



April 2021 | Vol. 6



STEAM NEWSLETTER

THE OFFICIAL NEWSLETTER FOR THE ILLINOIS DEPARTMENT OF
INNOVATION & TECHNOLOGY (DOIT) STEAM EDUCATION GROUP



$$2 + 5 = 7$$



Back at Headquarters

APRIL IS ILLINOIS INNOVATION AND TECHNOLOGY MONTH

Governor J.B. Pritzker has proclaimed April 2021 as Innovation and Technology Month in Illinois. Read the official **Proclamation** and continue reading this newsletter to find ways to be innovative at home and at school this month!



Let off some STEAM with these fun activities!

K-4

- **ENGINEERING ON THE GO: I SPY TECHNOLOGIES (EN & SP)**

5-8

- **INNOVATION AND CONSERVATION: TRANSFORM A RECYCLED PLASTIC BOTTLE INTO A SIMPLE HOMEMADE BIRDFEEDER**

9-12

- **BECOME A GEOGRAPHIC INFORMATION SYSTEMS (GIS) CARTOGRAPHER WITH NATGEO**
 - **LEARN ABOUT GIS**
 - **MAKE YOUR OWN MAP!**
-

Educator's Corner

STEAM resources for in-person, hybrid, + remote learning, and professional development

- **Learn more about innovation for inclusion in early education with STEMIE**
 - **Earth Day 2021: Resources for classroom, at-home, and community learning**
 - **Register for the LTC's #DIGLITCON: A Digital Literacy Conference for K12 Educators and Admins (June 4th, 2021).**
 - **Find a plethora of Standards based lesson plans for K12 with BrainPOP Educators**
-

DoIT STEAM Innovation

Webinar

Educational opportunities with DoIT STEAM
Thursday, April 8th | 4:00 p.m. to 5:00 p.m.

Join the DoIT STEAM Education team and K12 educators to learn about how virtual reality technology can be integrated into the classroom, and get a sneak peek of our plans for the 2021 Tech Prairie STEAM Expo during the Illinois State Fair (Aug. 18 -22). Registration in advance is required.

Register here.

News & Events



IDEA Amplify Innovation 2021

Empowered learners, empower learning. Join us for Amplify Innovation Live and Virtual as student change-makers from across the state will meet with Illinois legislators. Educators were encouraged to pass the mic to their learners and on this day, they will do just that! Please go [here](#) for more information.



- April 30: Videos from districts due (all districts can create)!
- May 04: Videos drop on the IDEA website (chosen videos by legislative districts)
- May 11: Amplify Innovation via wonder.me (chosen videos by legislative districts)

TEACHING ENDORSEMENT IN COMPUTER SCIENCE (CSTed)

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The Teaching Endorsement in Computer Science is a five-semester pathway that meets the Illinois State Board of Education's credit requirement for obtaining a teaching endorsement in computer science.

Offered by the University of Illinois Urbana Champaign (UIUC) in collaboration with the Discovery Partners Institute (DPI) and other regional partners, this cohort-based endorsement program was designed for practicing teachers in grades 5-12 with a desire to build skills in teaching computer science.

CSTed is presented in cooperation with our implementation partner:



The first cohort begins in Summer 2021: 14 June to 7 Aug

with an introductory Computer Programming and the CS Classroom course.

Want to teach Computer Science? Led by UIUC's College of Education in collaboration with the Discovery Partners Institute, the Teaching Endorsement in Computer Science (CSTed) is a new endorsement program in CS for any current teacher in grades 5-12. It is a 5-semester program of study with the goal to increase the number and quality of CS teachers in Illinois, particularly in schools and communities that have had limited or no CS courses. The first cohort begins this Summer with an introductory course on Computer Programming and the CS Classroom. Registration opens April 26th. Tuition support is available on a first-come, first-served basis. An information session will be hosted via **Zoom webinar on Wednesday, April 14 at 4:30-5:30PM.**

[Info Session Flyer](#) | [Program Flyer](#)

Great Lakes BioBlitz 2021 begins April 22 (Earth Day)

In 2020, in response to requests for activities that get youth and families outdoors, the Center for Great Lakes Literacy launched the Great Lakes wide project, Great Lakes BioBlitz (formerly called the Great Lakes Educators' BioBlitz). We encourage our communities to use iNaturalist to post photo observations of as many wild, living things in a specific area over a short period of time as possible.

[Click here](#) for more information and how to participate!



Illinois 4-H State Robotics Competition Registrations Open

Are you ready to tell your story? 2020 brought many unexpected challenges and changes to each of our lives. From attending school from home to keeping each other safe during a global pandemic, each of us has a unique story to tell about the past year, and this year you and your team will be able to tell your stories at the 2021 Illinois 4-H State Robotics Challenge. This year's challenge will be virtual and will require your team to use the challenges of the last 4 years (2017-2020) to tell your unique story.

