

*Advancing science, technology, engineering, and mathematics education for people of all ages.*



Vol. 11 Issue #11

November 2019

**In This Issue**

**K-16 STEM in the NEWS**

[36th Annual Women in STEM Held at BGSU](#)

**Community STEM in the NEWS**

[Fairport Harbor science teacher Nathan Yaussy receives Award](#)

**STEM Opportunities**

[Believe in Ohio STEM Forum](#)

[CODE4her](#)

[Black Swamp Math Teachers' Circles](#)

[Code.org Hour of Code](#)

[Education Projects](#)

**K-16 STEM in the NEWS**

**36th Annual Women in STEM Held at BGSU**

Over 325 young women from northwest Ohio middle schools attended the 36th annual Women in STEM program Oct. 30 at Bowling Green State University. Students spent the day exploring and performing experiments and hands-on activities in physics and astronomy, chemistry, biology, engineering, mathematics and technology as they learned about the STEM fields and what STEM has to offer in high school and beyond. Presenters from a wide range of STEM professions offered breakout sessions and hands-on workshops throughout the day. Forty students from underrepresented populations attended the event through sponsorship from The Anderson's.



One student stated, "Women in STEM really opened my eyes to the opportunities and jobs I could do in STEM. I loved the fun activities that we did!"



Workshop session titles included: "Leaning Tower of Pasta" "Sailing with STEM", "Life on the Beach in Ohio - 390 Million Years Ago!" and "History Einsteins: Creative Careers that use STEM".



[Imagination Station  
Engineer Girl](#)

When asked about her perception of the impact of the event, one of the 30+ presenters stated, "One of the best days of my year. I thoroughly enjoy working with the girls and supporting this event!"

**NWO STEM Activity**

[Investigating Home Insulation  
and Temperature](#)

Another presenter stated, "From my experience, "Women in STEM" plays a significant role in developing girls' interest in and identity as scientists and engineers not only by exposing them to a variety of career options but by providing in person experiences with women in STEM careers. It makes learning fun, accessible and provides students with real life applications for STEM."

The Northwest Ohio Center for Excellence in STEM Education at BGSU (NWO) annually organizes the event. NWO is a partnership with a number of area universities, K-12 schools, and community organizations that have a mission to advance STEM education for people of all ages. Sponsors for the 36th annual Women in STEM program were BGSU, The Anderson's, and NWO. Susan Stearns of NWO stated, "Women in STEM is a program that showcases female role models who have careers in the STEM fields. Exposure to these successful role models allow for the girls to learn it's possible and it's achievable for them to major in STEM fields in high school and college. We are thrilled to hold this event every year, demonstrating to this age group a rewarding career in STEM is more than possible."

For more information and photos of the event, please see our website at: <https://www.bgsu.edu/nwo/programs/women-in-stem.html>

## Community STEM in the NEWS

### Fairport Harbor Science Teacher Nathan Yaussy First in District to Receive \$25,000 Milken Educator Award

#### Ohio's only 2019-20 Milken Award recipient brings science to life

*From the Ohio Department of Education*

National STEM Day on November 8th became personal for one outstanding Ohio teacher. Before a room of cheering students, colleagues, officials and the media, Nathan Yaussy of Fairport Harding Early College High School was surprised with the state's 2019-20 Milken Educator Award and its unrestricted \$25,000 cash prize.

Yaussy is among up to 40 honorees nationwide to receive the recognition during the 2019-20 season and the first from the Fairport Harbor Exempted Village School District. The Ohio Department of Education State Superintendent of Public Instruction Paolo DeMaria joined National Institute for Excellence in Teaching CEO Dr. Candice McQueen to acknowledge Yaussy's commitment to bringing science to life.



"I can think of no better way to celebrate National STEM Day than to honor exceptional science teachers like Nathan Yaussy," said Dr. McQueen, who presented the award on behalf of the Milken Family Foundation. "Nathan makes learning tangible and exciting, both in and out of the classroom. With every lesson, students develop critical skills to think deeply and make the world a better place. As part of the National Milken

Educator Network of excellence, Nathan will have a platform to broaden his impact and influence."

