



STARBASE 2.0 Returns

STARBASE 2.0 Wright-Patt Returns

STARBASE Wright-Patt is continuing its partnership with Spinning Hills Middle School as it begins its third school year of the 2.0 program. Four teams with eight students and three mentors each have met four times during the months of October and November.

The program has expanded to include a variety of STEM-related activities such as engineering a toothpick bridge, building Computer Aided Designed derby cars, partnering with

a rocket club, and many other mind-engaging projects. The meetings are every other Wednesday, from October through May.

October Meetings: Magnets and Motors

In the month of October, STARBASE 2.0 teams were given the opportunity to learn the science behind magnets and motors. A WPAFB Educational Outreach Program Wizards of Wright (W.O.W.) instructor, Robert Gemin, brought an array of hands on activities for the students and mentors to explore and analyze.

As a follow-up, mentors led students in constructing Aluminum Can Motors. By following step by step instructions, students

came away with a working motor to make the connection to what they had previously learned.

November Meetings: Field Trip to Wright-Patterson Air Force Base

An important aspect of STEM education is seeing the application of Science, Technology, Engineering and Math in real-world settings. The teams of STARBASE 2.0 saw this first hand at the WPAFB Air Force Research Laboratory (AFRL). The Scanning Electron Microscope for Educators (SEMEDS) experience is part of the WPAFB Educational Outreach Program that brings together STEM professionals and local students.

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Contact Me:
Kim Egbert
Mentor Coordinator
937-255-1575**



To begin the visit, teams were briefed about the mechanics of the microscope and examples of what they would view using this high tech equipment. Small groups were formed to allow students multiple manipulations to see objects magnified thousands of times.

As a memento of the visit, teams were given either heat generated or electronic versions of images they focused upon and captured.



Upcoming Meetings

Teams have begun research of the structure and history of bridges. Using this and other resources, teams will design, build, and test bridges constructed of toothpicks and glue. The “construction companies” will be required to meet the building codes and stay within a given budget. Bridges will be tested and awarded according to design and strength in a future meeting.

STARBASE 2.0 Robotics

The STARBASE 2.0 Wright-Patt program has expanded! The program, which continues its 3rd year as an after-school mentoring program for 6th grade students at Spinning Hills Middle School, now includes 7th and 8th grade students at Mad River Middle School. Former STARBASE 2.0 students were invited to join one of two FIRST LEGO League (FLL) Robotics teams.



Once the quota of ten students per team was met, the students and their coaches began practicing twice a week after school.

The coaches include two Mad River Middle School science teachers, one parent, and two STEM professionals from Wright-Patterson Air Force Base. The teams, the Cyber Chiefs and The Hammer-



heads, will be attending a regional FLL competition at Central State University on December 10. The competition will include autonomous robotic tasks, a team-building exercise, and a project presentation. All activities focus on food and food safety.

Meet the Returning Mentors

STARBASE 2.0 Wright-Patt has six returning mentors between the two programs. Below are the mentors and the teams they represent.



Jody “Shutterbug” McCurdy (Navy Blue Angels) is a 3rd year mentor and a Spinning Hills Middle School Intervention Specialist.



Lindsey “Rock” Scaminace (Red Rocks on Jupiter) is a 3rd year mentor and a Spinning Hills Middle School 5th grade teacher.



Dan “MountainMan” Egbert (Spinning Green Lanterns) is a 2nd year mentor and a Xenia Community School 6th grade Math teacher.



Lt. Christopher “Norjak” Cooper (Dark Knights and Cyber Chiefs) is a 3rd year mentor and a 1st year STARBASE 2.0 FLL coach. He is a Software Systems Engineer at WPAFB.



Frank “Higgs” Chiodo (Dark Knights) is a 2nd year mentor and a University of Dayton Physics student.



Karen “Karemonki” Chick (The Hammer Heads) was a mentor last school year and is currently coaching one of the FLL. She is a recent Child Psychology graduate.