

## STEM Grants Having A Successful Impact



## **Summary**

The Air & Space Forces Association, Wright Memorial Chapter (AFA WMC), supports STEM education that impacts individual development, workforce readiness, and national progress. Encouraging STEM education at the K-12 level fosters a pipeline of future scientists, engineers, and inventors who contribute to technological advancements and economic prosperity. Our targeted support ensures that students of all backgrounds have the chance to develop skills that lead to upward mobility and lifelong success.

In the following article, Carl "Shof" Shofner, AFA WMC's VP for Aerospace Education, chronicles his visit to the Xenia school district and how they used the STEM grant we provided – and it's a pretty compelling story of how a \$1,000 grant can have such a major impact.

These grants would not be possible without the amazing support of our corporate and AFA WMC corporate community sponsors – an exceptional group of businesses listed on our AFA WMC Website.

Enjoy!

## STEM Grants - Having a Positive Impact

by Carl "Shof" Shofner

Xenia showed me that their STEM program runs elementary to high school. Tara Palmer, the Director of Curriculum & Instruction for Xenia Community Schools, met me at Shawnee Elementary to start my day. Through Tara I learned a number of ways WMC212 can continue to support Xenia schools. One option may be to help them replace damaged drones like you'll see later in this article.





Our first stop was the gym where 4<sup>th</sup> graders were coding their drones through take-off, flying and landing on precise location routines. There were about 10 teams of 3 each, pilot, maintainer and field engineer, each with dedicated roles. During my time with them I watched them progress through simple take-off and landing through flyout. And remember, these teams were each using block coding

to design their routines and the times required to precisely hit a spot. I think I did a pretty good job capturing the drones in flight!

At the middle school level we toured multiple classes to include the computer science lab, and air and space flight class. The teacher was trying to build her own wind tunnel! Our last stop was in the robotics class (picture below and students cropped out since they did not have media releases) where I observed the teams building a robot. What struck me about this visit was how the teacher interacted with a student who was at a roadblock. His response "use your team to help you figure it out." A very gentle admonition that he wasn't going to bail her out that easy.





I also spent time with the JROTC unit at the High School. As the picture shows they spend time exploring with rockets and other aerodynamic bodies. Last year the JROTC used some of WMC212's funds to study aerodynamics and then experience flight in the IFLY experience in Mason. The JROTC unit is robust and growing.

Many thanks to Tara for her time to escort me around and showcase how AFA WMC's STEM grant made a difference!!