



Austintown Local Schools

District STEM Newsletter



"We provide an inspiring education that strengthens and prepares our students for unlimited future opportunities."

January 2019

NOW REGISTERING FOR THE 2019-2020 SCHOOL YEAR!

All students in grades 6-12 are encouraged to participate in our STEM Programs intended to prepare students for any career involving Science, Technology, Engineering, and Math.

The AMS STEM Program is a full day, intensive program where students receive the same quality instruction as traditional students along with various Project Lead the Way modules impeded into the core curriculum. The Fitch STEM Program is a pathway of focused elective courses students take along with their core curriculum similar to a traditional Fitch student.

[Click here](#) to access the Austintown Schools STEM website. There you can access more information, past monthly newsletters, and links to the AMS and Fitch STEM applications.

For more information please contact...

Chris Berni, Senior Principal & Special Programs

cberni@austintownschools.org

Danielle Chine, STEM Instructional Coach

dchine@austintownschools.org

HAPPY NEW YEAR



Falcons on the Move! (See page 4)

Austintown students figure out how to survive global disaster



The 6th and 7th grade STEM students just finished "The Survival Challenge". This robotics project required students to build machines to help survive an apocalyptic scenario. 6th grade students wrote a narrative story from the point of view of a scientist, doctor, or engineer. This is a great example of interdisciplinary learning! Next, 7th grade students will expand on this learning by beginning automation and programming and 6th grade students will solve medical mysteries in the Medical Detectives unit. [Click here](#) to access the article from the Vindicator showcasing this project! [#gostem](#)

3D PRINTER AWARDED TO AIS

Austintown Schools won the INVENT3D Printer Challenge! This competition, hosted by MS Consultants and Advanced Methods in Innovation, required schools to describe how they would use 3D printing in their classrooms. Pictured is Mark Plant, Development Engineer from Inventor Cloud, awarding Austintown Schools the 3D printer complete with the "AF" logo. Danielle Chine, Instructional Coach received the printer on behalf of Austintown Intermediate School. The 3D printer will be housed at AIS and will begin enhancing student creativity very soon. #stemiseverywhere



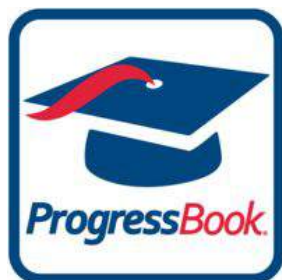
STAY CONNECTED!



FALCON NATION



Google Classroom



One group of 7th grade STEM students built a pull toy that moved Mr. E, the basketball player, up and down using a chain drive, cam and follower, and simple gear trains, mimicking the shooting of a basketball into a hoop. Mr. E was getting some serious hang time! #gostem



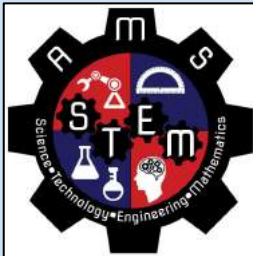
TECH CLUB PROBLEM SOLVING

AMS Tech Club students created their own solution to a problem we were having at school. They kept losing robotics parts on the carpet. Some of these parts are very small and hard to see. Justin, Zachary, and John made a solution. They built a magnetic broom complete with a universal joint at the base so you can push at any angle. For sale on Amazon soon...





[Click here](#) to access our YouTube Channel and watch videos from the year.



[Click here](#) to access our class website to see projects from the school year.

Austintown
Middle School
STEM website



AUSTINTOWN MIDDLE SCHOOL



AMS FIRST ANNUAL PULL TOY PARADE!

The 6th and 7th grade STEM students combined different mechanisms and simple machines to build a complex pull toy all on one input. The focus was on types of motion, inputs and outputs, building construction, teamwork, and theme. Students pulled their toys through the halls to music similar to the Macy's Thanksgiving Day parade. [Click here](#) to watch a video of the parade! Soon students will expand on their learning by adding motors, sensors, and programming their robots. Thanks to Mr. Eisenbraun for putting the video together!

The 8th grade STEM students are hard at work making circuits in the Magic of Electronics unit. Students are soldering together components to create a working night light. Anna displayed the importance of proper safety practices by testing how many pairs of goggles she can wear at once. You can never be too careful!



MEDICAL DETECTIVES ARE ON THE LOSE!

