



Vol. 9 Issue #9

September 2017

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Hull Prairie Intermediate School in Perrysburg Becomes Officially Designated!

Its official! Hull Prairie Intermediate school in Perrysburg received their Ohio Department of Education STEM designation banner during a recent visit from the Ohio Department of Education State Superintendent Paolo DeMaria. The all-school event began with an assembly in the sparkling new school's gymnasium with all 800 plus students in attendance. The Junior Builders, a group of young students who are hopeful engineers, first read speeches on what STEM meant to them, as they were part of a unique program in which they were involved with the team of builders who constructed the school. Perrysburg Schools Superintendent Tom Hosler spoke to the crowd on the excitement of seeing the first STEM school in the region be built from start to finish.



Hull Prairie is one of 42 schools in the state to be designated as a "STEM" school and the first in the northwest Ohio region. The innovative school was built in such a way to include open and collaborative learning spaces and houses two STEM innovative labs on each floor, as well as an outdoor learning prairie and art and music laboratories, with the purposes



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Bottom Left Photo: HPI STEM Teachers Jason Hubbard and Julia Whalen with STEM designation banner

of integrating a holistic approach to learning.

Top Right Photo: ODE State Superintendent Paolo DeMaria and State Board of Education President Tess Elshoff

NWO STEM Activity

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Community STEM in the NEWS

Robotics Zone, All Wheels Zone New Highlights of Annual STEM in the Park

STEM in the Park, is a FREE, family day of hands-on activities geared toward science, technology, engineering and mathematics at Bowling Green State University. The 2017 event will be held on Saturday, September 23 and will feature two new, must-see zones: All Wheels and Robotics.

More than 100 unique, hands-on STEM activity stations will be offered at **STEM in the Park**, which will take place from 9:30 a.m. to 2:30 p.m. at the Perry Field House. Community partners, local businesses and area universities will be on hand with interactive displays and activities to engage children of all ages in the STEM fields.

Participants can get their "Wheels Turning with STEM" by encountering all types of wheels, tires and gears in motion in the **All Wheels Zone**. Sponsored by Thayer Dealerships, this zone features The Right Direction, a local organization whose mission is to empower youth by increasing action sports' impact and access as a tool for positive youth development.

In the **Robotics Zone**, participants will interact with organizations that highlight cutting-edge technology involved with the design, construction, operation and application of robots.

Back by popular demand for the eighth annual event are the **Food Science Zone**, the **Digital Media Zone**, the high-energy **Science of Sports Zone** and the **H₂O Zone**, which explores the science behind all of water's amazing uses. As part of **Food Science Zone**, attendees are invited to bring a food or basic household/personal care item to donate to Food for Thought. Donations will be taken to the Cocoon Shelter. A **Roots 2 STEM PreK - 2**



Zone is also back this year, featuring activities that cater specifically to younger children.



The **STEM stage** will once again feature super-sized demos from the Imagination Station and the Toledo Zoo.

Activity station hosts include BGSU's Marine Lab and Herpetarium, SSOE, Verizon, Challenger Learning Center of Lake Erie West, Nature's Nursery, Toledo Zoo and more than 110 other institutions and organizations.

STEM in the Park is the brainchild of Drs. Emilio and Lena Duran, both faculty members in BGSU's College of Education and Human Development, and seeks to increase public engagement in the STEM disciplines in a family-friendly atmosphere.

The event allows participants to become a food technologist, dabble in robotics, launch pop rockets, pet lizards, and much more. Everyone who attends the event will be able to enjoy a complimentary catered lunch from Tony Packo's (while supplies last). Parking is free and shuttles will be running between the parking lots and the Perry Field House throughout the day.

NWO, the Northwest Ohio Center for Excellence in STEM Education, organizes the free event on campus and is committed to increasing attendance among low-income and at-risk children. For the fifth consecutive year, transportation will be provided for families from several school districts in urban and low-income neighborhoods.

STEM in the Park presenting sponsors for 2017 are Bowling Green State University, BP, First Solar, Lubrizol, PPG and Verizon. In addition to NWO, community sponsors include Perrysburg Rotary Club, SSOE, Thayer Family Dealerships, Toyota, Wal-Mart and The Andersons. Bostdorff's, Columbia Gas of Ohio, Glass City Federal Credit Union, Partners in Education, Tony Packo's and Whirlpool comprise the general sponsor list.

Over 4,500 people attended last year! Don't miss out on your chance to **#GetyourSTEMon** at the 2017 event!

For more information and to **pre-register**, please visit: www.steminthepark.org

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STEM Opportunities

NWO SYMPOSIUM - Online Registration now OPEN!

