

# —Spartan STEAM Innovation Academy—

## Eblast

Spring 2019

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## Spring STEAM Students of the Month:

### Junior, Kailyn Jones



Kailyn is a second year STEAM student and has truly taken her projects and product presentations above and beyond. Kailyn is very organized, accountable for herself, and a true example of a STEAM student at WMRHS. Kailyn comes to school every day with a smile and positive outlook. In her latest project, she investigated the cause and neural impact of seizures. In order to synthesize her learning and to aid in communicating her findings to others, Kailyn explored different means of visualizing her project. She decided to create a 3D model with an integrated microprocessor to display brain waves under normal conditions and during a seizure. In the process, Kailyn learned about 3D printing, circuitry, microprocessors, and computer programming. Check out the video below to see her brain in

action!

## Freshman, Ashley Bean

Ashley is a first-year student at Spartan STEAM Innovation Academy and at WMRHS. As a freshman, Ashley has embraced the idea of owning her learning through in-depth studies into topics of interest. She is genuinely interested in helping others which is evident through her current deep dive into how different service animals can help students with disabilities. Ashley stands out because she isn't happy with "good enough," and she strives to make improvements every day. It's this type of thinking that will take Ashley far as she continues her learning in SSIA and at WMRHS.



## STEAM Teacher Spotlight: Mrs. LaBounty



Mrs. LaBounty is in her nineteenth year of teaching in this district and her eighth at WMRHS. She has an Associate's Degree in Child Care Administration, a Bachelor's Degree in Mathematics Education, and a Master's Degree in Literacy and Language Arts. Mrs. LaBounty looks forward to doing school in a different way because she can see the potential kids have to solve real-world problems in authentic ways when they can ask their own questions. Mrs. LaBounty believes in making positive connections with her students, and that her students are capable of achieving great things!

## Spartan STEAM Innovation Academy Video

Ellipses Entertainment came to SSIA to create our first WMRHS STEAM promotional video. This was the first time the student speakers have participated in this type of production, and they did great! Check it out at [this link](#).

## Valuing World Cultures: Country Conferences by Julia Zanes

During our Valuing World Cultured Unit in our STEAM program, we hosted Country Conferences to get ourselves ready for real-life debates, arguments, and public speaking. We spent a great deal of time preparing to discuss our global country issues and on Friday we had a round table discussion and shared opinions, facts, and ideas for our neighboring nations.

In the first couple of conferences, we talked about our beliefs and what we would do in certain situations such as gathering fresh water, or human rights. One of the neatest parts of this conference was the ability to present what we believe should happen in these real-life situations and develop our own solutions to problems. Some examples of these problems would be countries going through a water crisis, housing crisis (not having enough places for people to live), and high rates of pollution in the area.

I believe that by getting students together to open up in front of a group and talk about countries we are unfamiliar with was something incredible to conquer. By the end, we were able to talk about the country we have been researching as if we were citizens. Not only did we have the opportunity to open up and give our opinions and ideas in front of others, but we are also in charge of staying on top of our research about our new weekly topics. So, in the end, we had researched for our country conference and learned to use the knowledge and facts for our UN Summative and country research. I really enjoyed this project.

## FIRST Robotics, Spring Update



The Spartan FIRST robotics team has two regional competitions under its belt and is ready to clean up the workshop and begin prepping for the 2020 build season. This year was our rookie year and we made some amazing connections, met some truly extraordinary people and benefited greatly from the generous outpouring of community support. The robotics team

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spent 6 weeks building furiously for their first event. During our February break, we competed in our first regional event at Salem High School. There were over 40 teams competing from high schools all over New England. The team was able to make connections with high school students from other teams to improve their robot with suggestions from their peers

In March the team spent a full weekend at the Whittemore Center at UNH for their second FIRST event. Their robot was able to compete at a more rapid pace thanks to building help from mentors and fellow competitors. The team was able to show off fully functioning pneumatics and an impressive 8-foot riser. At the end of the event, SPARTAN Robotics took home the Rookie Inspiration Award. This is a truly incredible achievement and Sparta has earned its place in the FIRST robotics circuit. Team coaches Mr. Hubacz and Mr. Grima could not be prouder of the hard work and dedication from this tremendous group of students.

## United Nations Summative: Student Reflection by Kailyn Jones

During our UN summative, we each chose a topic based on our interests and spent one full day conducting research as a group and working together to create a solution to our global problem. I chose to address the global water crisis. I personally feel that learning about this topic and working with others who shared a similar interest to solve this problem was very helpful. By putting our heads together and focusing on the task given to us, we were all able to come up with a solution that would work in all of our countries.

Coming up with a solution that would fit all of our countries was a long process. We couldn't accomplish this task quickly and it took a long time and a great deal of effort to fit every country's needs into the solution. I must say, putting all of our heads together and the new knowledge we gained from our individual countries, and those at the table with us, gave us the solution we needed. As a group, we went from having no type of solution to one that we believed would solve the water crisis in various countries and we were very proud to present.

At the end of the project we had to pitch our ideas to our model UN, so we presented to our entire STEAM program in our school's seminar presentation room. Presenting to the whole UN was a little nerve-wracking, but knowing that this solution would work in our countries gave us hope that this would not be vetoed. Due to our hard work and group efforts, we were approved to move forward with our idea by the UN.

## Our Final Event-Unlocking the Mysteries of the Universe:

As we STEAM toward the end of the school year, students are spending their final weeks taking a deep dive into their own personal mysteries. As a kickoff event, STEAM teachers took groups of students and spent a full school day exploring their mysteries with their investigative team of STEAM students. During the first block of the day, students assisted the teacher with the Questioning Formulation Technique or QFT. From the questions, developed groups began to explore and solve the mystery at hand. One group explored the existence of bigfoot in the White Mountains, another the mystery of time and how it passes differently as we age, and the other group focused on the development and eventual deterioration of the human brain. After two full blocks of research, questioning, exploration, and building, each group created products and collections of work to present to the STEAM program.

From the kickoff event, students began pursuing their own mysteries and are spending their days attending seminars and modules to help them hone in their investigative skills, and have been taught to use “green time” or their own work time to build research and develop unique final products. Over the next few weeks, students will present several times. Each time the stakes a little higher, and their findings and product more refined. We are excited to jumpstart presentations with a mystery walk. Students are creating posters with intriguing imagery and fun facts. Over the course of their work, they will learn to read and write purposefully, conduct office hours with teachers and complete weekly peer review sessions where they will give and receive feedback from their classmates. We are excited to see the world of STEAM takes them and how they unlock their mystery of the universe.

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Students ended their projects with a public showcase. For many, it was the first time they presented in public.

## *Check out these Student Videos*

[Godzilla Annihilation](#) By George Randall

This video is a *teaser* for his stop motion animation Godzilla Movie. George created the sets and each model.

[Coded Seizure](#) Model By Kailyn Jones

Kailyn create a 3D model with an integrated microprocessor to display brain waves under normal conditions and during a seizure

