

Asombro Insights

Science education for eager minds

A Quarterly Newsletter

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Helping New Mexico Students Become “STEM Ready”

By Stephanie Bestelmeyer

If you're passionate about science, technology, engineering, and math (a.k.a. STEM) education, there is no more exciting time than right now in New Mexico. Beginning this school year, New Mexico is using a new set of science standards to guide instruction: the STEM Ready! Science Standards. These standards consist of the Next Generation Science Standards (NGSS) along with six New Mexico-focused standards.

NGSS went through rigorous development by scientists, science education researchers, and educators. Each state has the option to adopt the standards, and New Mexico joins 18 other states that have adopted NGSS so far. Rather than focusing on large numbers of disconnected facts, NGSS helps students understand science at a deeper level through three dimensions:

- Science and engineering practices (such as asking questions, developing and using models, analyzing and interpreting data)
- Disciplinary core ideas (arranged into three main disciplines: life science, physical science, earth and space science)
- Crosscutting concepts that span all disciplines (such as cause and effect, energy and matter, stability and change)

Asombro has been using NGSS for three years under the expectation that New Mexico would adopt them. We are now taking multiple steps to use our expertise to

assist our state's transition to the new standards. Three major efforts show the range of our activities:



1) Asombro developed new lessons for kindergarten through high school that are fully aligned with NM STEM Ready! Staff were busy this summer testing and revising ideas to develop

26 classroom programs. We revised some existing lessons and started from scratch on others, and we're so excited about our new offerings.

2) We hosted a workshop on the new standards for 14 teachers from five school districts. Teachers gained information on the new standards and experience with what a lesson based on NGSS looks and feels like for students. Regardless of their past experience with the standards, all 14 teachers reported increased knowledge

and confidence with the new standards following the workshop.

3) Thanks to a generous grant from the PNM Resources Foundation, Asombro will be providing 100 classroom lessons and a teacher workshop for Deming Public Schools' teachers and students this school year.



Fund A division of the PNM Resources Foundation

We are delighted that New Mexico students will be learning science based on the best research about how students learn. Asombro is excited to help our state's children become STEM Ready!



Teachers participate in an Asombro workshop on the new science education standards.

Meet the Newest Asombro Staff Member - Dakota Domínguez

Dakota Domínguez became Asombro's newest Science Education Specialist in September. Dakota grew up in the Colorado Rockies near Salida and Denver, and he has family history in New Mexico going back several centuries. He travelled to New Mexico often as a kid and has always loved the desert. He started college at Prescott College in Arizona, where he studied field ecology and outdoor education. He transferred to The Evergreen State College in Washington to finish his degree in Environmental Science and Western US History. Dakota is passionate about fostering a sense of place and the joy of learning in others. He has worked as an interpretive ranger at Arches National Park, an outreach and volunteer coordinator for a Conservation District, an environmental educator in public schools, and most recently as a wilderness leadership instructor in North Cascades National Park.

We asked Dakota a few questions to help you get to know him. Here's what he had to say:

What led you to your new position at the Asombro Institute for Science Education?

I have wanted to move back to the desert ever since I left Arizona for Washington State. I've been gaining experience in the Environmental Education field in Washington, waiting for the right time and the right opportunity. Work at Asombro offers so much of what

I've been looking for: I get to do what I love in a place that I love and have roots in.



What is your favorite thing about the job so far?

Interacting with students and helping them learn about the place they call home. I love that it is my job to know the plants and animals of this ecosystem and help anchor important science concepts for students in their local landscape.

New Mexico is the Land of Enchantment. What do you find enchanting about it?

So much. The way light changes on the dramatic colors of the land and the huge open spaces where my imagination can wander and my soul can breathe. I have always been fascinated by desert natural history

and ecology: the beautiful ways that organisms adapt and thrive in lands of little rain. I am also passionate about studying New Mexico's history, the centuries of cultures interacting and changing each other and the land. As a family genealogist, being in a place where my ancestors lived is enchanting as well.

Red or Green?

Sun-dried Chimayo heirloom red. I prefer milder chiles where I can taste the earthier flavors rather than just the burn.

