

BEWISE: Connecting Girls to Science, Tech, Engineering, Math



Science Coordinator and Golden Bell winner **Nancy Taylor** is joined by County Board member Sharon Jones (back center), LRET colleagues **Nancy Giberson** (back right), **Raquel Tellez** (front right), BEWISE co-founder Pat Winter (left of Taylor) and members of the BEWISE Board of Directors.

A County Office of Education collaboration with leading science, technology, engineering and math companies has earned a California School Boards Association Golden Bell Award for its life-changing impact on young women.

BEWISE (Better Education for Women in Science and Engineering) was co-founded by SDCOE Science Coordinator Nancy Taylor and retired General Atomics executive Pat Winter. It introduces middle school girls to scientific learning opportunities through a number of unique activities, including sleepovers at science venues with female industry mentors, and then continues to provide on-going support and counseling through high school graduation.

"This is an outstanding example of a community partnership to help schools," said Rick Beach, President of the San Diego Science Alliance, who worked with Taylor, Winter and the BEWISE Board of Directors to develop and make the program successful. "This is a program that provides real-world connections for students and gets kids excited about learning."

A total of 1,200 girls in grades 7-12, 250 teachers, and 200 industry mentors have taken part in the program's 10 years. 170 schools in 32 districts have taken part, along with 70 science, technology, engineer and math (STEM) industry sites.

BEWISE starts in 7th grade, when Taylor invites girls at every county middle school to apply for an overnight stay at one of four venues: Legoland Aquarium, the

Conservation and Research for Endangered Species (CRES) at the Wild Animal Park, Hubbs Research Institute at Sea World, and the US Navy Museum.

No more than two students per school are selected, based on their essays and teacher recommendations. That yields 150 7th grade participants in the sleepovers. With a spirit of exploration and fun, the girls attend science workshops at the sleepovers, presented by volunteer women researchers and scientists.

Once they've taken part in the sleepover, the girls are part of the BEWISE Alumnae network, and more than 90 percent stay involved to attend programs at local biotech labs, engineering companies and universities. More than 400 BEWISE Alumnae are now in college, and 75 percent report science and engineering majors.

Wrote one BEWISE alum in her college application: Before I had embarked on this journey into the depths of math and science, I did not know my own capabilities...I now feel the need to solve the obstacles that face society, to find solutions and be part of new breakthroughs. After experiencing what I am able to accomplish and finding professionals who I can look to for guidance, being part of engineering has become a goal for me to strive for. My experiences from these BEWISE programs are only the beginning, only a start to a lifetime of wanting to explore and create.

Said the SDCOE's Taylor, "It's so cool for a program that has such an impact on young women to be recognized. And it's not trivial, because CSBA only honors programs that have data over several years that prove their accomplishment. And in the case of BEWISE, our data covers 10 years."