





The Idaho Exhibition of Ideas (IDX) is a multi-week, team-based digital design and fabrication competition where students learn and practice design, iteration, and rapid prototyping skills with 3D printing technology. Student teams from grades 5-10 brainstorm, develop, and prototype an idea for a solution that responds to a challenge theme and incorporates 3D design/printing technology. The teams present their solutions to a panel of judges and a public audience for review and feedback. The program engages youth in identifying, designing, prototyping, testing, and iterating solutions to real-world problems.

**Tylar Hedrick** was an eighth-grader at Lone Star Middle School in Nampa when she participated in an IDX competition. Her team conceived the idea for HELP-Homeless Emergency Life Packs, a packable, portable shelter. Tylar's team won first place and Students' Choice Award at the 2016 Idaho FabSLAM Showcase (now known as IDX). Tylar didn't stop problem-solving there: she and her classmates continued refining the design after the IDX Competition. As a high school freshman, Tylar was invited to present the concept at the White House with top officials of NASA and the National Science Foundation in attendance.















STEM is about *more* than Science, Technology, Engineering, and Math. It's about engaging with the world through creativity, collaboration, and innovation.

And STEM skills give Idahoans a competitive edge in the workplace; preparing them for high-paying, high-demand careers in agriculture, healthcare, computer science, and more.

STEM...Helping build a prosperous Idaho!



## STEM EDUCATION BUILDS RESILIENCE

Tylar is now a sophomore at University of Southern California and continues to pursue her portable shelter idea through her coursework while double majoring in International Relations and Spanish. She hopes to move forward in the production of an application of HELP in Latin America to provide humanitarian aid to those affected by natural disaster, international conflict, and displacement.

Tylar remarked, "Both the Idaho STEM Action Center and Mr. Aaron Moiso (my middle school engineering teacher) have been instrumental in my education and who I have become today. The experiences I had through the 3D Digital Fabrication Competition enabled me to make connections with some amazing people and put me on a path to become an even more determined, driven, hopeful individual. I appreciate the opportunities and experiences the Idaho STEM Action Center has given me more than I could possibly express!"

The goal of Idaho Exhibition of Ideas (IDX) is to equip students with the practical, technical, and creative skills needed to engage with real-world problems of today and tomorrow in Idaho and beyond. Workforce demand for skills in 3D technology continues to grow in Idaho's advanced manufacturing, architecture and construction, and aerospace industries. Tylar exemplifies the broad impacts STEM student competitions have on participants' lives.

# **Building STEM through:**

**ACCESS** 

to STEM professional development throughout Idaho.

focused partnerships with industry and universities. and camp support.

## **Our Partners**















# **STEM IS EVERYWHERE AND FOR EVERYONE!**

## **GET INVOLVED TODAY!**

Your participation is essential for Idaho's success! There are many ways for you to engage with STEM education. Mentor. Volunteer. Donate. Partner. Help us build a path to prosperity for all Idahoans.

### **LEARN MORE**

To learn more about the STEM Action Center's strategies, success stories, and positive impacts in your community, email: admin@stem.idaho.gov or visit stem.idaho.gov.



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