



Vol. 11 Issue #10

October 2019

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STEM in the Park Once Again Amazes the Crowd!

"STEM in the Park", a free, hands-on and inquiry-based event designed to engage participants in the STEM fields, was held on the campus of BGSU on September 28. An estimated crowd of nearly 5,000 people attended the 10th annual event and enjoyed over 175 activities from a wide variety of exhibitors showcasing STEM disciplines. This year's theme was "Go Green with STEM in the Park, and introduced the new ECO-ZONE, with all new Earth-Centric Activities - Because there is no Planet B!

Event Coordinator Jenna Pollock stated her excitement for the new theme explaining, "We are very excited about this year's eco-friendly theme, as we like to have the event stay current with fresh ideas, and climate awareness is on everyone's minds."

Other activity zones back by popular demand for the tenth annual event were the All Wheels Zone, Robotics Zone, Food Science Zone, the Digital Media Zone, the Science of Sports Zone, and the H2O Zone, which explores the science behind all of water's amazing uses. A Roots to STEM Pre-K-2 Zone featured activities that cater specifically to younger children.

The STEM stage once again featured super-sized demonstrations, and activity station hosts included BGSU's Marine Lab and Herpetarium, SSOE, Challenger Learning Center of Lake Erie West, Nature's Nursery, and more than 80 other institutions and organizations.



One of the many strengths of this program is the spirit of community that evolves during its planning and implementation. The many volunteers and exhibitors that provide free STEM- infused and inquiry-based learning activities to engage children and their families contributes to the remarkable success of "STEM in the Park".

"This event has become our passion. We truly love to see children and their families enjoying hands-on STEM learning activities," stated Emilio Duran, who co-founded the event with his wife Lena Duran. Both are faculty in BGSU's College of Education's School of Teaching and Learning and are amazed at the popularity of the event over the years.



Another important aspect of the event is a program that was developed to offer transportation to students wherein transportation is the main barrier of attendance. Mrs. Pollock stated, "Each year we reach out even further in our region to provide this opportunity and we're thrilled and gratified at the number of those who come to enjoy this spectacular event!"

To commemorate the 10th annual event, a tree that was donated by Bostdorff's was planted on the grounds of the Perry Field House.

"STEM in the Park" Presenting Sponsors for 2019 are Bowling Green State University, Lubrizol, and PPG. In addition to NWO, Community Sponsors include The Andersons, Perrysburg Rotary Club, Principle Business Enterprises, SSOE, and Thayer Family Dealerships. General Sponsors include Biggby Coffee, Bostdorff's, Cooper Tires, Glass City Federal Credit Union, Matrix Technologies, Meijer, NAMSA, NWO Montessori, and Wal-Mart.



For more photos, videos and information on "STEM in the Park", please visit: www.steminthepark.org.

STEM Opportunities

Code.org Computer Science Fundamental Workshops

FREE professional development for K-5 educators and those new to teaching computer science fundamentals. At the end of the workshop, teachers will understand:

- The importance of all students having access to computer science skills, and the teachers' role in creating an environment where all students can learn equitably.
- How CS Fundamentals can be used as a tool for bringing computer science to all students.
- The structure of CS Fundamentals courses (lesson plans, online activities, unplugged activities).

- **Dates:** Nov. 4, and Dec. 9, 2019
- **Time:** 4:00 pm - 7:15 pm
- **Hosted by:** Northwest Ohio Center for Excellence in STEM Education
- **Location:** Jerome Library @ Bowling Green State University
- 1001 E. Wooster St.
- **Register here:** <https://studio.code.org/pd/workshops/7840/enroll>
- [Click here](#) to download a flyer (pdf)



ChickQuest workshops

November 1 & February 5, 8 am - 4 pm; Nationwide and Ohio Farm Bureau 4H Center, Columbus

March 5, 8 am - 4 pm; Mason CLC, Akron



**GROW
NEXT GEN**

<https://grownextgen.org/events>

ChickQuest, a Classroom Journey Through the Life Cycle of Chickens, is a 4-H School Enrichment Program that challenges students to use Science, Engineering, and Technology to investigate the life cycle of an embryonic chicken egg. From monitoring living eggs to observing fluffy chicks, these lively activities pique curiosity, encourage collaboration and communication, and provide young scientists with unforgettable experiences. The Ohio Soybean Council, Meyer Hatchery, and OSU Extension want to provide this curriculum for 185 elementary teachers in Ohio during the 2019-2020 school year. Each teacher will receive:

- * Teacher Guide
- * Science log books-one per student in your classroom
- * incubator
- * fertilized egg coupon
- * kit that includes experiment supplies
- * one day of professional development training for the teacher

Teachers receive .7 CEUs for attending this workshop.

