



STEM SPOTLIGHT

MOLLY PLYLER

**Director of STEM &
Computer Science**
Jackson-Madison
County School System



FREED-HARDEMAN UNIVERSITY - BBA IN AGRIBUSINESS AND
MINOR IN BIOLOGY FREED-HARDEMAN UNIVERSITY - M.ED.
IN CURRICULUM & INSTRUCTION UNION UNIVERSITY - ED.S.
IN INSTRUCTIONAL LEADERSHIP UNION UNIVERSITY - ED.D.
EDUCATIONAL LEADERSHIP

WHAT WAS THE BIGGEST INFLUENCE IN YOUR SELECTION OF MAJOR/CAREER?

My high school Biology teacher, love of the outdoors, and desire to support environmentally friendly practices influenced my studies as an undergraduate. Afterward, I had an opportunity to move to China to teach conversational English at a Banking and Finance College. It was there that I fell in love with teaching and the impact a teacher has on the trajectory of their students' lives.

IF YOU COULD GO BACK TO HIGH SCHOOL AND SELECT ANY ELECTIVE COURSE TO TAKE THAT WOULD HAVE BETTER PREPARED YOU FOR COLLEGE, WHAT WOULD IT BE?

I wish I had taken advantage of the work-based learning opportunities offered at my high school. As a student, I focused on academics and taking courses that prepared me for college. But a work-based learning placement, like an internship, would have better prepared me for life away from home as a college student.

WHAT IS YOUR FAVORITE ASPECT OF YOUR JOB?

I love the work I get to do in our district's Innovation Department. Every day, we are challenged to re-image time, space, modes of learning, and partnerships affiliated with our schools. This allows us to bring meaningful and engaging opportunities to our students and faculty so school becomes a place of new adventures and dreaming BIG!

HOW DO YOU/YOUR COMPANY MAKE A POSITIVE IMPACT ON SOCIETY/OUR COMMUNITY?

One of the ways my department positively impacts our community is through our emphasis on computer science and robotics. Currently, Tennessee has over 10,000 open computing jobs. There is a huge opportunity for students to work in the tech sector, and you can get there with or without a 4-year college degree. The more we train our students to understand computational thought processes and technical skills in areas such as robotics, mechatronics, engineering, or computer programming, the more likely students will have fulfilling, high-wage careers that can impact their families for generations to come.



WHAT IS THE MOST INTERESTING THING YOU HAVE BEEN ABLE TO DO IN YOUR CAREER?

I am grateful to have had so many exciting opportunities throughout my career. When I taught Biology, I was able to do my Molecular Biology training at Princeton University. We literally ate lunch with Nobel laureates. While at the CO, I helped design computer science teacher training, the first in West TN, and conducted teacher and student workshops in Appalachian communities. We also organized trips to Silicon Valley for high school students to visit tech companies such as Google, LinkedIn, and Pivotal Labs. As a robotics coach, my middle school students were the Tennessee VEX IQ Robotics State Champions for two back-to-back years. With my work at Code.org, I helped the curriculum team develop CS-integrated activities and lesson plans that teachers and students use worldwide. In my current role with the Jackson-Madison County School System, we brought back the love of teaching for many, encouraging our teachers to dream big and find professional learning inspiration trips they could take as we came out of the pandemic. Plus, our department got to fly in a black hawk helicopter with open doors. That was an amazing experience!



WHAT ADVICE WOULD YOU LIKE TO SHARE WITH K-12 STUDENTS WHO ARE CONSIDERING YOUR PROFESSION?

Working in K-12 education, there are many days when your mantra must be "see the rubber band, be the rubber band" due to the need to be flexible and adaptable for whatever comes your way. However, anything worth doing is going to have challenges. Not only do those challenges refine you as a professional and a person, but they allow you to better serve the students, colleagues, and families in your school community. There is no greater task or rewarding work than to know you played a small part in helping students cultivate their talents and find their path in the world.

