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K-12 STEM ENQUIRER

LEGACY CRAFTSMAN CAMP

LEGACY kicked off this month with 360 students in the Craftsman Camps at Wright-Patterson AFB, Eglin AFB, Robins AFB, USAFA, and Hill AFB! 11-15 year old students participated in hands-on STEM activities including working with Rube Goldberg designs, Raspberry Pi, mBots, and much more! One student had this to say about the experience, "The LEGACY camp is really good and fun, too! You also get to learn new stuff while having fun and it gives you a taste of what college or high school is like!"

In This Issue...

	Pg.
LEGACY Craftsman Camp	1
SOITA	2
STARBASE Camp	3



...Join Us Next Month

- LEGACY Camps
- FLL Rookie Camp
- WOW!





The Wizards of Wright (WOW!) partnered with SOITA (Southwestern Ohio Instructional Technology Association) for teacher workshops in June. Teachers from 15 different districts in the area participated in the two-day workshops.

During the first workshop, "Put the WOW! into Your STEM Lessons," participants learned new ways to incorporate STEM into their classrooms using materials like Cubelets, littleBits, and Ozobots.

Activities were discussed that use WOW! circuitry kits while incorporating magnetism and electricity. Day two featured SOITA's Makey Makey Invention Literacy Workshop - a fun, hands-on learning experience that focused on invention literacy, making, and design thinking. Makey-Makey's are a great way to teach circuits and conductivity; allowing students to put their skills to use designing their own inventions!



The second workshop, "INNOVATION UNPLUGGED," focused on teachers interested in building a makerspace for their students, but struggle to find money in their budget. 3D printers and laser cutters are great but the maker movement is about so much more than items that are plugged in. During "INNOVATION UNPLUGGED," the principles at the core of the maker movement were discussed. Activities teachers can use were explored using low cost supplies and items they likely already own to create or add to their own makerspace.

We are already looking forward to next year's Teacher Workshops!



STARBASE Wright-Patt had an exciting week of STEM fun in the month of June, working with rising fifth and sixth graders who attended two-day STARBASE Aerospace summer camp sessions. Students spent their first day of camp at the National Museum of the US Air Force. In the morning, they learned about Newton's Laws of Motion, identified the parts of a model rocket, and assembled their own rocket. In the afternoon, students toured the Presidential Plane Gallery and Space Gallery with a tour guide, interacted with a wind tunnel to identify aerodynamic designs, and topped off the day with a motion-based outer space virtual-reality experience!

The second day of camp was action packed, starting with an on-base tour of the Wright-Patterson AFB Naval Medical Research Unit (NAMRU). Students were treated with a behind-the-scenes tour of current research projects, including a look at the legendary "Kraken" disorientation device. They interacted with research personnel who shared about the many career fields that collaborate to discover new technology to keep pilots healthy and safe. Students got to try on oxygen masks, peek into machinery, and ask questions.

After the NAMRU tour, students finished the afternoon at the STARBASE campus. They use the Engineering Design Process to design "Rover Bots" using Sphero rolling robots, and competed to see whose design survived the longest in "hostile" territory. Camp concluded with a "BANG" as students launched their rockets with the help of our local rocket expert, retired Col. Ron Stauffer!