The 6th grade has begun testing vital signs in the Medical Detective unit. Students are taking body temperature, blood pressure, pulse, and respiration rate to determine disease and properly diagnose patients. Next students will test the effectiveness of different antibiotics against a control using agar plates containing bacteria and different types of antibiotics. Later, they will examine body systems and dissect a sheep brain. The Medical Detectives unit takes students on a journey of discovery and investigative learning.



AUSTINTOWN FITCH HIGH SCHOOL

"We provide an inspiring education that strengthens and prepares our students for unlimited future possibilities."



FITCH STEM BECOMES "STEAM" AT CREATIVE ARTS NIGHT

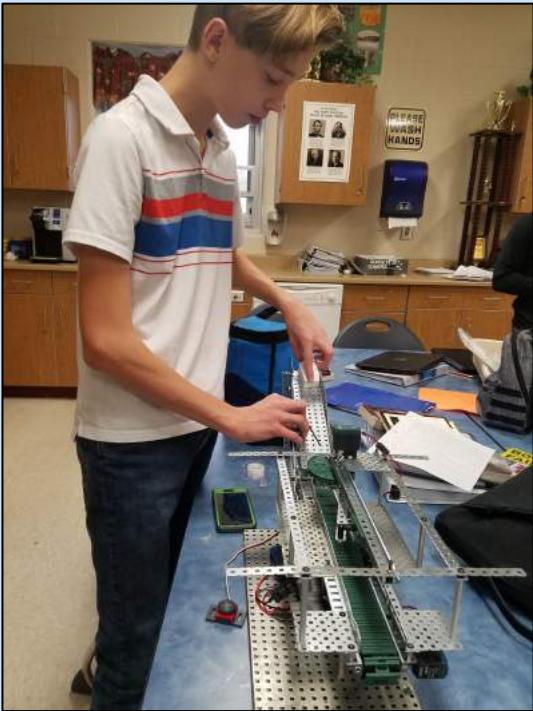
Fitch STEM students were representing the arts and technology at Creative Arts Night at Fitch on January 15th. They displayed their custom created designs and 3D printing projects. The competition robots showcased their skills. Students represented STEM giving examples of how the arts enrich all areas of STEM education. This was a powerful way to showcase how art and creativity contribute to educating the whole child. [#stemiseverywhere](#)

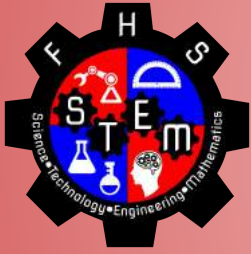


Senior Charles Carson made this custom designed AFHS STEAM logo showcasing the Arts in STEM to create STEAM. Charles has expanded on his learned skills by creating his own business doing digital and print media custom creating his own logos, Tshirts, keychains, digital art, and anything you can imagine. Go Charles!

Students in Ms. Sroka's Computer Integrating Manufacturing class are building and programming SGVs, or self guided vehicles. Students are using Vex Coding Studio to program their robots to move autonomously. [Click here](#) to learn about Project Lead the Way curriculum and Vex Coding Studio. The cars of the future are coming!







Austintown Local Schools STEM Programs

Meet Our Staff



Chris Berni



Danielle Chine



Doug Eisenbraun



Josh Folkwein



Jason Freudenberg



Lauren Hrusovsky



Ashley Smith



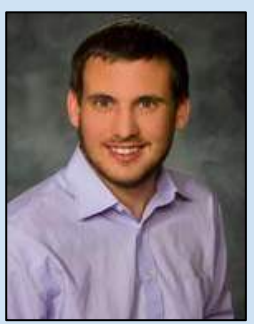
Celia Sroka



Jessica Tomic



Brian Umstead



Robert Wyant



The vision of Austintown Local Schools is to offer a united community with a proud legacy and a progressive approach to education. We prepare our students by providing an inspiring education with a focus on a future of unlimited possibilities. One way of extending progressive educational initiatives is through our many **STEM (Science, Technology, Engineering & Math)** programs and extracurricular activities starting in kindergarten through graduation. These programs provide a project-based and student-centered learning environment with a focus on 21st century skills to give our students skills to ensure success that lasts a lifetime.



For more information contact:

Chris Berni
Fitch High School Principal
Director- 21st Century Learning
cberni@austintownschoools.org

Danielle Chine
District STEM Instructional Coach
dchine@austintownschoools.org

[Austintown STEM website](#)