

# Testing Their Metal

Students from Coventry's Career Center and Feinstein Middle School compete in state contest

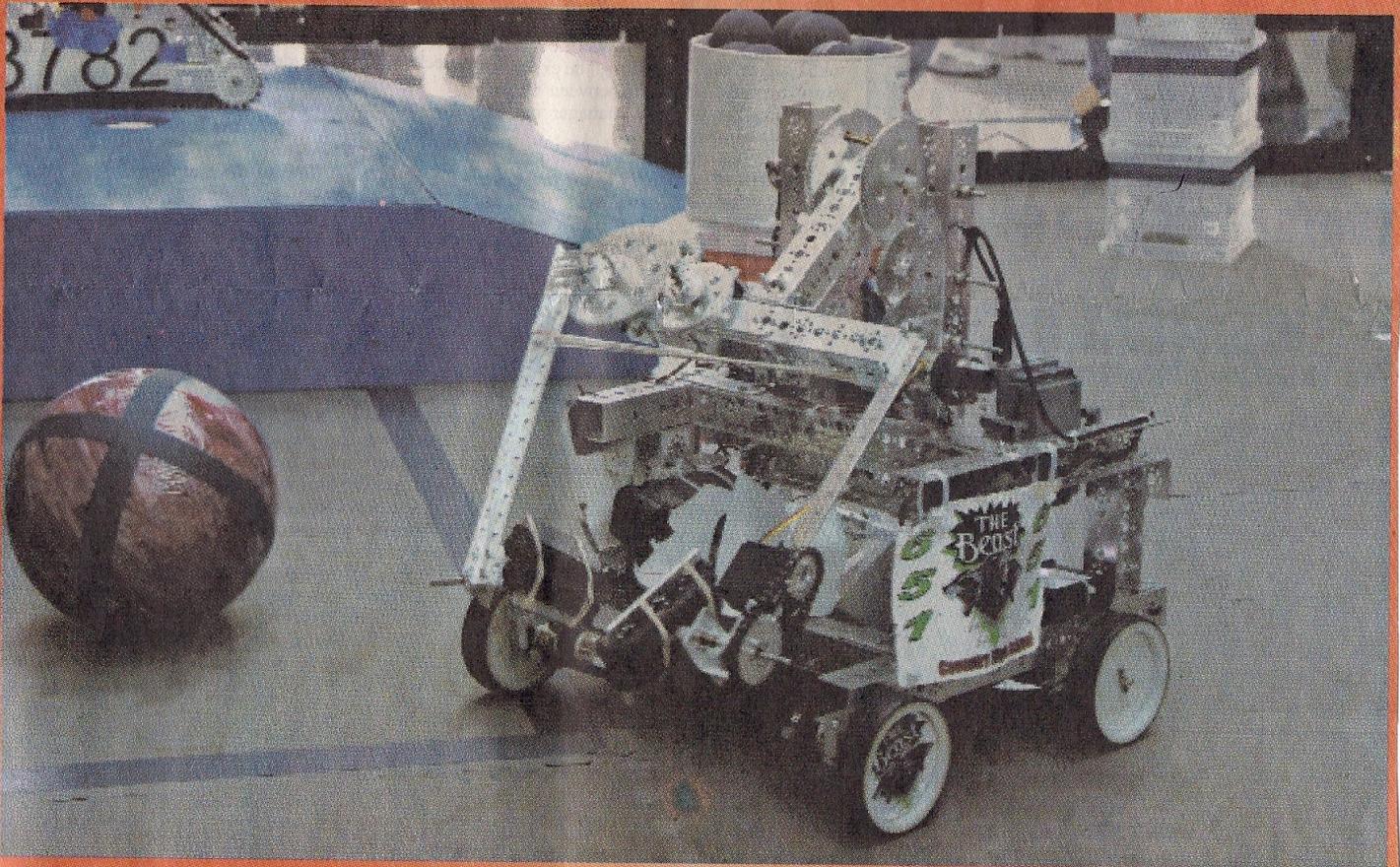


Photo: James Bessette

"The Beast," Coventry High's entry in this year's robotics competition, helped the school place in the top five of 33 schools represented there last Saturday.

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COVENTRY — The robotics clubs at Coventry's middle and high schools have kept busy the last couple of weeks. Alan Shawn Feinstein Middle School students participated in the state-wide competition on Jan. 14 and students at Coventry High School competed on Feb. 4.

Rebecca Henderson, one of the robotics coaches at Feinstein, explained that what stood out about

Coventry's competitors was not the score, but the teamwork that the students employed.

"Our group really made sure that everyone had an active role in it, whether programming or testing on the mat. They were really good about that," she said.

Scott Tennent, another robotics coach, agreed.