Hailed by *Teacher* magazine as the "Oscars of Teaching," the goal of the Milken Educator Awards is to celebrate, elevate and activate the American teaching profession and inspire young, capable people to join it. The Milken Educator Award is not a lifetime achievement honor. Recipients are heralded while early to mid-career for what they have achieved - and for the promise of what they will accomplish given the resources and opportunities inherent in the Award.

"I couldn't be prouder to team up with the Milken Family Foundation to honor Nathan Yaussy and to recognize the incredible difference he is making in the lives of his students. It's obvious that his enthusiasm, commitment and compassion are contagious among the students and staff at Fairport Harding," said Superintendent DeMaria. "I'm blown away by the level of excitement and support we've encountered as we planned his award presentation today. It's clear that Mr. Yaussy is a beloved member of his school community who is very deserving of this recognition."

Nathan, a former participant of the Ohio Junior Science and Humanities Symposium, placed all four years of high school in the research paper competition while at Buckeye State. As a senior in 2004 he earned 3rd place and was awarded a college scholarship sponsored by the Army, Navy and Air Force and an all- expense paid trip to the National Junior Science and Humanities Symposium. The Ohio Junior Science and Humanities Symposium is annually held at Bowling Green State University and more information can be found at the website:

<https://www.bgsu.edu/nwo/programs/ohio-junior-science-and-humanities-symposium.html>

More information about Nathan Yaussy can be found on the [Milken Educator Awards website](#).

[\[back to top\]](#)

## STEM Opportunities

### Attention High School Teachers! Believe in Ohio STEM Forum

An Invitation to Your Students to Attend A **FREE** STEM Entrepreneurship & Innovation Forum at Bowling Green State University  
Thursday, December 5 2019, 9:40 am - 1:00 pm



- Students, assisted by mentors, will work in teams to develop a new product, service or problem-solving innovation that they will pitch "Shark Tank style" to their peers.
- The Forum will begin at 9:40am and end at 1:00pm.
- All Northwest Ohio high school students are invited to attend, with students attending as part of a teacher or parent chaperoned group. (Limit of 30 per school.)
- Teachers will also learn about how their students can compete for cash awards as part of a Believe in Ohio STEM Commercialization Plan or STEM Business Plan competition at their high school.
- As capacity is limited, registrations will be accepted as space is available.
- Transportation subsidies of \$100 are available to schools that bring 15 or more students.

For more information about the Believe in Ohio program, please see: <https://believeinohio.org/>

Register Here:

<https://believeinohio.org/registration-for-bgsu/>

## New Session! Let **HER** learn to program with Lego EV3 Robots

CODE4her is a computer science mentorship program for girls in **grades 5 through 8** organized by the Bowling Green Computer Science Department and the BG Women in Computing (BGWIC) student organization, under direction of faculty advisor Jadwiga A. Carlson.



The "Let **HER** learn to program with Lego EV3 Robots" mentoring sessions will be held at BGSU in Hayes Hall on the following five Sundays in 2020.

Let **HER** learn to program with Lego EV3 Robots at these five 2.5 hour mentoring meetings held in Hayes Hall 020 on BGSU campus:

### Five Sundays 1:30-4pm:

- February 2
- February 23
- March 15
- April 5
- April 26

Each girl (5th through 8th grade) will work with the same BGSU student mentor and member of BG Women in Computing student organization.

Cost: \$125.00 (missed meetings cannot be made up).

Registrations are accepted on a first-come, first-served basis!

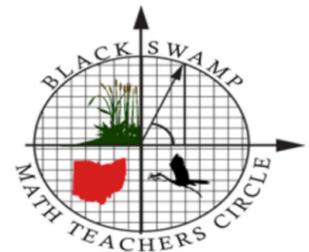
Please see: [code4her.org](http://code4her.org) for more information



## Black Swamp Math Teachers' Circles

Math Teachers' Circles bring together teachers and mathematicians to enrich the teachers' experience of mathematical problem solving. There are four goals:

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



**The 2019 session is 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
- Contact hour certificate

Click the link to register: <https://goo.gl/forms/5Vv9z1wSIIYr12vG3>

All meetings are from 6:30 - 8:30 PM at BGSU in the Pallister Conference Room, 1st floor of Jerome Library. You can attend as many meetings as you want, depending on your schedule!

