

Air and Space Forces Association Chapter Aerospace/STEM Teacher of the Year

Nomination for Susan J. "Janell" Cunningham

In my 26 years of teaching experience, I have encountered many things that have brought wisdom to my students in support of aerospace-related STEM activities.

I have been a teacher at Stewart Middle Magnet School for the past 7 years. Since my tenure at Stewart, I have been involved with the John Glenn Top Gun Academy program under the guidance of the founder, Lynn McDaniel. This Academy is open to high-performing, STEM students who have an interest in aerospace who apply and interview to be accepted.

The John Glenn Top Gun Academy has allowed me to support student learning in ways that I would not find at any other school. Annually, I have taken my students to Kennedy Space Center for an overnight field trip to the visitor center. I have helped students collaborate with NASA Engineers, Air and Space Force personnel, and MacDill AirForce Personnel. I had my students create instrumentation in my classroom that was taken to Kennedy Space Center, so that the instrumentation could be sent up in a weather balloon. I have also worked with students to program Sphero robots so they can manipulate variables on Martian soil.

With the help of Lynn McDaniel, I also work with outside organizations such as the Air & Space Forces Association, NASA Engineers, Women in Defense, and as well as with former students who now employed in STEM-related careers. I also work closely with the Great American Teach-In program, where students learn about careers in STEM-related fields from guest speakers in their classroom.

I love being a science educator. Working at a STEM Magnet School such as Stewart Middle Magnet has allowed me the privilege to work with like-minded students. I am the teacher for an 8th grade high school credit course called Introduction to Physical Science. In this class, we cover forces, motion, and energy as it relates to aerospace. These activities help students participate in simulated space flights in our flight simulation lab here at Stewart as well as in simulations at Kennedy Space Center. Students in my classes complete twice weekly lab activities and work in groups where they collaborate and work together to solve STEM-related problems which in turn, will prepare them for their endeavors in university studies.

As I engage students in STEM-related activities, it is important to me to keep lines of communication open between all stakeholders. I use applications like Remind, and Google Voice, where I communicate with both parents and students via text messaging about class activities and needs.

On a more personal note, I really love teaching, more specifically, teaching at my school. I enjoy it so much that I drive 50 miles roundtrip daily just to be able to be part of the innovative curriculum at Stewart. I am proud to be teaching the highest level of science that the school offers as well as being the subject area leader for science. I love seeing my students expand on

their expertise and interests because of their continued involvement in extracurricular activities like the John Glenn Top Gun Academy, the Student Astronaut Challenge, and the CyberPatriot Club. I enjoy being part of my students' STEM journey in both a curricular and extracurricular role and watching them tie it all together.