



May 2021 | Vol. 7



STEAM NEWSLETTER

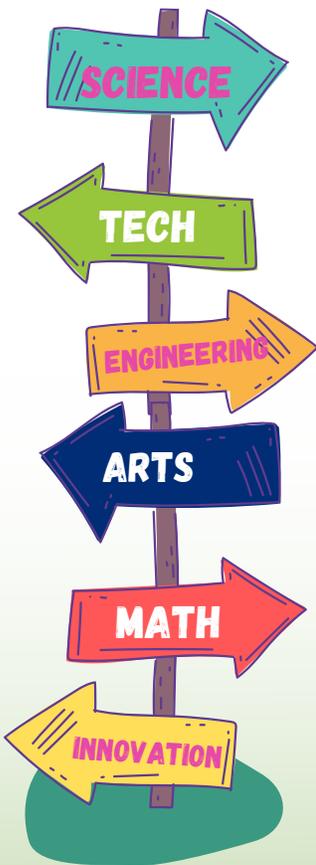
THE OFFICIAL NEWSLETTER FOR THE ILLINOIS DEPARTMENT OF
INNOVATION & TECHNOLOGY (DOIT) STEAM EDUCATION GROUP



$$2 + 5 = 7$$



BACK AT HEADQUARTERS



WE'VE GOT SUMMER ON THE BRAIN...



WHERE WILL YOU GO?

Let off some STEAM with these fun activities!

K-4

- **KITCHEN CHEMISTRY: MAKE ICE CREAM IN A BAG**

5-8

- **NASA | BUILD YOUR OWN SPACE LAUNCH SYSTEM: BLOCK 1**

9-12

- **MAKE YOUR FIRST SCRATCH PROGRAM: MOSQUITO PATROL**

Educator's Corner

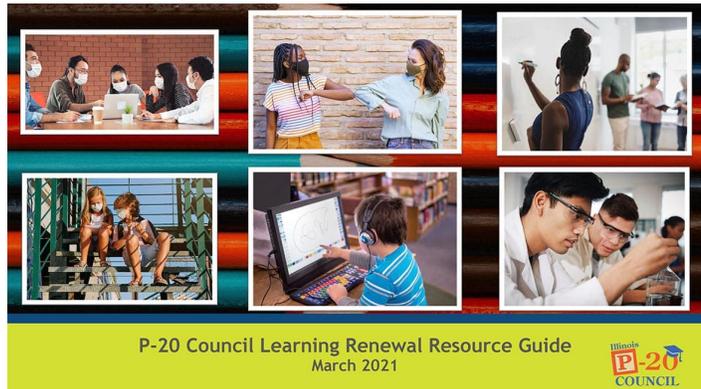
STEAM resources for in-person, hybrid, + remote learning, and professional development

- **2021 High School Summer STEM Research Teacher Mentor Application for the Grainger Engineering High School Research Program**
 - **Register for the LTC's #DIGLITCON: A Digital Literacy Conference for K12 Educators and Admins (June 4th, 2021)**
 - **LTC EdTechNext professional learning retreat in Galena, IL (August 2-3, 2021)**
 - **"How to go Back to School During a Pandemic: A Guidebook" by OSF Healthcare Jump Simulation**
-

P-20 Council Learning Renewal Resource Guide now available

"On behalf of the P-20 Council, we welcome you to the Learning Renewal Resource Guide, a collaborative, living document that highlights a set of opportunities to invest in learning renewal and support our students, educators and broader community in these unprecedented times."

