

Spangdahlem Middle School students receive practical skills demonstration

By Airman 1st Class Kyle Cope, / Published October 18, 2018

SPANGDAHLEM AIR BASE, Germany --

Spangdahlem Middle School students gained insight into how their applied technology course is used in career field applications by having an in-class demonstration, Oct. 16, 2018.

The demonstration was arranged and organized by Joy-Nicole Smith, Spangdahlem Middle School applied technology course teacher. The class had a demonstration of soldering, performed by U.S. Air Force Tech. Sgt. Thomas W. Pennington, 372 Training Squadron, Detachment 17 aerospace ground equipment instructor.

“Soldering is taking a component or wire and connecting it to another component or wire with a circuit board using a mixture of lead and tin,” Pennington said.

Smith was inspired to have the soldering demonstration performed in her class after she learned the skill this summer at the United States Naval Academy, located in Annapolis, Maryland.

“This past summer I attended the United States Naval Academy, Science, Technology, Engineering, and Math (STEM) training for DoDEA educators,” Smith said. “One of the skills they taught during that training was soldering. I was fascinated by the skill and thought it was applicable to what we are teaching. Demonstrating it was a way to introduce technical fields to the students.”

The 372 Training Squadron, Detachment 17 also would like to further partner with Smith’s class and demonstrate more skills in the future.

“We at the Det are willing to create a partnership with the school so we can show the students hands on application of what we teach and how it effects everything they can do in the future,” Pennington said. “I think today’s demonstration was a success and I am really proud that it came out the way it did. We gave the students attention the whole time and I think they all took something away from the lesson, that is important to me and that was important to Miss Smith. The whole reason we did this was for the kids.”

Soldering is not the only practical skill the students get to see demonstrated. Airmen from the 52nd Civil Engineer Squadron explosive ordinance disposal section also periodically visit Smith’s classroom and provide the students with insightful demonstrations.

When EOD visits the classroom they often bring in some of the robots they use in the field, 3D printers, radiation detectors, and generally discuss how their work and equipment keeps the children’s parents safe in a deployed environment, Smith said.

In additional, Smith is also searching for a cybersecurity expert who can share an overview of the cybersecurity world with her class.

“Cybersecurity is huge right now, that is a battlefield itself,” Smith said. “We always think physical battlefields, but right now when it comes to the security of our online material we have people in the background fighting for that and making sure information is secure. I would really like to have someone in the classroom demonstrate cybersecurity and the applications of programming for keeping us safe.”

For Smith the classroom is rewarding because she is able to facilitate a strong learning environment with students who are open to learning new things in new ways.

“The part I love about this class is that the students have freedom, they can explore, they can make mistakes and learn from them. The students at Spangdahlem Middle School are amazing.”



PHOTO DETAILS / DOWNLOAD HI-RES

U.S. Air Force Tech. Sgt. Thomas Pennington, 372nd Training Squadron auxiliary ground equipment instructor, talks with Spangdahlem Middle School's Applied Technology class at Spangdahlem Air Base, Germany, Oct. 16, 2018. The purpose of the visit is to show students the real-world application of skills and knowledge they are learning in the classroom. (U.S. Air Force photo by Airman 1st Class Branden Rae)





[PHOTO DETAILS](#) / [DOWNLOAD HI-RES](#)

U.S. Air Force Tech. Sgt. Thomas Pennington, 372nd Training Squadron auxiliary ground equipment instructor, talks with Spangdahlem Middle School's Applied Technology class at Spangdahlem Air Base, Germany, Oct. 16, 2018. Pennington explains the importance of wearing safety glasses and using other safety measures during the soldering process to students. (U.S. Air Force photo by Airman 1st Class Branden Rae)



[PHOTO DETAILS](#) / [DOWNLOAD HI-RES](#)

U.S. Air Force Tech. Sgt. Thomas Pennington, 372nd Training Squadron auxiliary ground equipment instructor, demonstrates soldering basics with Spangdahlem Middle School's Applied Technology class at Spangdahlem Air Base, Germany, Oct. 16, 2018. Soldering involves melting a filler metal into joints combining the components to the computer chip board. (U.S. Air Force photo by Airman 1st Class Branden Rae)



[PHOTO DETAILS](#) / [DOWNLOAD HI-RES](#)

U.S. Air Force Tech. Sgt. Thomas Pennington, 372nd Training Squadron auxiliary ground equipment instructor, shows a computer chip board to students at Spangdahlem Middle School's Applied Technology class at Spangdahlem Air Base, Germany, Oct. 16, 2018. Pennington explains how a computer chip board works and how components will be placed on the board to make it functional. (U.S. Air Force photo by Airman 1st Class Branden Rae)