Two AUSD Teachers Win STEM Awards

Two AUSD teachers placed in the first Fuel Your School STEM contest last month. Sponsored by Chevron in collaboration with DonorsChoose.org and Maker Ed, the contest was open to teachers in Alameda and Contra Costa County who posted Science, Technology, Engineering, and Math (STEM) projects on the Donors Choose website.

The projects had to be "maker" projects (i.e., those that included opportunities for students to tinker, build, design, and problem solve). Each project was judged on four criteria: whether it aligns with a core STEM concept, whether it represents maker education, the originality of the project, and the feasibility of the project. DonorsChoose chose 20 of the 45 submissions in the first phase of the judging; Maker Ed then chose the top three finalists.

Elephants on a Bridge

Erin Head, the teacher/librarian at Paden Elementary School, won the First Place prize of \$5000 in the contest for her "STEM in the Library: Building Bridges, Building Empathy." Ms. Head's aim is to expand the Makerspace in her school's library by purchasing books and other materials to combine reading and "making."

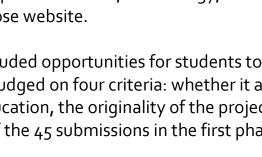
Her award-winning project involves students reading 21 Elephants, a true story about how P.T. Barnum led 21 elephants across the Brooklyn Bridge to prove it was safe. Ms. Head will then challenge her students to work in small groups to build a bridge that holds 21 plastic elephants. You can see a video of Ms. Head explaining the project here. The students will also read Strictly No Elephants, a story about a boy who is ostracized because he has a pet elephant.

"Literature is a great tool for developing empathy because it provides opportunities for kids to see themselves reflected in stories and also a chance to imagine themselves in someone else's shoes," Ms. Head says.

Mousetraps and Solar Power

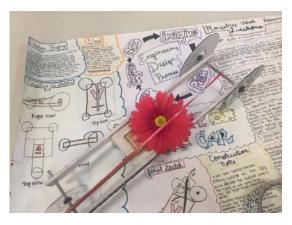
Pamela Schaffer, an 8th-grade science teacher at Wood Middle School, won Second Place (and \$2500) for a mousetrap car building project that she introduced last year. The project helps students learn about the physics of energy, force, and motion by designing and building model





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vehicles using springs from mouse traps to power their cars. The Chevron award will allow Ms. Schaffer to add solar and electromagnetic powered vehicles to the project.



"As a STEAM-integrated learning school, students will document their projects and explain the science behind them in websites they'll create in their English classes," Schaeffer says. "They will also analyze test data and make calculations of the energy, force, acceleration, and momentum of their vehicles in Math. This Project Based Learning experience provides students with an authentic challenge using science to address real world issues and helps them develop and use critical thinking, problem solving, creativity, collaboration, and communication skills across the curriculum."

Congratulations to these two forward-thinking teachers. We can't wait to hear how their projects turn out!