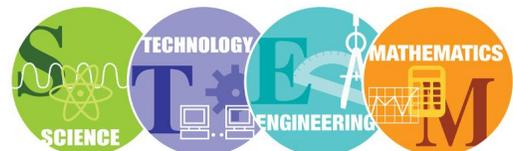
NWO Symposium on Science, Technology, Engineering and Mathematics Teaching

November 18, 2017

8:45 AM - 3 PM

Olscamp Hall @ BGSU

Featuring the 2017 keynote speaker: **Dr. Gabriel Matney**



Northwest Ohio Symposium on Science, Technology, Engineering, and Mathematics Teaching

2017 NWO SYMPOSIUM STRANDS

1. STEM in the Community: Thinking Outside the Classroom
2. Putting Creativity to Work: Teaching STEM With Innovation

3. Integrating Technology in the Classroom
4. Teaching and Learning in SCIENCE
5. Teaching and Learning in MATHEMATICS
6. Teaching and Learning in ENGINEERING

[CLICK HERE](#) to register online!

Program now available online at: bgsu.edu/nwoSymposium

Ohio Department of Education

A new texting service from the Ohio Department of Education offers another way to stay up to date on general education news and resources. Texts are available on both iPhone and Android, and it's simple to sign up! **Just text OHED NEWS to 468311 from any mobile phone.**

Also available are texts offering useful information and tips for families with elementary, middle or high school students. Check here for more information about all three topics and sign up today!



Texas Instruments has announced a new STEM Behind Cool Careers activities resource.

Teachers can download a free trial of the TI-Nspire CX Software for 90-days to utilize the free activities.
<http://genstemcontest.com/>

EHOVE Career Center TECH SUMMIT

October 21, 8:00 am - 2:30 pm

The EHOVE Tech Summit is a conference for teachers, administrators, and technology staff, the TECH SUMMIT will feature sessions on how to use the latest and greatest technology tools in a school setting.



EHOVE Tech Summit is a conference focusing on using technology effectively in the classroom. We will have a variety of session for all skill levels. Check out the flyer below for more information. Check out the EHOVE Tech Summit Website at: <https://sites.google.com/ehove.net/ehovetechsummit/home>

Future City STEM Mentor Program

Future City is a STEM program that challenges middle school students to:

- Imagine what cities will look like 100 years in the future.
- Research how engineers & scientists solve today's problems.
- Design a solution to this year's theme: The Age-Friendly City!
- Test their city design ideas using SimCity software.
- Build a scale model of their city using recycled materials.
- Present their city to STEM professionals.



Mentors work with the team educator to guide students through the creation of their cities.

Mentors are role models who share their real-life career experiences in STEM and city design.

Mentors can be working professionals, retirees, or higher education students who have experience in STEM, city planning, architecture, or other related fields.

<http://futurecity.org/participants/mentors>

The Astronauts Memorial Foundation Educator Conference

This certified educator conference will be held at **Kennedy Space Center, Florida, July 11-13, 2018**. SPACE is the place to be - summer of 2018!

- Encounter the Astronauts Memorial Foundation's massive conference center space with state-of-the-art 4K projection and sound capabilities.
- Experience stimulating presentations from Astronauts, NASA science and engineering experts in all fields.
- Participate in interactive, hands-on sessions with acclaimed teacher specialists team-teaching alongside NASA experts.
- Tour Kennedy Space Center and Cape Canaveral Air Force Station including historic launch pad sites, the Vehicle Assembly Building, Launch Control Center and more.

- Tour the expansive Merritt Island National Wildlife Refuge and the Canaveral National Seashore.
- Hear first-hand information about the bold future of space exploration including the latest NASA/Commercial collaborations with SpaceX, Blue Origin and others happening right here at KSC.

Enjoy the large Kennedy Space Center Visitor Complex

Depart at the end of 3 days with ready-to-go lesson plans and creative ideas to infuse classroom with STEAM and multi-faceted, space-related curriculum content!

For more information, complete an interest form here: <https://docs.google.com/forms/d/e/1FAIpQLSefvdnyPkGcMMGpvPoUEuaHurP5y3Q3WIkNWdLqr9KPkvhUOQ/viewform>

eCybermission

eCybermission is a **free** competition for **6th to 9th grade students**, and is a web-based STEM competition for students that promotes self-discovery and enables all students to recognize the real-life applications of STEM. Teams of three or four students are instructed to ask questions (for science) or define problems (for engineering), and then construct explanations (for science) or design solutions (for engineering) based on identified problems in their community. Students compete for State, Regional, and National Awards.

Early registration ends November 9. Final registration ends December 13. Mini-grants are available to teachers to support them as they implement eCybermission, the deadline to apply is October 11.

