

Recap Report

DECEMBER 8, 2022

MESA CONVENTION CENTER



HOSTED BY:

Bogi Lateiner

*A.S.E. Master Technician, Educator, and Host of
MotorTrend's All Girls Garage & Garage Squad*



PRESENTED BY



WORKSHOP
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Thank you for supporting [X-STEM Phoenix](#), a program of the USA Science & Engineering Festival.

X-STEM Phoenix was held on December 8, 2022 at the Mesa Convention Center in Mesa, Arizona. The free conference - presented by [West Pharmaceutical Services](#) and the [U.S. Space Force](#) - was designed to showcase diversity and inspire middle and high school students about careers in the STEM fields.

The all day event, emceed by A.S.E. Master Technician, educator, and host of MotorTrend's *All Girls Garage & Garage Squad*, [Bogi Lateiner](#), featured multiple presentation sessions given by top STEM role models covering a broad range of topic areas including aerospace engineering, robotics, space, and drug delivery systems. Each presentation was followed by a Q&A session, giving students the opportunity to directly interact with speakers. Five hands-on and interactive workshops, sponsored by the [U.S. Air Force](#), were hosted by leading STEM-focused organizations including [Education Empowers](#), [Maricopa County Sheriff's Office](#), [TechForce](#), and [West Pharma](#). Workshop topics ranged from forensics to automotive technology to drug delivery technology to artificial intelligence and drones. Most students had the opportunity to sit in on four speaker presentations and one hands-on workshop. During lunch, students visited booths hosted by our partner organizations, gathered for group photos in the branded photo stations, and mingled with speakers. [Snap-on](#) generously provided reusable swag bags for every student in attendance and contributed toward the over \$4,000 in bus grants that were provided to Title 1 schools. [American Airlines](#) provided a team of employees who generously gave their time to volunteer for the day.

The X-STEM Phoenix conference marked the Festival's first programming in the state of Arizona. Attendees were primarily from the Phoenix Metropolitan Area with some attendees traveling from Tucson, Bagdad, Eloy, and Waddell, Arizona. Additionally, educators and students joined us from Florida, Illinois, New York, and Texas.

To extend and expand the impact of X-STEM Phoenix, all X-STEM main stage speaker presentations were professionally recorded and will be made available at no cost from the Festival YouTube channel and website at a later date. Each recorded X-STEM Phoenix presentation will be accompanied by an NGSS and CASEL aligned lesson plan to assist educators in utilizing the content as a classroom activity.

View and download photos from X-STEM Phoenix [here](#). A list of participating speakers and workshop presenters can be found below.

X-STEM Phoenix Speakers



Dr. Erin Macdonald

Astrophysicist, Writer, and Star Trek Science Advisor

Finding Career Inspiration on the Screen



Dr. Tom Sugar

Robotics Researcher, Professor & Associate Dean, Arizona State University

Robotic Exoskeletons Making Work Easier



Lt Col Cassandra McCloud

Deputy Base Civil Engineer, Goldwater Air National Guard Base

Create The Things You Wished Existed!



Liat Shochat

Sr. Director, R&D, Wearables Platform, West Pharmaceutical Services, Inc.

How will YOU imagine the future of taking medicine?



Roy Moya III

The Singing Engineer, Founder & CEO of STEMusic

How STEM Made My Dreams Come True!

X-STEM Phoenix Workshop Presenters

The New World of Tech, Exploring Computers on Wheels and Beyond

HOSTED BY  **TECHFORCE**
FOUNDATION

WITH  **BOEING**

 **PENSKE**

Snap-on
**MAKERS
FIXERS**



The Whys and Hows of Law Enforcement Forensic & Robotic Tactics

HOSTED BY



Robotics & Self-Driving Cars

HOSTED BY



Artificial Intelligence (AI) & Drone Simulators

HOSTED BY



Have You Ever Wondered About Drug Delivery Systems?

