



Mr. James Conaway

Bartow County Schools, Red Top Middle School

“Coding in the Garden”

STEM Classroom Lesson

Mr. Conaway began by introducing his students to coding through a game-based learning program. Then, he challenged them to create their own projects using Arduino products. Students built moisture sensors to use in the school’s garden to prevent overwatering and save the school money. This has expanded to include the Farmbot.io where students are currently investigating electric fence technology to safely eliminate weeds using a small amount of electricity.

Impact Initiative

In 2020, Mr. Conaway founded and coached an after-school LEGO Robotics Team for his school. This year, he expanded and added another team. In 2022, he plans to add another team for underwater robotics that will be competing against Georgia Southern in Savannah. Mr. Conaway has become an exemplar teacher in robotics not only for his school but for his district as well.