<https://www.ecybermission.com/>

Junior Solar Sprint (JSS)

Junior Solar Sprint (JSS) is a free solar car competition sponsored by the US Army Educational Outreach Program (AEOP) that challenges students to design, build, and race solar electric vehicles using hands-on engineering skills and principles of science and math. JSS is designed to support the instruction of STEM in categories such as alternative fuels, engineering design, and aerodynamics. Students who are part of a registered Technology Student Association (TSA) chapter or who compete at an approved Army host site are eligible to compete in JSS. Teams must follow the official TSA middle school competition rules when competing in JSS.



Registered teams will receive a free solar car kit. <http://www.usaeop.com/programs/competitions/jss/>

STEM Schools Open for Tours

If you talk to the leaders behind accomplished, innovative schools about how they formed the vision of a new school with their community and one form of professional development is bound to come up: visiting other innovative schools.

Through a school visit, you can ask questions of school staff, meet students, and experience the school building

as a learning environment. Visits are a powerful approach to building your vision of a different school. We're proud to announce the **Fall 2017 list of STEM school tour dates**.



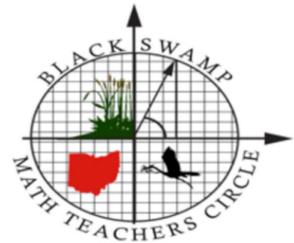
School	Location	Tour Date and Time
Northwestern Local Schools (Elementary, Middle, and High)	West Salem	October 3, 10 a.m.
National Inventor's Hall of Fame STEM Middle School	Akron	October 6, 10 a.m.
Akron STEM High School	Akron	October 6, 1 p.m.
Dayton Regional STEM School	Dayton	October 9, 9-11 a.m.
Hull Prairie Middle School	Perrysburg	October 10, 9:30 a.m. - 12 p.m.
Thurgood Marshall STEM High School	Dayton	October 11, 9 a.m. - 12 p.m.
Mad River Middle School and Stebbins High School	Riverside	October 17, 1 p.m.
Metro Institute of Technology	Columbus	October 17, 1 p.m.
eSTEM Academy	Reynoldsburg	October 20, 9-11 a.m.
Summit Road STEM Elementary	Reynoldsburg	October 20, 12-2 p.m.
Ridgeview STEM Junior High	Pickerington	October 20, 12-2 p.m.
Metro Early College Middle School and High School	Columbus	October 20, 1-3 p.m.

Black Swamp Math Teachers Circle

Take part in this great adventure in mathematics. The 2017-18 sessions are **FREE** and open to K - 12 math teachers and college faculty/staff in northwest Ohio.

Participants will receive:

- Great professional development, Networking with mathematicians, higher education faculty and other classroom teachers and Contact hour certificate.



There are four goals:

- Increase the confidence of math teachers in problem solving.
- Deepen teachers' content knowledge through exploring mathematically rich problems and develop an arsenal of techniques to solving unfamiliar and challenging problems.
- Form long-term professional relationships among teachers and mathematicians, through regular, highly interactive meetings.
- Provide support for teachers who want to bring richer mathematical experiences to their students.

Registration is OPEN! Click the link below to register for one more of the meeting dates.

<https://goo.gl/forms/5Vv9z1wSIIYr12vG3>

Educational Resources Workshop

Learn about Toledo area educational resources from community organizations

Calling all educators including administrators, homeschooling educators and pre-service teachers:

Toledo Museum of Art will host a FREE Educational Resources Workshop in partnership with 12+ community organizations, including Imagination Station! Attend short presentations from some of Northwest Ohio's best informal education institutions as well as learn about hidden gems to energize classroom discussion.



September 28
5 - 8pm

<https://www.facebook.com/NWOCRW/>

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NWO STEM Activity

This month's activity is provided by **Lubrizol**, a Presenting Sponsor of **STEM in the Park**

More fun activities from STEM in the Park can be found on our website at: <http://www.bgsu.edu/nwo/programs/stem-in-the-park/activity-cards.html>

Flubber

What You Need

- 2 bowls
- 1 1/2 cup warm water
- 2 cups white glue
- 1 1/3 cups hot water
- 3 tsp. Borax Powder (non-toxic/available by laundry detergents)
- Food coloring
- Metal spoon



What To Do

1. In a bowl, combine warm water, white glue and food coloring.
2. In a second bowl, combine hot water with Borax. Mix thoroughly.

3. Pour contents of small container into the large container.
4. Slowly pour Borax mixture into the glue mixture while stirring quickly. Stir until the mixture leaves the side of the bowl. Slime will be sticky. Knead the mixture until it is no longer sticky.

Download a pdf of the complete hands-on activity by [clicking here!](#)

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Share Your Story!

Thank you for your support of NWO, our programs, our activities, and our partners. Please send us updates, press releases, and news of STEM happenings at your school, district, or organization. Please submit to nwo@bgsu.edu. We are always looking for great STEM education stories to feature in upcoming newsletters.

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NWO/COSMOS, 241 Math Science Bldg., BGSU, Bowling Green, OH 43403-0212

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