair Season. The Alliance assisted in coordinating the yearly science fairs across schools in Santa Fe involving whole class projects for grades K-2 and individual and small group projects for grades 3-8.

There were 36 Alliance judges supported by 30 high school students in a total of 15 fairs with 1,250 students participating. We were delighted that approximately 25 high school juniors and seniors worked with the Alliance in judging science projects. It was so gratifying to see this peer-to-peer connection take place. As thanks, the Alliance gave each participating HS student a gift certificate - many to 12th grade students going off to college this fall. For additional information of this year's science fair events, go to Celebrating Innovation at District-Wide STEM Fair at https://www.sfps.info/article/2043372.

But there is more. Did you know that the Alliance …

- Includes a network of over 40 retired or currently employed scientists, engineers, computer scientists, and educators?
- Provides some needed financial funding in the science arena.
- Supports students in developing science fair project while sharing how science is done, encouraging them to think like scientists and engineers when addressing problems, and having an adult who listens.
- Played an integral role in planning the SFPS District STEM Fair that took place in February with 178 students participating.
- Provides all the gift card awards to students who place 1st, 2nd, 3rd or receive a Judge's Choice award, in the District-wide science fair.
- Has an Adopt-A-School (AAS) Program, currently operating at Nina Otero Community K-8 School?
    - On average volunteers make 35 STEM presentations in life skills, art, physical education, and grades K-8 classrooms and during library time.
    - The Program has had the most science fair projects (158) and students (338) participating.
    - It supports an eighth-grade STEM mentoring program, starting in October and ending in late January involving over 14 volunteers.
    - The Program coordinates the After School Science and Tech Club for students who work side-by-side with volunteers, exploring topics of interest.
    - It manages and stocks the Alliance STEM Resource Closet with consumables and equipment for all teachers to access.
    - The Program hosts a yearly Teacher/Staff/Administrator Appreciation Luncheon.

Well, that brings the SFAFS volunteer story to a close. Connecting STEM volunteers with students of all ages, teachers, and families, now more than ever, is a winning combination. Come volunteer and join STEM GEM Alliance Team!

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