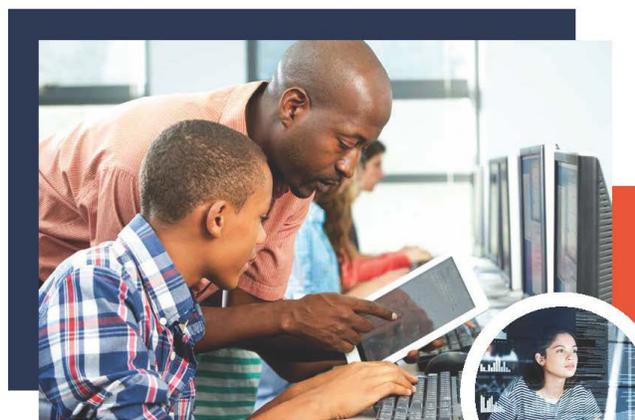
News & Events



IDEA Amplify Innovation 2021

May 11, 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!

TEACHING ENDORSEMENT
IN COMPUTER SCIENCE (CSTed)



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.

TEACHING ENDORSEMENT IN COMPUTER SCIENCE (CSTed)

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.

[Program Flyer](#)

2021 STEM for All Video Showcase

COVID-19, Equity, and Social Justice, May 11-18

In this free 8-day Showcase event, you will be able to view short videos depicting federally funded, cutting-edge, projects that are improving Science, Math, Engineering and CS education. You're invited to discuss the videos online with the presenters and other visitors. Vote for your favorite presentations for the public choice award. Thousands of researchers, educators, higher ed faculty, and parents will take part. Sign up for updates. We look forward to your participation!

Funded by the National Science Foundation



Summer Computer Science Professional Learning



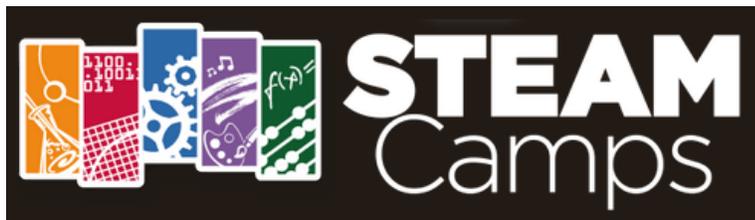
With the recent enactment of **Public Act 101-0654**, Illinois schools will need to provide developmentally appropriate opportunities for students to learn computer literacy skills and intensive instruction in computer literacy as a graduation requirement starting 2022-23 SY. **Code.org**, a national 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@ltechillinois.org) for support.

STEAM SUMMER CAMPS

Summer is quickly approaching! Many organizations have STEAM-centric K-12 summer camps still open for registration with in-person, virtual, or hybrid models. Check out a few here or get inspired to research your area's opportunities.



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.

Summer@IMSA 2021

IMSA will be offering both virtual and in-person programs at our Aurora campus and Belle Valley School in the MetroEast area this summer.



Session 1: June 21–July 1
Session 2: July 12–22
12:45–2:45pm and 3–5pm, M–Th



Parkland College College for Kids and Summer Discovery Camps

Community Education is here for you and your family with a wide variety of youth classes and camps offered year round: in-person, online, hybrid and live local online!

Summer Illinois Mathematics Camp

Summer Illinois Math (SIM) Camp is a week-long math day camp for middle and high school students hosted by the University of Illinois at Urbana-Champaign Department of Mathematics. Campers will see the creative, discovery driven side of mathematics. By showing them some of the ways mathematicians approach problems, SIM Camp hopes to encourage them to continue studying math beyond the high school level.



In Summer 2021, SIM Camp will be a virtual camp experience taking place online; Virtual SIM Camp Epsilon will run from June 7th through June 11th, and Virtual SIM Camp Delta will run from June 21st through June 25th.



Governor's State University Virtual STEAM Camps

Hello GSU Summer STEAM Camp families! We are very pleased to announce that registration for our free virtual summer 2021 camp is open for campers 11 to 16 (campers as young as 10 taken with parent or guardian recommendation). Space is limited, so please be sure to register at your earliest opportunity.

Camp activities will take place during the weeks of July 11, 18, and 25 and will feature a combination of online asynchronous, synchronous, (live) and self-scheduled parent/ guardian directed activities.