HOSTED BY



BREAKDOWN OF REGISTERED ATTENDEES BY GRADE LEVEL

MS (grades 6-8)	53%
HS (grades 9-12)	47%

BREAKDOWN OF REGISTERED ATTENDEES BY SCHOOL TYPE

Public School	76%
Private School	9%
Charter or Science Magnet	12%
Home School	3%

35% of registered attendees were from Title 1 schools

BREAKDOWN OF REGISTERED ATTENDEES BY GENDER

Female	39%
Male	39%
Prefer not to say*	22%

BREAKDOWN OF REGISTERED ATTENDEES BY ETHNICITY

Asian	12%
Black or African American	5%
Hispanic or Latina/Latino	23%
Native American or Alaskan Native	3%
White	30%
Other	3%
Prefer not to say*	23%

*Many educators with large groups noted they did not know the ethnicities and/or gender of the attendees at the time of registration.

PROMOTION AND SOCIAL MEDIA

X-STEM was promoted heavily on our website and to our newsletter list of 100k teachers and parents. To enhance our outreach efforts regionally, we implemented a highly targeted Facebook advertising campaign to local school groups and families.

Priority invitations were extended to Title 1 schools to provide the best possible opportunity for students from underserved communities to attend. Overall outreach included 142 schools across the Phoenix Metropolitan Area made up of public, charter, and private schools.

The event and speakers were heavily promoted across all of our social media platforms. Speakers, workshop presenters, and partners also touted their participation on social media. With a goal to engage the audience and increase awareness, we encouraged attendees to share their experience during the event using #XSTEM.

The following page illustrates the campaign and reach through our partners and on social media.

X-STEM Phoenix By the Numbers

REACH ON USASEF SOCIAL MEDIA, WEBSITE, EMAIL & NEWSLETTER

337K Impressions

INSTAGRAM/TWITTER ACCOUNTS WHO SHARED X-STEM:

Bogi Lateiner (IG) - @bogisgarage - 77.2k
Maricopa County Sheriff's Office (IG) - @mcsoaz- 16.2k
U.S. Space Force (TW) - @SpaceForceDoD- 579.7k

EDUCATOR QUOTE:

"I have never seen my students so engaged and enthusiastic about all things STEM!"

X-STEM Phoenix Stats:

2,000

students, teachers,
and parents attended

96%

thought X-STEM was an effective way to
get students more interested in STEM

44%

of students attended
thanks to bus grant donations

Sample Posts



ATTENDEE QUOTES

Educator from the Summit School: “X-STEM was a great opportunity for my students to experience science beyond the walls of our classroom/building. They were highly engaged during Roy Moy’s presentation, and they left feeling inspired that you can make multiple dreams come true if you work hard and follow your passions.”

Educator from Changemaker High School: “X-STEM helped my students see that there are multitudinous ways to connect to STEM. The people who do STEM, look and like things, just like them.”

Parent Attendee: “Seeing my kids in the hands-on workshops so interested and inspired warmed my heart.”

Student attendee: “The X-STEM event was very fun. We did a workshop where we got to win a car model and learn how to read car monitors, take off car wheels, and got a chance to win a t-shirt... We then got to listen to a speech by a member of the Air Force and a member of medicine making. My friends and I had a lot of fun and wanted to stay longer. The Air Force was there and told us all about their adventures. They handed out fun things like shirts, cups, squishies, pens, etc. We also got to meet this guy who built airplanes and incorporated music and put on a little concert for us. It was overall so much fun and we would LOVE to go back!”

Educator from Sunnyslope High School: “The speakers were great, they had some amazing personal experiences and career objectives. It was great for our students to see such amazing career goals and know they can dream too.”

Student attendee: “It overall was an amazing experience that I was glad to attend. It was overall fun and interactive and I recommend this experience to everyone.”

Educator from Queen Creek High School: “I have never seen my students so engaged and enthusiastic about all things STEM!”

Educator from Highland Junior High: “I really enjoyed a presenter named Ron, a process engineer, with WEST who described plastics and injection molding. Students got to see many of the products that their group produces. He spoke of many physics terms like pressure, temperature, and time to make things happen; even my chaperones got in some questions...”

Educator from Horizon High School: “A great way to get exposed to many different fields in engineering quickly. :-)”

A PROGRAM OF



Scenes From Around X-STEM Phoenix