- Register now through April 30:
<https://go.illinois.edu/4HR2021>
- For details about the challenge, and other FAQs head here:
<https://go.illinois.edu/2021CHALLENGE>
- Follow along with everything robotics:
<https://www.facebook.com/groups/il4hrobotics>
- *Must be a 4-H member to participate



Abraham Lincoln Presidential Museum | No Malice Film Contest

Events throughout February and March | Entry deadline April 30, 2021

"The **No Malice Film Contest** creates a platform for Illinois youth and young adults, ages 11-21, to explore the topic of racial healing using the medium of film. We believe youth and young adults have the capacity and desire to use their words and actions to promote fairness, heal the wounds within their communities, and participate in social change for the benefit of all. The No Malice Film Contest encourages you to take a creative and thoughtful

approach to these aspirations through the creation of short films."



STEAM Resource Spotlight

Maker Girl

"Every girl should identify as a MakerGirl—A **MakerGirl** is someone who lives and dreams as an **unstoppable force** that says **"Yes!"** to challenges of the future"

Founded in Champaign- Urbana, MakerGirl educates the next generation through STEM workshops, focused on 3D printing, to inspire girls to pursue STEM fields.



Million Women Mentors



Million Women Mentors is the premier network dedicated to encouraging girls and women around the world to pursue, persist and succeed in STEM careers. Join the Movement in Illinois to Champion Women and Girls in STEM.

TedEd Earth School - Resources for Earth Day Learning

Welcome to Earth School! Embark on 30 adventures – or Quests – that will help you understand and celebrate our natural world, while learning about how dependent we are on our planet. Now more than ever, we need to protect, nurture and care for Earth – so join us to learn something amazing in every quest. Within each lesson, you'll find fascinating resources compiled by Earth experts and ideas for getting involved in ways that count. Join us to learn more, create, act and share your journey (#EarthSchool) towards a cleaner and greener life.



Summer Computer Science **Professional Learning**

LEARNING
TECHNOLOGY
CENTER of ILLINOIS

With the recent passage of House Bill 2170, Illinois schools will need to provide developmentally appropriate opportunities for students to learn computer literacy skills and intensive instruction in computer literacy as a graduation requirement starting 2022-23 SY. **Code.org**, a national non-profit dedicated to increasing CS opportunities, provides free curricular resources and lessons for all grade levels. To help new and experienced computer science educators implement the curriculum, Code.org partners with the **Learning Technology Center** to offer professional learning events. Participants learn how to teach computer science and use the available curriculum. A limited number of scholarships are available for this program.

- **CS Discoveries (Grades 6-10)**
 - July 12-16 in Springfield (Capital Area Career Center)
 - July 19-23 in Chicagoland (Location TBD)
- **CS Principles (Grades 9-12)**
 - July 26-30 in Springfield (Capital Area Career Center)
 - August 2-6 in Chicagoland (Location TBD)
- **CS Fundamentals (Grades K-5)**
 - June 24 (Online)

If you have any questions about the Code.org professional learning opportunities, please reach out to Brian Bates (bbates@ltcillinois.org) for support.



NIU STEAM Summer
Camps are approaching!
Register Now.

Your epic summer adventure awaits online.

Online doesn't have to mean hands off. NIU STEAM virtual camps offer hands-on science, technology, engineering, art and math fun as campers work in teams, build friendships, engage their curiosity and explore careers.

STEAM Camps are led by a passionate, well-trained team who love to teach, laugh, and have fun. Join us for an epic summer adventure in a wide range of areas, such as:

Coding | Career | Creative | Gaming | Making | Nature | Science | Space | Robotics

Available for elementary, middle, and high school age groups.

The 'A' in STEAM

"Arts foster scientific success" -Dr. Temple Grandin

This series is dedicated to showing how art and creativity play a crucial role in our society on its own and even within the STEM fields . There's a great deal of artistry that goes into our favorite products and media we consume that make our lives easier, or at least a bit more enjoyable, and teaches us valuable lessons about history.

Be A Maker in Music! As a part of their STEMIEfest, STEMIE curated a list of resources geared towards being a MAKER of Music. Innovation is born out of creativity. See what you can create yourself!

Find the resources here, including:

- [Make your own drum set](#)
- [Compose music and lyrics](#)
- [Make your own pan flute](#)
- [Wind and Water: Create Pitches with Water Bottles](#)
- [Composing with Pitched Percussion](#)



Watch + Learn

Take your music maker skills a step further and learn about

the science of sound



www.illinois.gov/doiit-steam



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Please submit STEAM ideas, comments, questions, or suggestions using our [contact us form](#).

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