"Other teams had only two people up at the table but we switched groups every time," he said.

"They all listened to each other and

gave each other a chance. In teams, sometimes you see someone sitting back but they made sure everyone had a part," added Henderson.

The middle school teams were scored on three different sections: a presentation, the teams' robots and their teamwork. The Robotics Club at Alan Shawn Feinstein did not win at the competition; however, Henderson felt their efforts and improvement were both worth noting.

On the robot portion of the challenge, the students improved their per-

sonal scores at each of their three opportunities, she explained.

"And now, they are continuing to still work on the challenge even though it's still over. They still want to better themselves and see how they can do better," she said.

Alec Bellotti, 13, and Trevor Campbell, 13, explained how their robot worked during the competition. The team had created a robot, constructed of legos, to perform through a series of challenges on a mat.

**ROBOTICS, 4-A**

# Local students compete in robotics

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"We have to start out in the main base area and send it to different places on the mat. The challenge we are working on right now is to get it to a wall so we have to program it to get it around the obstacles and bring it to the east wall without colliding it with anything," explained Campbell.

"It's fun. Throughout the course of three years, I've learned how this can also be applied to real life," he added. "My dad works at an insurance company and what he does, is make programs that are similar to this."

The robotics program that the school uses can be adjusted, from simple to complex, in order to challenge students at any grade level, according to Tennent.

"This material is used all the way through master's programs, it's the baseline for an engineering program," agreed Henderson. "You can make the projects as geared down or up as you want them to be, based on the students you are working with."

The research and hands-on experience is good preparation for the students, she said. For example, Bellotti and Campbell were calculating how to program the robot to drive a specific distance on the mat on Tuesday, Jan. 31.

"It's not just plugging in the icons at a computer screen," she said.

The group's presentation portion of the competition was a food factor challenge. Victoria Kaplun, 12, Ciana Martino, 12, and Allegra Richards, 12, explained that as a class, they decided to do the project on the transportation and current procedures for eggs.

"We found that eggs, either when packaged or when put in the trucks, were not handled properly. Even on a farm, they wouldn't be cleaned all the way and they would come to the stores contaminated and dirty, so when you took it home it was already contaminated and you could get sick," explained Kaplun.

So the students decided to invent a machine that would sanitize the eggs.

"We talked to Stop and Shop about their eggs and got some responses about their egg farm. With that, we had some ideas and came up with an invention that, if we tried to make, would be like a mini-carwash," Kaplun explained. "You would put the egg in and it was steam it with hot water so it would kill the bacteria but not cook the egg."

The students researched and invented the project in theory but did not actually construct the machine, they explained.

At the competition, the students presented this invention before a panel of judges. Kaplun, Martino and Richards said that this portion of the challenge did not go as planned when their laptop's battery died.

"We had done a newscast skit. There was a live part with the news anchors and field reports that were prerecorded on the laptop," said Kaplun. "When the laptop died, we had about 30 seconds so we kind of improvised our presentation."

Martino said that "It was kind of good because we said things that we wouldn't have [otherwise] mentioned."

"They did a great job," said



Submitted Photo

## Feinstein's Trevor Campbell keeps an eye out while teammates compete.

Henderson. "And even more exceptional, on that day, was how they worked together and performed. In my opinion, and I've been doing this for eight years, they did outstanding."

Jamie Cotnoir, the coach for the Coventry High School robotics team, was equally as proud.

"I only had two of them that were on the team last year, and the other guys were all new to it, so they really did well. The robot came out awesome," he said.

At the high school level, the teams were scored based only on the robot they constructed. Cotnoir explained that each year, a new challenge is given to the high schools and the students are required to design and build a

robot within those perimeters.

This year's challenge asked for a robot that could scoop racket balls into a mini-milk crate, have the ability to manipulate the milk crate and, at the end, hold the milk crate as high as it could. Teams were given points based on these factors.

Coventry High School placed 5th of the 33 schools that competed.

To prepare, the students were split into two teams to design, build and program the robot. The robot they created was 18 inches cubed but grew when it eventually lifted the milk crate at the end of the challenge. John Lomi, a junior, programmed the robot.

The students explained that there were two portions of the challenge. The first is prepared and programmed ahead of time and the second is a two-minute portion controlled by the students.

"This year's challenge was pretty difficult. Even the concept of programming, designing and building something that can lift things, turn things around and scoop up materials, it was quite a bit challenge to put everything together in a manner that produced great results," explained Joseph Ericson, a senior.

"I thought it was difficult but definitely a lot of fun. It teaches you a lot about things about how to manage your time and manage the parts you have," said Alex Borges, a junior.

When asked if they enjoyed participating on the robotics team, all of the students agreed that they did, many adding that they plan to pursue a degree in college in robotics or engineering.