Bright young minds go head-to-head at Science **Olympiad**



Over a thousand high school students put their skills to the test in competitions, such as robotics and bridge building.



(Photo: JASON MINTO/THE NEWS JOURNAL)

Dover High School seniors Rachel Mills and Zorana Ilic have been preparing for the Delaware Science Olympiad's bridge building competition since December.

They researched designs. They then built and tested three types of miniature bridges. Finally, they settled on a model that was strengthened by isosceles triangles and two different types of wood.

When it came time for the competition Saturday afternoon, they hooked a bucket to the bottom of their bridge and watched eagerly from behind their lab glasses as more and more sand was poured into the bucket.

When the bridge finally snapped under the weight, they were all smiles.

"That was awesome," Mills said, as the bucket of sand was weighed and their scores were officially recorded by the judges.

Mills and Ilic were two of the over one thousand students from 150 Delaware high schools who participated in the Delaware Science Olympiad.

Each year, the competition pits students against each other in all Science, Technology, Engineering and Math (STEM) disciplines – whether it be building a model of a genetic defect, maneuvering a robotic arm, racing electric cars or showing off their knowledge of forensics.

Delaware was one of the first two states to hold a Science Olympiad about 40 years ago. The idea has since grown nationwide, and the students who won Saturday can go on to compete in the national competition in May at the University of Wisconsin-Stout, according to Delaware director Gerald Poirier.



Protein modeling of sepiapterin reductase by Archmere Academy team A at the High School Division Science Olympiad Competition at Delaware State University. (Photo: JASON MINTO/THE NEWS JOURNAL)

On Saturday, the campus at Delaware State University in Dover came to life with some of Delaware's brightest young minds in the sciences.

Groups of students in the gymnasium huddled together wearing matching t-shirts with chemistry humor taglines, such as "Going for the Au (Gold)" and "Making bad chemistry jokes because all the good ones Argon."

Geoffrey Dresslar and Showvik Haque, both seniors at William Penn High School, were no different, wearing "May the Force Be With You" mathematical equation shirts.

The two competed in the robotic arm competition – an event in which students pre-build a robot claw that can pick up and drop dice and other items.

Dresslar said making the robot wasn't the hard part. He got permission to dismantle and rebuild another team's robot after a robotics championship last week.

The hard part for him and Haque was practicing to determine exactly how to maneuver the claw using game controllers. They spent days practicing and recording their results on a spreadsheet.

After the final test Saturday, Dresslar said, "Today was a little bit less than our average, but because we had a few really good rounds in practice, our average was skewed."

"We've done a lot better, but this is not our worst, by far," Haque said.



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Dresslar, showing off the fun side of the competition, said that if their robotics score placed them in the running for a medal, he would mount the robotic arm on a metal plate on his back and see if he could pick up the award with the arm.

Dresslar wasn't the only student hoping for a win Saturday.

Daisy Luck, a 16-year-old home school student from Newark, came for the second year in a row with 12 members of the Tri-State Home School group. She participated in the environmental science and ecology station, followed by astronomy and geological mapping.

Unlike the robotic arm, these events are done in the privacy of a classroom and are a more traditional type of exam.

"It's a lot of fun," Luck said. "It's always interesting."

Back in the crowded gymnasium, students cheered each other on.

Shaily Patel and Santoshi Kandula, both juniors at Newark Charter School, attempted to fly a small wooden airplane across the basketball court for the "Wright Stuff" competition.



Geoffrey Dressler (left) and Showvik Haque, both seniors at William Penn, compete in the robot arm portion of the High

The two admitted that they are not "building people."

"We are more into biology," Patel explained.

But, regardless, they wanted to branch out of their usual discipline so they ordered in advance a kit and built the plane according to the blueprint. They tested different rubber bands to ensure they wouldn't snap and lubricated the rubber band the night before the competition.

"It was fun to see our plane flying," Patel said.

Kandula said the Science Olympiad can be "stressful," but also a lot of fun.

"You truly learn, even if you don't win first place every time," Kandula said. "You can still apply what you learn to other school-related activities or college."

School Division Science
Olympiad Competition at
Delaware State University. (Photo:
JASON MINTO/THE NEWS
JOURNAL)

Luke Green, a junior at Salesianum School, said he also joined the competition for the first year in order to be prepared for college. He normally participates in volleyball and other athletic activities, but decided to try Science Olympiad.

Over the last few weeks, he has been juggling volleyball tryouts and preparing for the air trajectory competition. He created a device that drops two five-pound weights onto a kick ball. The blast of air from the kick ball pushes a ping pong ball through the air. Judges then measure the distance the ping pong traveled.

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Stephanie Ross a sophomore at MOT Charter School releases her vehicle to compete in the electric car event at the High School Division Science Olympiad Competition at Delaware State University. (Photo: JASON MINTO/THE NEWS JOURNAL)

Green originally used a two liter bottle for the air, but at the last minute switched to the kick ball.

"It went a lot better than I thought," he said about the swap.

His mother, Ann Green, of Oxford, Pennsylvania said she loves seeing him participate in something besides sports.

Ilic and Mills said that while the competition can heat up, it is also about having fun. Groups of students all over campus ate lunch together, played basketball outside and chatted as they walked from each competition location.

"You do the serious side of it, but then we go out there and play soccer, or last year we built a snow man," Mills said. "It's fun to hangout with all the other schools because even though it's stressful and it's competition, we are all still friends."

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