Red Clay students solve real-world STEM problems

Editor's Note: The following item was written by Pati Nash, Director of Communications for the Red Clay Consolidated School District.

The Red Clay STEM Summer Enrichment Program has more than quadrupled in size since its inception, and is meeting its goal of enrolling more girls and special education students.

Currently, 367 students have enrolled for at least one of the three weeklong sessions that began on July 10 at Conrad Schools of Science. In 2011, 60 students were enrolled.

"Every year the program has grown," said Red Clay Science Coordinator Eddie McGrath, who manages the program. "And we have increased the program's availability."

Launched in the summer of 2011, the STEM program was created to provide participating students the experience of applying the principles of STEM (**S**cience, **T**echnology, **E**ngineering, and **M**athematics) to solve real-world problems in a carefully structured environment.

The theme of the program is "Making the World a Better Place," and students are not only encouraged to consider a career in the sciences, they are inspired to use science as way to solve the world's problems.

Participating students work with technology, math and science teachers to design, create, and test a variety of engineering projects, such as bridges, mini-robots, and vehicles. They then present these projects in a public forum, explaining in detail the processes they used to create their final products.

Students develop team-building, planning and communication skills as they prepare to meet the rigor of the high school STEM expectations that will challenge them in upcoming years.

Currently, the program enrolls 43 percent girls and 6.5 percent students with identified disabilities.

McGrath said that more girls have enrolled in the program since adopting the new theme two years ago, and that he has also made an effort to have more female educators teach sessions. This year, 19 of the 31 teachers are female.

"Research has shown that students are more likely to go into STEM careers if they see someone that looks like them who is successful in STEM careers," said McGrath. "We actively encourage girls and students of color to enroll. Our program is designed for students who are curious about the sciences. It allows them to explore a science without the onus of grades."