Students in the after care at St. Vincent's School in Dutzow were sprawled out on the gym floor working with robots they had built when their teacher walked in. They immediately began cheering.

"He's here, he's here," a couple of students shouted.

Andrew Amburgey, Marthasville, smiled sheepishly at the reception.

At 15 years old, Amburgey isn't a typical teacher for these kids, but then neither are his lessons. Amburgey is teaching the students, who range in grades from kindergarten to fifth grade, about building robots with Robotix - a motorized, modular building system.

It looks a lot like playing, and judging by the smiles and excitement on the kids' faces, it must feel that way too. But there's actually a lot of learning going on, said Amburgey, who has been "playing" and competing with motorized robots himself for several years.

He currently is a member of the River City Robots, a FIRST Robotics team out of O'Fallon, and before that he competed in FIRST LEGO League events, which means any child from any 4-H club in Warren County can participate. Amburgey is a member of Dynomite 4-H, which meets the second Tuesday of the month at the St. Ignatius Church basement in Concord Hill.

Last spring Amburgey offered the six-week workshop for students in the Y's School-Aged Child Care program at Marthasville Elementary. This spring he is working with St. Vincent's after-care program.

Amburgey comes in after school once a week. He spends about an hour teaching the students a lesson and letting them show him what they've learned.

This week the students, working in small groups, showed Amburgey how the robots they built could push a tennis ball outside a circle on the gym floor. Then he had them play a game of "robot soccer."

After all of the excitement, he brought the kids together for a lesson on levers. Other topics have been on the scientific method, brainstorming and sensors.

"The idea is to get kids excited about math, science and technology," said Amburgey, "and to spark the kids' interest, to let them know these things are out there and available.

"It's important to teach them these things early because it helps them learn scientific concepts later in life," he added. "They may not grow up to be an engineer, but they've learned about things that they will use in other ways, too."

Dea Roesner, an art teacher at St. Vincent's who runs the after care program with Gina Gratza, said the students are loving the workshop. About 20 boys and girls participate.

Amburgey uses Robotix kits that were purchased with grant money for the Warren County 4-H Robotics project. The first kit was purchased by the Marthasville Chamber of Commerce.

The kits are designed for beginners and include a binder that spells out lesson plans and ideas for Amburgey to follow. In that way, the workshops are helping him improve skills in public speaking, communication, teaching and planning, said Nancy Amburgey, Andrew's mom.

"It's a win-win situation," she remarked. "He learns so much from having to prepare and teach."

Amburgey, who is homeschooled, is a sophomore.

He said it isn't hard to teach the kids about the Robotix. Their interest and excitement in the concept helps.

"They tend to soak it up really easily," he said. "Once they get the basic idea, they do it almost on their own."

Amburgey has a couple of years of high school left before he goes off to college. His goal is to study mechanical and electrical engineering - probably at Missouri University of Science and Technology in Rolla - to get a job working on robots for the military.

Amburgey is the son of Nancy and Lee Amburgey, Marthasville.

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Reader Comments

Added: Saturday May 08, 2010 at 06:47 PM EST

What a wonderful Teen. His Parents have to be very proud. They will have a great MOTHERS DAY & FATHERS DAY.

SCHMIDT, MARTHASVILLE, MO.