The Toshiba/NSTA ExploraVision Science Competition

The Toshiba/NSTA ExploraVision science competition encourages K-12 students to imagine what technology might be like in the future while experiencing scientific process and discovery in an engaging, hands-on way. Let's empower the next generation of inventors, scientists and leaders. It's not too late to register your teams!



Deadline for submissions is February 10.

Download our [free lesson plans for teachers](#) and [register](#) online today!

NGSS@NSTA Classroom Resources

Check out these [NGSS@NSTA Classroom Resources](#) vetted by NSTA teacher curators. This week's focus is life science:

Grades K-2: [Pollination: Buzz Activity 4H](#)

Grades 3-5: [Island: A Story of the Galapagos](#)

Grades 6-8: [Where's The Beach? Investigating Ways to Protect Shorelines From Erosions](#)

Grades 9-12: [Designing a Digestive System](#)



**National
Science
Teaching
Association**

InfoOHIO FREE Professional Development

Using InfoOhio's Digital Text to Build PreK-5 Literacy

PreK-5 educators can take advantage of a fee-free, in-person, professional development opportunity brought to educators through a partnership with INFOhio, Scholastic, the ESC of Northeast Ohio, Stark County ESC, and Great Start for Great Futures Coalition.



There are two opportunities to attend: October 28 at the ESC of Northeast Ohio or October 29 at the Stark County ESC. [Registration is open!](#) Educators can find more information about this free professional development opportunity on [INFOhio's blog](#), or ask us at support.infohio.org.

Ohio Technology Summit

The Ohio Technology and Engineering Educators Association is hosting the Ohio Technology Summit on Thursday, October 29 from 9AM to 4PM at Otterbein University's The Point, 60 Collegeview Rd. in Westerville, OH 43081.



At OTS educators have the opportunity to explore the hands-on integration of technology across the curriculum - from kindergarten to college. Sessions will benefit elementary, middle school and high school teachers, librarians, and and after school program leaders.

Keynote Speaker - Erin Bender - Executive Director, The Point at Otterbein University

Partial List of Sessions:

- Google Classroom in STEM
- Carving out a Future (Intro to CNC with the Carvey)
- Future of Work Attack of the Drones - Build and Fly
- MicroDrones in Your School
- Open Your Robotics Program with the moto:bit Board
- Computer Science is for Everyone!
- OTEEA Student Exhibits Exemplary Samples/Q&A
- MakerSpace - Not Just a Room in the Building
- Elementary STEM Resources
- The Engineering Design Process - How to use it in your classroom

Registration and more information at OhioSummit.org

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NWO STEM Activity

Fizzy Pumpkin Experiment

This month's activity was found on Pinterest

What You Need

- 2 Small pumpkins
- Baking soda
- Vinegar
- Green, red and yellow food coloring
- Popsicle stick or spoon for mixing
- Sharp knife
- Spoon
- Large baking dish or container for eliminating mess



What To Do

1. Begin by using a sharp knife to carefully cut around and remove the top of your pumpkin. Adults should do this step for the children.
2. Remove the top from the pumpkin, and use a spoon to scrape out all of the seeds and pulp, until the inside of the pumpkin is mostly cleaned out.
3. Fill two cups up with vinegar.
4. Add green food coloring in one cup, and add red and yellow food coloring to the other cup to make orange. You can use a popsicle stick or spoon to stir the colors and disperse them completely into the vinegar.
5. Place the two small pumpkins into a baking dish with high sides or another container. This will help to catch the mess when the fizzing effect overflows and makes for easy cleanup.
6. Put some baking soda into the bottom of each pumpkin. You can use at least 2 tablespoons.
7. Pour the colored vinegar into the pumpkins over top of the baking soda. Watch as a fizzing reaction occurs and bubbles over. You can stir the baking soda left in the bottom of each pumpkin to cause another smaller reaction, or even pour more baking soda on top.

[Click here](#) for more info on this activity and others!

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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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