SIU Edwardsville Summer Camps

SIUE offers a variety of summer camps. Students of all ages can explore academics and the arts this summer. STEAM related camps include:

Engineering | Music Technology Composition | Arts | Music



Illinois Extension 4-H Family Camps

IL 4-H will be holding 3 day/2 night Family Camp Retreats with each family getting their own cabin! While at camp you can swim, boat, shoot archery, climb the rock wall, make arts & crafts, fish, take hayrack rides, participate in S.T.E.M. activities, hike, make s'mores over a camp fire and so much more! To meet COVID restrictions at activity areas, there will be sign-up sheets for all activities after participants arrive.

STEAM Resource Spotlight

OSF Healthcare Innovation Labs

"Employees with STEAM skills are crucial for research and development, creating innovations and working in technologically challenging jobs. In some fields, such as health care, serious skilled manpower shortages are projected over the next decade. We are working to equip the children of today with the strong Science, Technology, Engineering, Art and Math skills they'll need to be successful in the technologically demanding fields of tomorrow."



Resources for Teaching with Virtual Reality

"While we feel like we are achieving and growing to understand more every day what it takes for virtual reality hardware and deployment, we know that the hardware is useless without the applications necessary to experience it. While new applications are being published every week, here are a few examples of applications that are making an impact right now."

Find this Google Doc and more great technology integration resources on [Mr. Koniak's website](#) at Taylorville High School.



UIUC Veterinary Medicine Virtual Open House

Every year students at the College of Veterinary Medicine put on an Open House to give the public a behind-the-scenes look at their chosen profession. In 2020, they invited individuals to share in their passion for animals and science virtually. Interact with their resources, including diversity in the career, animal mythbusters, meeting the animals, and much more!

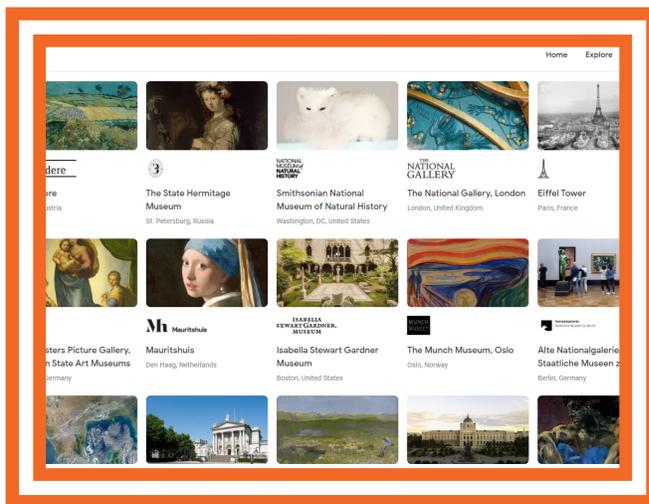


The 'A' in STEAM

"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.

Take a virtual trip this summer!
With [Google Arts & Culture](#), you can visit museums in Florence, Amsterdam, São Paulo, and many more cities around the world with just a few clicks.



Not quite summertime for your school yet? Check out these great [K-12 Lesson Plans](#) from The Institute for Arts Integration and STEAM:

"These free arts integration lessons are a perfect way for you to get started with arts integration and STEAM, or to enhance a program you already have in place."

Sneak Peek

Plan to attend the Tech Prairie STEAM Expo at the Illinois State Fair this summer, August 18-22, 2021!

More information coming in June.



www.illinois.gov/doit-steam



[Follow DoIT on Twitter @IllinoisDoIT](https://twitter.com/IllinoisDoIT)



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

Any links being provided are for educational purpose use only; they do not constitute an endorsement, approval, affiliation, sponsorship, or partnership by the State of Illinois, Department of Innovation & Technology (DoIT) of any products, services or opinions of any of the linked entities. The State of Illinois bears no responsibility for the accuracy, legality or content of the external site or for that of subsequent links. Contact the external site for answers to questions regarding its content. The State of Illinois reserves the right to add or remove the links provided at any time without notice in its sole discretion and shall not be obliged to give a reason for doing so.
