



WPAFB Educational Outreach



INSPIRING STUDENTS IN STEM

K-12 STEM ENQUIRER

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WOW! Teacher Workshops

The WOW! program, partnering with SOITA, offered two Teacher Workshops in July that focused on Aviation through Rocketry with 5th-8th grade teachers. The workshops worked with straw rockets, retrieval devices, and WOW! lessons: *Straw Rockets*, *Testing Pressure with Balloon Rockets*, *Stomp Rockets*, and *Testing Thrust with Paper Rockets*. The creativity, the learning, and the networking was fantastic.



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A workshop was also offered for K-4th grade teachers focusing on Wind, Weather, and Flight. Participants made Bernoulli airstrips, experimental aircraft/2 loop planes, and experimented with new WOW! activity worksheets like *Air Takes Up Space*, *Impossible Puff*, *Roto-Copters*, and *Paper Windsocks*. These activities will be in new lessons coming soon. In-person days with our teachers are a treat and the office looks forward to more free workshops in the future.



Join us next month...	
Rookie Camp	
Volunteer Spotlight	

New this year: WOW! will be offering several one-hour virtual workshops during the school year. Contact antoinette.callahan.ctr@us.af.mil for more information about registering for these.

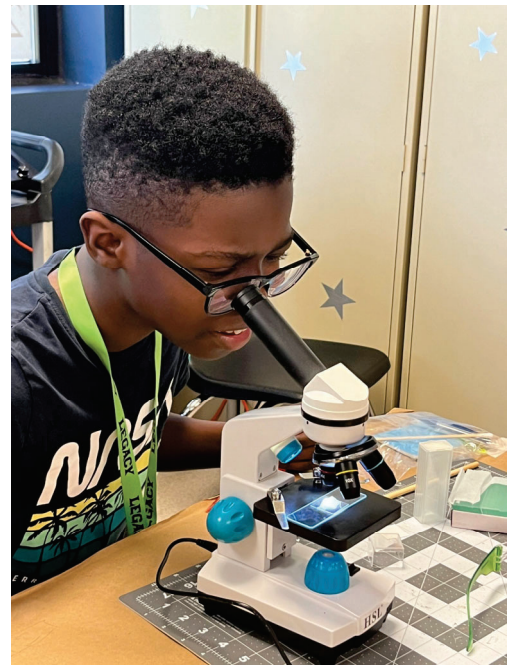
2024-2025 Teacher Workshops: WOW! is partner partnering with SOITA again for free one-day teacher workshops during the school year. Mark your calendars for Wednesday, October 2 and Tuesday, February 25. Watch our website for information about when registration will open.



LEGACY CRAFTSMAN CAMP

2024 LEGACY Craftsman camps were a success! Weeklong camps were held for 11 – 15 year old students at Wright-Patterson AFB, Hill AFB, the United States Air Force Academy, Eglin AFB, and the Air Force Office of Scientific Research.

Campers enjoyed STEM activities, demonstrations, and field trips while seeing how math and science apply to the world around us. Some of the highlights of the week are the weeklong activities including Egg Launch, Hydraulic Pneumatic Powered Devices, Boomilever, Sumo Robot, and Raspberry Pi.



LEGACY CRAFTSMAN CAMP PHOTOS



LEGACY CRAFTSMAN CAMP PHOTOS



LEGACY GOOD NEWS STORY



HEIDI KENNARD

Department of Air Force Leadership Experience Growing Apprenticeships Committed to Youth (LEGACY) Jr. Apprentice, Heidi, began LEGACY as a 13-year-old Craftsman camper. Heidi returned to Craftsman camps each summer and is currently in her second year as a Jr. Apprentice making this her 5th LEGACY summer.

Last summer, Heidi worked in the Air Force Uniform Office within the Air Force Life Cycle Management Center (AFLCMC/WNU) where all Air and Space Force uniforms are designed and prototyped. She worked with textile specialists and learned why the uniforms are made of certain materials, how to test the uniform materials, and why it's so important for the Airmen to wear these specific uniforms.

This summer, Heidi is working with the Rapid Development Integration Facility (RDIF). The focus of her internship this summer is rapid prototyping and in house production. "I've got to start and finish projects, working on every step, from designing on paper to holding the finish product in my hands," said Heidi. "RDIF works on a really wide range of projects, so being able to see how processes differ has been amazing," she added.

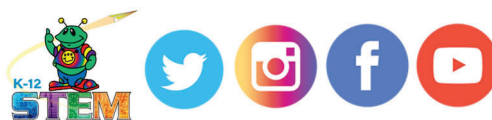
Heidi recently attended the Summer Textile Exploration Program (STEP) held at North Carolina State University within the Wilson College of Textiles. In this weeklong camp, she stayed in the dorms and worked with textiles professors to get an introduction to the college and field. At STEP, Heidi chose the Smart Textiles Engineering group (also offered were Polymer/Color Chemistry and Apparel Design). Her final project was to make a knitted hat with integrated circuits that would flash symbols. They also made t-shirts, toured Underwriters Laboratories, the Gregg Museum of Art and Design, and learned more about scholarships, admissions, and student life on campus. The best part about the camp was that she got to "try on" the college for a week. "It was a great way to learn about and experience the environment and classes before you fully commit to attending after graduation," said Heidi.

After high school, she plans to attend Purdue University to major in materials science and engineering. Heidi hopes to work with NASA or another space organization to help develop space suits. She would like to focus on textiles and their unique properties and how they can be utilized for space.

Heidi has played tennis for 10 years and will be a senior on her high school team this season. She is the Student Council President, a member of the National Honor Society, and a Dayton Chief Science Officer, where she advocates for the student voice and innovation in her community.

"The best part of LEGACY to me is all the people I've met through it. The other LEGACY students are awesome and I'm good friends with many of them. It's always interesting to talk with each other about work and what we are all working on," said Heidi. She has enjoyed working with her mentors and has found her work very rewarding and fun. "Getting to network with very cool people that want to help and support us is definitely the best part," she added.

Keep up the great work Heidi and good luck in your senior year!



GOODNEWS STORY CONTINUED

This is Bella, Heidi's dog, wearing one of the hats Heidi made (without the circuits so she didn't have a chance to chew on them).



This is where we spent a lot of time learning about textiles and how they are used for firefighting and police work.

EO Employee Spotlight

Name: Breanna Holliday

Title: Administrative Specialist, & Program Manager

Programs: Tutors, Mentors, Classroom Speakers, Virtual Career Speakers & Read Across America

Time with the EO office: Recently started

What are you most excited about in your new role?

I am most excited to get to know and support each EO program, and their Program Managers. Also, I'm excited to learn from each program and their processes to support, equip, and educate the next generation.

What is your favorite aspect of working with students in STEM?

My favorite aspect of working with students in STEM within my time so far is to see students find a love and passion for the unique talents and gifts each student gets to grow within the support and mentor-ship of the programs.

What goal do you have as you settle into your new role?

My goal as I settle in my role is to continue the standards of excellence and integrity I've come to find at the heart of each program and their Program Managers. I also hope to continue in the steps of each Administrative Specialist before me, taking the bar of efficiency of system processes even further, expanding exposure to our educational community, and continu-ing to support the EO division as a whole.

If you had one superpower, what would it be and why?

If I had a superpower, it would be to make others feel seen and valued because it truly makes a difference when you look to understand a person. I've been on the receiving end of others doing so with me and it's changed my life for the better.

