

**SEPTEMBER 21-24, 2021** 

X-STEM ALL

**ACCESS** 

FEATURING THE COOLEST MINDS IN STEM

RECAP

















Thank you for supporting **X-STEM All Access**, a program of the USA Science & Engineering Festival.

X-STEM All Access premiered live on September 21-24, 2021. The free virtual conference series, presented by <u>AstraZeneca</u>, <u>Discovery Channel</u> and the <u>U.S. Space Force</u>, was designed to showcase diversity and inspire students about careers in the STEM fields with the ultimate goal to help bridge the STEM workforce gap.

The online conference was presented as a series of four daily 45 to 60 minute livestream events, each one featuring multiple STEM role models centered around a shared topic. The program was targeted to students in middle and high school (grades 6-12), but kids and adults of all ages were welcome to attend. All four live episodes were immediately made available for on demand viewing at any time.

More than 34,000 students, teachers, parents, military families, and STEM enthusiasts registered to attend the four-day conference series - a 24% increase over the previous event. 87% of the educators who registered planned to utilize this virtual event as educational content for their students.

We enhanced our marketing and outreach efforts by implementing a highly targeted online advertising campaign on social media, joining forces with media partners, engaging STEM influencers as ambassadors, and continuing our targeted outreach to Title 1 schools around the country. In our communications, we promoted the series as on-demand episodes in an effort to make the event more convenient for attendees' schedules. More details and stats for these outreach efforts can be found below.

To further engage students and help educators better utilize the program as an educational resource, we provided educators with speaker-specific worksheets to use as classroom tools. 65% of attendees surveyed said they utilized the worksheets.

X-STEM All Access featured some of our nation's top STEM role models covering a broad range of topic areas and representing top life science universities, high tech, and life science corporations, non-profit organizations, and governmental agencies.

We partnered with Passage Productions to deliver high-quality and professional programming

#### X-STEM ALL ACCESS

# **Speaker Lineup**









Moderated by **Justin Shaifer**, Mr. Fascinate

### Wild About Animals

**Jordan Veasley,** Zookeeper & Wildlife Educator, Jungle Jordan **Phil Torres,** Tropical Biologist & Science Communicator, Discovery Channel

Brain Break by Dr. Tracy Fanara, Ocean Scientist & Environmental Engineer, NOAA







#### **Real-Life Robotics**

**Jasmine Lawrence,** Robotics Product Manager, X the moonshot factory

**Easton LaChappelle,** CEO & Founder, Unlimited Tomorrow Special Guest Appearance by **Major Adrian Law,** U.S. Space Force Guardian

Brain Break by Maynard Okereke, Hip Hop M.D.









### **Next Gen STEM**

YouTube Stars

Catherine Kim, Student & Bioinformatics Researcher Dasia Taylor, Student & Inventor Special Guest Appearance by Dr. Susan Galbraith, Executive VP, Oncology R&D, AstraZeneca

Special Guest Appearance by Collins & Devan Key,









### **Returning to the Moon**

Zena Cardman, NASA Astronaut

Dr. Moogega Cooper, Planetary Protection Engineer, NASA JPL

Brain Break by Roy Moye III, Aerospace Engineer & Musician







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#### **VIEWING ANALYTICS**

Post event survey responses indicate that **26%** of educators had their students watch together from a single screen in the classroom, while the remainder assigned it to be viewed individually in class or as homework.

Based on our registration data, each registered classroom had an average of 19 students. Therefore, we can make a reasonable extrapolation that nearly **15,000** students viewed the event on the live dates. With the additional on demand viewing that number is reasonably over **26,000** to date.

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#### BREAKDOWN OF REGISTERED ATTENDEES BY REGION

	Fall 2021	<b>Spring 2021</b>	<u>Spring 2020</u>
Northeast	36%	40%	56%
Southeast	27%	29%	26%
West	16%	14%	10%
Midwest	12%	11%	6%
Southwest	8%	6%	2%

We also had representation from 58 countries including Afghanistan, Algeria, American Samoa, Australia, Azerbaijan, Bahamas, Belarus, Belize, Botswana, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Cayman Islands, China, Colombia, Costa Rica, Ecuador, Egypt, France, Germany, Greece, Guam, Guatemala, Honduras, India, Indonesia, Iran, Jamaica, Kazakhstan, Malaysia, Mexico, Mongolia, Morocco, Nepal, Netherlands, Nigeria, Pakistan, Peru, Philippines, Portugal, Russia, Saint Kitts and Nevis, Saudi Arabia, Singapore, South Africa, South Korea Spain, Switzerland, Taiwan, Trinidad and Tobago, Tunisia, Turkey, United Arab Emirates, United Kingdom, Uruguay, and Venezuela.

4.2% of attendees were from outside of the United States.

