Student ideas are out of this world

By Jennifer Farnsworth
Our Towne Ballston Spa

Seventeen-year-old Senior Nick Garso began brainstorming for his science lab experiment the moment it was assigned to him. New to the Ballston Spa Central School District this year is the Spaceflight Experiment Program, a project that is providing students the opportunity to participate in experimental research very similar to what scientists around the world are working on. Thanks to GlobalFoundries’ support for the Innovation in Education program, students like Garso are able to expand their minds in ways they never thought possible.

“I don’t think I would have thought about things like ‘zero gravity’ in such depth if it wasn’t for this project,” said Garso.

Over 1,000 students in grades 5 through 12 are participating in the process of developing a proposal for the competition. Part of the process, especially in the high school classes, is to have groups of students work together to create a proposal that will be one of three selected and submitted to the National Center for Earth and Space Science Education for review. A national review team will then select one of the three experiments to be included on the final flight of the Space Shuttle Endeavour on February 27, 2011. District Science Curriculum Coordinator Diane Irwin said this particular program has been challenging to some student teams because of the scientific constraints that they face in designing their experiment. She said students are limited in the size of their experiment as well as the materials that they can choose to include.

“These are constraints similar to those that scientists face as they conduct research. Students have conducted background research into microgravity and utilized the scientific method to develop a proposal. Students have needed to demonstrate innovation, creativity, problem solving and perseverance. These 21st Century skills are very important to the innovation economy,” said Irwin.

Garso’s proposal is to see how an antibiotic against E.coli will work in space, with zero gravity. He said he is also learning to effectively put together a proposal. Freshman Alexis Davis, 14, said she chose to look to the bio-medical field, taking a specific look at how a strawberry seed and silly putty would fair with zero gravity.

“My goal is to see how they fall in space. I want to know if they would level out or fall onto each other. The project has my mind going and thinking more about zero gravity versus gravity than ever before,” said Davis.