**Monday, December 2, 2019**

**Save the Date for the spring meeting with more information to come.**

Monday, February 10, 2020

Monday, March 30, 2020

For more information, please contact Dr. Debra Gallagher, Bowling Green State University, at [dgallag@bgsu.edu](mailto:dgallag@bgsu.edu) or 419-704-1920.

## Code.org Hour of Code

Starting this year, the Hour of Code will continue inspiring student creativity with a new theme: **Computer Science for Good. #CSforGood**

Inspired by the United Nations' Sustainable Development Goals (SDGs), the Hour of Code will highlight how computer science can make a positive impact on our world, from writing apps to solve a local problem, to using innovative ideas in data science to address global challenges.



As [Code.org](https://code.org) plans ahead for CS Education Week, December 9-15th, they hope you'll join the 15,000+ teachers who have already signed-up as they strive to reach 1 billion served!

## Education Projects

**EducationProjects.org is all about teachers**

- Energize science lessons with engaging, hands-on labs and activities and connect classrooms to the real world with industry experts ready and willing to provide support.
- Encourage professional development by collaborating with other teachers at PD events.
- Provide free supplies to make implementing the curriculum easy.

<https://educationprojects.org>



## Imagination Station



## Upcoming events and activities:

### **Snowmazing Science:** Community Art Project

Help transform Imagination Station into a winter wonderland! Explore physics and learn how to use hand tools to construct a kinetic structure to display. Together we will fill Discovery Hall with a beautiful blizzard of twirling, swirling snow mobiles! Activity included with admission.

### **Tinkering Space: Electronic Greeting Cards**

Send a holiday greeting with extra pizzazz this year! Add a few circuits and LED lights to your holiday message to create a card that twinkles and sparkles with all the festivity of the season. Activity included with admission.

## Applications for 2020-2021 EngineerGirl Ambassador Program Now Open!

Are you a high school girl with a passion for solving problems and willing to use your ingenuity and engineering design skills to inspire younger students, or do you know a high school girl who does? The application for the 2020-2021 EngineerGirl Ambassadors Program is now open! The **application deadline is March 1, 2020**.

Learn more at [engineergirl.org/ambassadors](http://engineergirl.org/ambassadors)

[\[back to top\]](#)

## NWO STEM Activity

### Investigating Home Insulation and Temperature

*This month's activity was featured at the 2019 STEM in the Park and is brought to you by Bowling Green Energy Project*

#### What You Need

- Weatherstripping
- Door sweep and draft stoppers
- Thermostat Temperature Guide (see link below)

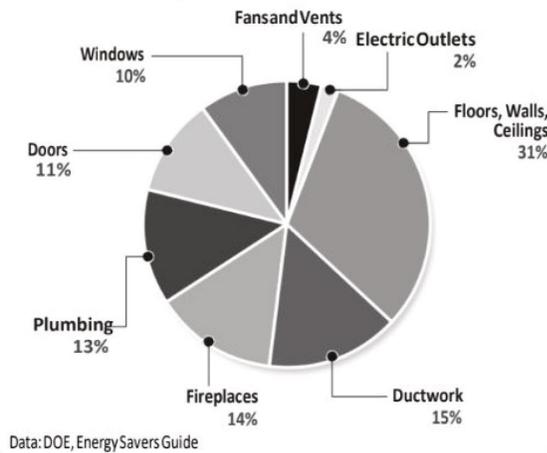
#### What To Do

Open your outside doors and check the condition of the weather stripping between the doors and the door-frame.

none - 0 points      poor - 2 points      fair - 4 points      good - 6 points

Using the graphic below, "How Air Escapes," decide with your family the five areas of your home you will check for air leaks.

## How Air Escapes



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

[\[back to top\]](#)

### 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](mailto:nwo@bgsu.edu). We are always looking for great STEM education stories to feature in upcoming newsletters.

Join NWO on [Facebook](#)

Follow NWO on [Twitter](#)

### eNewsletters from the past!

Looking for past articles from our eNewsletters?

[Click here](#) view and download from our **eNewsletter** archives.

NWO/COSMOS, 304 University Hall, BGSU, Bowling Green, OH 43403

[SafeUnsubscribe™ {recipient's email}](#)

[Forward email](#) | [Update Profile](#) | [About our service provider](#)

Sent by [nwo@bgsu.edu](mailto:nwo@bgsu.edu) in collaboration with