



JASON FARMER / STAFF PHOTOGRAPHER

North Pocono's Josh Winslow, left, and Mike Parola prepare to release their electric vehicle during the Science Olympiad Invitational at North Pocono High School.

MIND GAMES

About 200 students from 14 school districts compete in Science Olympiad at North Pocono High School.

BY KYLE WIND
STAFF WRITER

COVINGTON TWP. — The small electric vehicle zipped across the North Pocono High School gymnasium floor, then abruptly stopped.

Ari Wisenburn, a junior from the Abington Heights Science Olympiad team, demonstrated Saturday one of her group's creations for a regional competition that drew about 200 students from 14 school districts.

"The small gear meshes with the large gear on the axle to increase torque," the Clarks Summit resident explained. "We measure our distance using a threaded rod. As you spin it, you can see the wing nut goes closer and closer to the limit switch, which stops the motor. It cuts the circuit and provides a manual break."

The design was her team's solution to one of the competition's 23 challenges: Create a self-propelled vehicle that will travel a certain distance, then stop. The inventions were judged based on how quickly they cover the distance and how far they are from the target when they stop.

The students, who wore

"I found my love for science."

Kelly Bollard
2015 North Pocono High School graduate and Science Olympiad volunteer

T-shirts printed with the motto "perform random acts of science," found out Saturday their cars had to drive 10 meters.

Before the event, the Abington Heights group alternatively considered using a computerized microcontroller to adjust the distance their vehicle travels but settled on the wing-nut approach — which Ari described as a more mechanical method.

Throughout the day, students competed in a variety of events, whether they were scattering pennies with robot arms, flying helicopters or pitting their knowledge and problem-solving skills against one another on written tests.

North Pocono seniors Michael Felins and Vincent Wojnar recalled placing mirrors to reflect a laser around barriers that judges set to a desired spot in one event and their team building a hovercraft that glides a fraction of an inch above a surface for another.

The hovercraft's base was

a square cut off an air-hockey table. It used computer fans as its propulsion system.

"It took us a long time to find the right design that would work for us," said Michael, of Madison Twp.

Mike Hricko, a technology education teacher at North Pocono High School, gets a thrill out of watching students working on the projects and getting excited about them.

"It makes me feel young and energized," the 30-year teacher said. "There's hope for the future — lots of it. ... This program takes kids from all walks of life, so to speak. You get the ones who are very, very intellectually on top. They can think it through — the problem solvers, the theorists. But it also takes the hands-on person. It's the marrying of the two groups that complement each other well."

Kelly Bollard, a 2015 graduate who volunteered to help run the North Pocono-hosted event, said she always wanted to be a chef before joining the school's Science Olympiad team, and the experience changed her trajectory.

"I found my love for science," said the pre-optometry major at Indiana University of Pennsylvania.

Contact the writer:
kwind@timeshamrock.com
@kwindTT on Twitter