Education Programs

Thanks to your support, Asombro staff provided 687 hours of science for 14,880 students so far in 2018!

Here are the programs from June - August 2018.

1-Jun	NM PED STEM Symposium- Desert Stories	14-Jun	Socorro Library - Amazing Arthropods	27-Jun	Deming Library - Animal Adaptations
5-Jun	Challenger Center - day camp	18-Jun	Ruidoso Library - Amazing Arthropods	28-Jun	Las Cruces Library - Fossils
6-Jun	La Semilla - day camp	19-Jun	Challenger Center - day camp	2-Jul	Capitan Library - Amazing Arthropods
7-Jun	Bayard Library - Animal Adaptations	20-Jun	La Semilla - day camp	12-Jul	JER Symposium - Asombro
8-Jun	NM MESA - day camp	22-Jun	Alamogordo Library - Amazing Arthropods	17-Jul	Hatch Library - Fossils
9-Jun	Columbus Library - Amazing Arthropods	25-Jun	Silver City Library - Geology & Earth Processes	19-Jul	Judge Marquez Library - Geology & Earth Processes
12-Jun	Challenger Center - day camp	26-Jun	Challenger Center - day camp	18-Aug	Wild Birds Unlimited - Creepy Crawly Critters
13-Jun	Tularosa Library - Fossils	27-Jun	Friends of Rockhound - Desert Plants	27-28 Aug	Vista MS - Wildlife CSI
13-Jun	Pathfinders - Lizards				

3rd Quarter Wonder Award for Outstanding Volunteer Service: Ericha Courtright

By Stephanie Haan-Amato

The generous folks who volunteer their time at Asombro make it possible for us to reach more than 22,000 students every year, and we appreciate them more than we can say. Because our volunteers inspire WONDER in us, the Asombro staff chooses one volunteer every quarter to receive our **Wonder Award** for outstanding volunteer service.

Our 3rd quarter 2018 Wonder Award goes to **Ericha Courtright!** Ericha has been involved with Asombro for more than 10 years. She most recently facilitated a complete overhaul of our website and developed a beautiful new site that showcases our work. (Be sure to



check it out at www.asombro.org!) During the last several years, she has volunteered her expertise for countless hours to keep our website maintained and updated.

Ericha has also volunteered for numerous Asombro special events. She has been the fun and cheerful volunteer at many Butterfly Flutterby booths, such as Egg Dash. She also volunteered for several years to hand out water at our fundraiser Desert Dash Trail Race. She even brought her sons to help at these events, so she tripled her impact! We can't thank Ericha enough for her dedication to our cause and for sharing her valuable time and expertise with us! She is most certainly WONDER-ful!

THANK YOU!

We are grateful to the generous donors in the second quarter of 2018.

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Science Sponsors

By Rink Somerday

Asombro developed the Science Sponsors program to meet the need of local classes that are unable to afford even the modest fees that we charge for Asombro programs.

Generous individuals, businesses, and service organizations become Science Sponsors by donating \$100 per class. That donation gives a classroom of children a one-hour, hands-on science lesson with Asombro's talented staff, covering all costs such as travel and consumable supplies. Science Sponsors receive notes from the children and/or their teacher as well as the knowledge that they helped bring the wonder of science to local children.

Tutti Bambini in Las Cruces kicked off the campaign with a generous donation to sponsor four classes. These wonderful donors have also become Science Sponsors for the 2018/19 school year:

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We are about to start awarding and delivering Science Sponsors lessons to students throughout our region. There's still time to join this amazing group of science education sponsors. Visit www.asombro.org/science-sponsors today!



Asombro Institute
FOR SCIENCE EDUCATION

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www.asombro.org

Have you visited the new-and-improved Asombro website? Now it's even easier than ever to learn more about Asombro, connect with staff members, plan a visit to the Chihuahuan Desert Nature Park, and find out how you can join our efforts to increase science literacy. Many thanks to Rachel Szczytko, Ericha Courtright, and Libby Grace for all their hard work updating the site.

YES! I want to support the
Asombro Institute for Science Education!

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