

## Students explore new lab, STEM possibilities

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Anthony Edwards / Staff Photo Joey Scarborough, a student enrolled in Stafford Technical Center's STEM Academy, works on using a computer generated model and 3D printer to create a plastic version of a component used in an automotive engine on Monday. Once finished, the part will be tested in a real life application by the school's Automotive Technology program.

**The minds of students are buzzing with new ideas inside the walls of Rutland High School and Stafford Technical Center.**

Students at RHS and Stafford have each put their own personal spin on how they thrive while learning through STEM — Science Technology Engineering and Math — and Capstone programs.

Stafford is in week three of using its new technical lab, and students and teachers are beaming with not only pride but excitement at the space that now boasts enough room for the 19 students per course and their projects.

The room has new work tables on wheels and a computer classroom that has a massive interactive board. There is high-

tech equipment including three-dimensional printers that spit out functioning wrenches made of plastic.

It is also the home to the local robotics team and will be a community space for future events such as summer camps and presentations.

Fieh Chan, STEM director and outreach coordinator at Stafford Technical Center, is thrilled at the updated space that allows for a flexible work environment.

“It’s a wonderful experience for the students and the educators,” Chan said. “It’s upscale and will offer students more opportunities to learn.”

STEM student Amelia Kipphut said walking into the new lab was like Christmas morning.

“It’s so nice. We aren’t cramped at all, which allows us to focus and get our projects done more accurately and efficiently,” she said.

Kipphut is at Stafford from Fair Haven Union High School, exploring different fields of engineering.

“I figured that this program is a great opportunity, and my opportunities feel like they’ve expanded with this new area.”

Across the parking lot at RHS, students are also studying STEM programs and are enrolled in Capstone programs which focus on world and social studies.

The Capstone programs are designed to allow students to find a specific area in which they want to study, and then give students the flexibility to study that area in a less traditional sense.

Students and teachers work together to make guidelines for an independent study program.

RHS seniors are required to make their own website on their subjects studied and present their findings in a public, community setting to help educate about their topic.

The range of topics studied among the students vary greatly. One student is studying how to construct prosthetic limbs from a 3D printer. While another is analyzing the consequences of alcohol in youths across the globe.

While these intense projects are geared toward seniors as a way to help them prepare for college, underclassmen are also starting to take those steps.

Freshmen geometry classes are using computers to virtually redesign the school library.

Two seniors, Gabriella Elnicki and Molly Turgeon, are teaming up to learn all they can about the different consequences that premature babies often suffer from.

The two have an interest in neonatal care, and are approaching the topics from all angles.

They are researching not only long-term impact on babies, but also on parents.

“It’s so much more than just the children being born early and suffering through health issues,” Turgeon said. “Parents suffer too. They struggle with money and their own emotional trauma.”

Elnicki volunteers as a “baby cuddler,” someone who helps out at Rutland Regional Medical Center in the nursery.

She said she has always known she wants to work with infants, but that this program is strengthening that dream.

Both students have been spending more time at RRMC, shadowing nurses and doctors to get a more hands-on feel for the different jobs.

They recently were invited to visit Dartmouth-Hitchcock Medical Center in Lebanon, N.H., to further study premature babies and how to care for them.

“Not only will this set me apart when getting into college, but it is giving me the experience I need,” Turgeon said. “That’s the part I really care about.”

Other than the medical aspect, both girls are also focused on how to interact with the parents who may have a sick or premature baby.

“I’ve started to learn while shadowing that working with

screaming or very upset parents is all part of the job,” Elnicki said. “And everyone on a medical team works together to make sure that parents and baby are as healthy as they can be. It’s really inspiring and I would not have this knowledge or experience if not for this program.”

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