

CARQLINA® www.carolina.com

FAST FACTS

Name: Mechelle LaLanne

Role: Managing Director of Science Education

Institution: North Central Educational Service District, Wenatchee, Washington

Challenge: Replacing 14-year-old STEM kits for 29 school systems

Solution: Community-focused Jumpstart STEM support program

Results: The innovative
Jumpstart STEM program invites
local residents, businesses, and
organizations to get involved
in helping their schools update
STEM curricula materials.
Jumpstart STEM provides
a range of support levels so
everyone in the community can
play a role in children's STEM
education.

CONTACT:

Carolina Biological Supply Company curriculum@carolina.com 800.334.5551

Innovative STEM Funding Program Engages the Local Community

As the STEM-driven economy continues to grow, so does the demand for STEM-literate graduates. It's projected that more than 2.4 million STEM jobs will go unfilled this year.*



Creative and dedicated. STEM funding in Washington State's NCESD has a bright future thanks to Mechelle LaLanne and the communities she serves.

Mechelle LaLanne directs STEM education for the state of Washington's North Central Educational Service District (NCESD), which includes more than 40,000 students in 29 school systems scattered across a wide swath of counties. Along with her love of science, the fact that her students will be entering such a STEM-focused adult world drives LaLanne to provide them with the high-quality STEM education they need.

Findings from the LASER i3 study[†] from the Smithsonian Science Education Center (SSEC) support what LaLanne already knew: hands-on learning activities make a significant difference in young students' educational success. Thus, she is committed to engaging the imaginations and minds

of her district's students with fun and challenging hands-on STEM lessons and activities. Many of NCESD's schools use Carolina's Building Blocks of Science® 3D and the SSEC's Smithsonian Science for the Classroom learning kits and hands-on modules. LaLanne helps district schools save money by scheduling and rotating these resources among them. This reduces the number of modules a school system needs to purchase while still maintaining a high standard of STEM learning.

Needed: New STEM Kits

In 2017, it became clear to LaLanne that some of the STEM kits needed to be replaced. Some of them had been in use for 14 years, and despite annual refurbishing, the components were showing their age. In addition, the state of Washington's science standards had recently changed, meaning many of the kits had to be updated or replaced to address the new standards. Yet the cost of replacing the kits was a daunting consideration.

continued >>







LaLanne began exploring ways to fund new STEM materials, including investigating online crowdfunding platforms such as GoFundMe®. She found that such platforms charge a fee, often based on the amount of funds raised. LaLanne wanted 100% of funds raised to be used for STEM materials, so she did not pursue that avenue further. But her investigation planted a seed in her mind. She thought, "Why can't we build our own local funding program using that model?"



Making connections. Hands-on STEM activities are key to engaging the minds and imaginations of young learners.

member of each community NCESD serves—from individuals and families to businesses and other organizations. The result of her focused effort is the **Jumpstart STEM** program.

The Jumpstart STEM program provides community members with participation options, from a \$20 level that might be attractive for individuals up to a \$500,000 level for businesses or other organizations that have greater fund availability. The options also include a description of

the number of modules, students, classrooms, or grade levels that are supported at each level of participation, inviting the community to support STEM education in a tangible way. LaLanne explains, "In a sense, each

Inclusive Funding, Easy Signup

LaLanne began brainstorming how a community-based STEM funding program might be structured. One of her goals is to make participation feasible for every interested

Jumpstart STEM Program Levels

- **Student**—\$20 supports STEM education for one student in the district.
- **Module**—\$1,500 supports one STEM module (life science, physical science, earth science, or engineering). The module rotates between three classrooms, benefitting approximately 90 students each year.
- **Teacher Module**—\$2,500 supports one STEM module plus a teacher's guide, which rotate between three classrooms.
- Complete Teacher Module—\$10,000 supports one module in each of the four STEM areas. The modules rotate between three classrooms.
- Complete Grade-Level Support—\$100,000 supports modules for all four STEM areas for an entire grade level. The modules rotate between all NCESD classrooms for that grade level.
- Complete STEM Education Support for Grades 1 through 5—\$500,000 supports modules for all four STEM
 areas for all five grade levels. The modules rotate between all the classrooms, benefitting approximately 18,000
 students per year.

continued >>







supporter becomes an underwriter of their community's STEM education."

The logistics of signing up as a sponsor as well as the administration of the program are simple. The donor selects the level of support on the program website and is then redirected to an online form where they





Long-lasting. STEM modules like Carolina's Building Blocks of Science® 3D (left) and the SSEC's Smithsonian Science for the Classroom can often be refurbished and reused for years of successful teaching and learning.

enter their name and contact information. NCESD staff mail an invoice to the donor, which the donor returns with their support. As intended, this custom-designed program ensures that the funds stay in the district and are used for STEM materials that directly benefit the students.

Every sponsor, no matter the level of support, is recognized on the program website. Module totes and components also display sponsor names; the means of recognition broadens as the level of support increases. This is part of truly grounding the program in the community.

Positive Community Response

The Jumpstart STEM program was rolled out to the

district's 29
superintendents
in early 2018. The
program is also
on display at local
farmers' and artisans'
markets, on local
radio and television
programs, and at
meetings of regional
foundations and
public utilities. People
at these events are

able to see what the STEM modules include and how they are used by students and teachers. A demonstration of the program's website is also provided to encourage potential donors to explore the program further when they return to their homes or offices.

Feedback from the community has been positive, and LaLanne and her colleagues are enthused about the growing momentum as news of the program spreads. Even more exciting for the district is the prospect of being able to provide new, high-quality STEM materials for students for another 14 years and beyond.

Learn more about the Jumpstart STEM program at the NCESD website at www.ncesd.org/news/service/stem/stem-materials-center.

"We are excited to see our communities engage in their students' STEM education in this very tangible way."

-Mechelle LaLanne, Managing Director of Science Education, North Central Educational Service District

*"The STEM Imperative," Smithsonian Science Education Center, accessed May 2018, https://ssec.si.edu/stem-imperative

[†]"Smithsonian i3 LASER Research Study," Smithsonian Science Education Center, accessed May 2018, http://landing.carolina.com/stc-resources/smithsonian-i3-laser-research-study

continued >>







Innovative Answers to NGSS

Smithsonian Science for the Classroom modules blend content, practices, and crosscutting concepts into hands-on STEM investigations.



- Phenomena-based and problem-based learning for grades 1–5
- 3-dimensional, hands-on learning in every investigation
- Four modules—life science, earth and space science, physical science, and engineering design—at each grade level to meet performance expectations
- Brings the excitement of the world's largest research facility—and the most impressive collection of science and artifacts—into the elementary classroom

Learn more about Smithsonian Science for the Classroom at www.carolina.com/ssftc.