#### BREAKDOWN OF REGISTERED ATTENDEES BY GRADE LEVEL

	<u>Fall 2021</u>	<u>Spring 2021</u>
ES (grades 5 and lower)	21%	26%
MS (grades 6-8)	53%	46%
HS (grades 9-12)	18%	17%
18 and over	4%	7%
Declined to answer	4%	4%

### **BREAKDOWN OF REGISTERED ATTENDEES BY SCHOOL TYPE**

	Fall 2021	<u>Spring 2021</u>
Public School	70%	75%
Private School	15%	14%
Charter or Science Magnet	8%	5%
Other	5%	2%
Home School	2%	4%

<sup>\*42%</sup> of U.S. public school groups registered are Title 1 schools

### **BREAKDOWN OF REGISTERED ATTENDEES BY GENDER**

<u>Gender</u>	<u>Fall 2021</u>	<b>Spring 2021</b>
Female	32%	40%
Male	29%	38%
Prefer not to say*	40%	22%

#### BREAKDOWN OF REGISTERED ATTENDEES BY ETHNICITY

	<u>Fall 2021</u>	<b>Spring 2021</b>
Asian	6%	5%
Black or African American	12%	17%
Hispanic or Latina/Latino	11%	15%
Native American or Alaskan Native	<1%	1%
Native Hawaiian or other Pacific Islander	<1%	<1%
White	13%	20%
Other	1%	<1%
Prefer not to say*	56%	41%

<sup>\*</sup>Many educators who signed up large groups of students noted that they did not know the ethnicities and/or gender of the attendees at the time of registration.

#### **HOW ATTENDEES HEARD ABOUT X-STEM ALL ACCESS**

To best gauge the effectiveness of our outreach efforts and media partnerships we added "How did you hear about this event?" as a required field on the registration form.

USASEF Newsletter	54%
School District Outreach	19%
Social Media	16%
Other	7%
Search Engine	2%
Discovery/Science Channel	2%

#### **ATTENDEE FEEDBACK**

# On a scale of 1-10, how would you rate X-STEM All Access overall?

(One = poor, Ten = fantastic)

	Fall 2021	<b>Spring 2021</b>
Ten	69%	43%
Nine	18%	27%
Eight	8%	23%
Seven	4%	6%
< Six	1%	1%

#### PROMOTION AND SOCIAL MEDIA

X-STEM All Access was promoted heavily on our website and to our newsletter list of over 100k teachers and parents.

We developed media partnerships with the following organizations to expand our reach: Discovery/Sci Channel, Teen Life Media, Innovation & Tech Today, and DiversityComm. The advertising from our media partners included website banners, newsletters, push emails, on air graphics, digital magazine ads, social media, and blogs.

The event and speakers were heavily promoted across all of our social media platforms. Speakers and their organizations also touted speaker participation on social media. During the event, we launched a social media campaign called Show Us How You STEM with a goal to engage our audience and increase awareness for the program. We partnered with Science Communicators as "STEM Ambassadors" on Instagram to both grow our social media presence and extend our reach.

Promotional offers extended to our audience included a free copy of the latest digital **Your Future in STEM Guide** published by <u>TeenLife Media</u>.

We continued our endeavor to promote X-STEM to Title 1 schools across the country. We reached out to approximately 300 school districts that represent high concentrations of Title 1 schools. As stated in the demographics above, 42% of the U.S. public school groups registered were Title 1 schools.

The following pages illustrate the campaign and reach through our partners and on social media.

# X-STEM All Access Media Partner Reach

Total Impressions from Media Partner Outreach:

### Over 2M

### **Discovery/Sci Channel**

Featured In: Two push emails, In program messaging

Impressions: over 1.3 Million

The Discovery Channel featured on-air graphics promoting the event during primetime and daytime placements on the 15th and 18th of September. They aired on the premiere and re-run of Expedition X each of those days and garnered a total of 410,000 impressions.

#### **Teen Life Media**

Featured In: Email blast, sponsored blog post, website banner ads

Impressions: 53,000

#### **Diversity Comm**

Featured In: Website events calendar, digital magazine

Impressions: 821,522

### **Innovation & Tech Today**

Featured In: Website events calendar, website banner ad, newsletter banner ad

Impressions: 23,000

#### **SAMPLE MEDIA:**





#### Click the image below to play the Discovery on-air graphic:







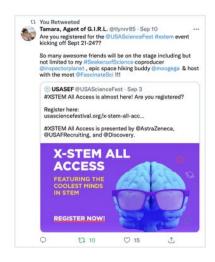
PREMIERES SEPT 21-24

# X-STEM All Access Social Media Reach

Facebook, Twitter, Instagram & LinkedIn:

# 1.29M Impressions\*

#### **SAMPLE SOCIAL POSTS:**







### **FB Ad Statistics:**

9

Number of ads

197K

Impressions from ads

311

Clicks to registration page

# #ShowUsHowYouSTEM Campaign

# 63K Impressions\*

#### **SAMPLE SOCIAL POSTS:**







# X-STEM All Access Social Media Reach

Accounts of those who shared X-STEM posts with large followings:

## **Twitter:**

NASA Astronauts: 1.2M

AstraZeneca: 292k

Dr. Moogega Cooper: 13.1k

Tamara Robertson: 5,416

Easton LaChappelle: 3,358

HipHop MD: 1,022

Jonte Lee: 564



# **Instagram:**

NASA Astronauts: 540k

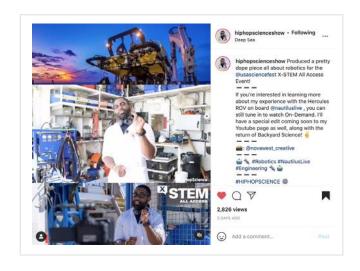
Tortillakeyper: 71.4k

HipHop MD: 14.1k

NittyGritty Science: 25.5k

Dr. Moogega Cooper: 5,621

Dasia Taylor: 5,592



# **Total Impressions:**

Twitter: 88,000 Instagram: 84,000

Linkedin: 14,060 Facebook: 926.7k

**Note:** We shifted our advertising strategy from boosting posts to implementing a highly targeted ad campaign on social media. While this shift resulted in a lower number of overall impressions, it allowed us to reach a more targeted audience and increase our conversion rate for registrations.

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#### **ATTENDEE QUOTES**

**Educator from Ontario, CA**: "This has been a great week for my students to see scientists and engineers of all different fields and representing lots of different ethnicities speaking about their passions and determination. I am impressed by the responses I have seen on my students' reflections regarding their level of interest and what stood out most to them. It was definitely a worthwhile experience for my students."

**Educator from Newman, GA** "As a STEM educator X-STEM was a perfect way to introduce my students to different guest speakers with Covid limiting who is allowed in our classroom. The speakers allowed my students to see real-world STEM professionals in action. It also showed them innovation at work!"

**Educator from Riverview, MI** "I love using the X-STEM webinar sessions to give my STEM students a clear and concise explanation of more STEM careers and cool jobs from the people that are doing them in real life! They find the individuals so relatable!"

**Homeschool Educator from D.C.** "I love this format and I also appreciate seeing more African-Americans representing STEM!"

**Student from Portland, OR** "I would love to see more of this! As an 8th grade student, this is very enjoyable and informative!"

**Student from LeesBurg, VA** "X-STEM All Access was a great way to meet professionals from different STEM fields and hear them talk about what they do! It was really interesting, and my whole family listened in."

**Educator from Affton, MO** "I believe hearing STEM professionals speak is a great way to get students interested in these fields."

**Educator from Norman, OK** "I love having the opportunities that X-STEM All Access provides to my Gifted and Talented students. In the regular classroom, they certainly learn the basics our society deems to be the norms of education, however my students need to know what they can dream of becoming or even create their job of the future. It is called exposure, X-STEM provides that exposure. Thank you X-STEM All Access."

**Educator from Newark, DE** "I had never heard of the USA Science Engineering Festival before, so this was a wonderful introduction to your site and the resources. At this time I'm completely satisfied with what I experienced. I even sent in a question for support because our school could not watch the livestream, and the support person provided an immediate remedy to our issue. Thank you for that!"

**Educator from Ooltewah, TN** "My students enjoy hearing and seeing other students achieve higher expectations than the average student. They also enjoy seeing the different professions that are in our society. It has really opened their eyes to the different science careers that are available. I appreciate the program you do. This is our second year and the students enjoy it."

**Student from Bowie, MD** "It was knowledgeable, informative and very easy to understand. All the presenters provided the best introductions and well explanations of their career."

**Educator from Frostburg, MD** "Since we are unable to watch the LIVE events with our program students (they are school all day) the On-Demand format was a great opportunity for our students."

**Homeschool Educator from Jersey City, NJ** "Hi thank you for having a virtual experience and would really like this to continue post pandemic. The speakers are awesome choices in various fields..."

Homeschool Educator from Philadelphia, PA "The topics are varied enough that everyone had a favorite and was able to get involved in. Using that asset, I was able to incorporate student led activities. Fantastic way to work on presentation skills, public speaking and leadership skills. The worksheets were a great resource."

**Educator from Corvallis, OR** "It was great to see the different presenters, it was nice that so many folks were young since I teach middle school."

**Educator from Santa Ana, CA** "X-STEM All Access is a great opportunity for students to see STEM professionals excited about their careers. The interviews are very interesting and discussions about how professionals face challenges and how they found a career they are passionate about is something you cannot get from a textbook."



Report Date: October 13, 2021