July 2021 | Vol. 9

STEAM NEWSLETTER

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

2+5=7

BACK AT HEADQUARTERS

THE SUMMER OLYMPICS ARE HERE...

Let off some STEAM with these fun activities!

K-4

- MAKE YOUR OWN SIDEWALK CHALK!

5-8

- USE THE SCIENTIFIC METHOD IN ART

9-12

- CREATE A SNAPCHAT GEOFILTER FOR YOUR COMMUNITY

Educator's Corner

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

- STEM Resources for Teachers from Google
- Lessons on the Olympic Games from Scholastic
- Nita M. Lowey 21st Century Community Learning Centers Grant Program | 2021 Summer Symposium
- LTC: Ignite Creativity in your Chromebook Classroom: 60+ Tools and Lessons to Spark Creativity
- LTC EdTechNext professional learning retreat in Galena, IL (August 2-3, 2021)
- ideaU Summer Institute (August 9-13,2021)
  - Earn 20+ PDHs
  - Early bird registration available through July 21

News & Events

PRESS RELEASE: 2021 Tech Prairie STEAM Expo at the Illinois State Fair, Aug. 18-22

"Springfield, IL - The Illinois Department of Innovation & Technology (DoIT) will debut the Tech Prairie STEAM Expo at this year's Illinois State Fair. The event will provide fairgoers with opportunities to experience the many ways Illinois is advancing the areas of STEAM (Science, Technology, Engineering, Arts and Mathematics).

Along with DoIT, the STEAM Expo is being presented by the University of Illinois Extension 4-H, Illinois Innovation Network, Learning Technology Center of Illinois and Illinois Digital Educators Alliance (IDEA). The Expo will be held from August 18-22, 2021 in the Orr Building and will highlight Drone and Esports competitions, as well as many innovations and emerging career and educational opportunities in STEAM fields being advanced throughout the state."

Featured exhibitors include:

- mHUB
- LuxBlox
- OSF Healthcare Jump Simulation Lab
- Double Dutch Boom Bus Hip Hop Xpress
- Illinois Innovation Network
- And many more!

Racial Equity in STEM Education (EHR Racial Equity)

Funding Opportunity from the National Science Foundation: Proposals Wanted

"The National Science Foundation (NSF) Directorate for Education and Human Resources (EHR) seeks to support bold, ground-breaking, and potentially transformative projects addressing systemic racism in STEM. Contexts may include, but are not limited to: preK-12, two- and four-year undergraduate, and graduate institutions; municipal organizations; STEM workplaces; and informal STEM contexts, such as museums, community organizations, and media. Full proposals are due **July 13 and October 12, 2021 and March 22, 2022."**

Springfield, IL | Kidzeum July Reopening!

"Kidzeum's mission is to: Create experiences of learning and discovery through play for children of all backgrounds and abilities."

"Kidzeum is committed to nurturing health and wellness, promoting science education, and to developing environmental and global awareness through innovative programs and exhibits."

Illinois Digital Educators Alliance (IDEA) July IDEA Playground

"Join us in our July IDEA Playground as we figure out ways to incorporate playful learning into the new school year. Listen or watch up to 6 pre-recorded sessions complete with note taking doc for each video to collect your thoughts. Collaborate with other learners in an online forum. Earn up to 6 PDHs when you watch all six presentations. The Playground opens at 9am on Saturday, July 17 and lasts until Saturday, July 31."

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 6-8)**
  - July 19-23 at NIU Naperville Campus
- **CS Principles (Grades 9-12)**
  - August 2-6 at Ridgewood High School in Norridge, IL

TEACHING ENDORSEMENT IN COMPUTER SCIENCE

Want to teach Computer Science? Explore your options as a teacher to earn your endorsement in Computer Science. Several options around the State of Illinois include:

- **UIUC College of Education Teaching Endorsement in Computer Science**
- **Illinois State University Teacher Education in Computer Science program**
- **Northeastern Illinois University**

Article by Internet 2: "Illinois Teacher Transports Students to 1962 with CAP Distance Learning Scholarship"

"Laurel Adams, a 6-12th grade paraprofessional/facilitator at Palestine High School in Illinois, was determined to find ways to keep students engaged and inspired during the pandemic. Since in-person field trips were out of the question, Adams sought out a new way to take her students beyond the classroom: a virtual simulation experience through the Center for Interactive Learning and Collaboration (CILC).

As a recipient of the Internet2 Community Anchor Program Distance Learning Scholarship and through her school's connection to her state's research and education network, the Illinois Century Network, her classroom was able to participate in a Cuban Missile Crisis Simulation program from the International Spy Museum in Washington, DC." Read more of the article by clicking here.

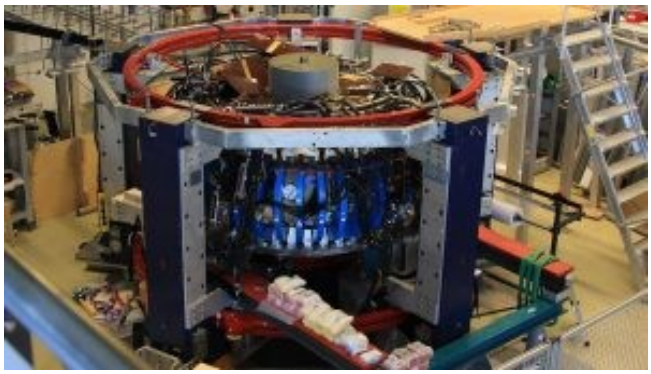
STEAM SUMMER CAMPS

Can you believe summer is halfway through? 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.

EXPLORING NUCLEAR, PLASMA, & RADIOLOGICAL ENGINEERING CAMP

For rising 10th-12th graders | July 25th – 29th, 2021 | Seats still available!

"Nuclear, Plasma and Radiological Engineering(NPRE) is a branch of engineering with diverse and broad applications –among them: the continued safe and reliable use of fission reactors for energy production, risk assessment and analysis, plasma science and engineering for materials processing, development of fusion reactors for longer-term power generation, and radiological sciences use of radiation sources in areas such as national security and medical imaging and treatment."



Northern Illinois University STEM Fest 2021 | Saturday, October 23

Never too early to save the date! "The 2021 STEM Fest Celebration is in person at the NIU DeKalb Campus on Saturday, October 23! We're also planning special STEM Fest virtual events throughout October. Sign up for our newsletter for detailed updates."

STEAM Resource Spotlight

Educator Resources from the Art Institute of Chicago

Connect your students with art no matter where learning is happening.

"Whatever your teaching context, our educational resources engage you and your students with art and ideas from across eras and cultures. Be sure to also explore the Art Institute's collection to find information about artworks and artists, high-quality images, research tools, and scholarly publications related to the museum's global collection."
Feature | Thematic Curriculum: Art +Science

ART INSTITVTE CHICAGO

STEAM and the Olympics

Have you ever thought about how STEAM is integrated within the Olympic Games? It's more present than you'd think. Check out these resources to learn more.

- Science of the Summer Olympics: Engineering in Sports
- The Science of the Olympic Winter Games
- 4 STEM Activities That Bring the Olympics Into Your Classroom

Headed to a National Park this summer? Be a citizen scientist!

"Enjoy science? Love the national parks? Get involved in citizen science! Citizen scientists work alongside researchers to collect data and find answers to real-world questions. They contribute valuable information to help us manage parks. Get your hands dirty in the field. Study important issues that affect parks. Gain deeper knowledge about park resources. Ready to join us? Explore citizen science projects and opportunities in national parks."

NATIONAL PARK SERVICE

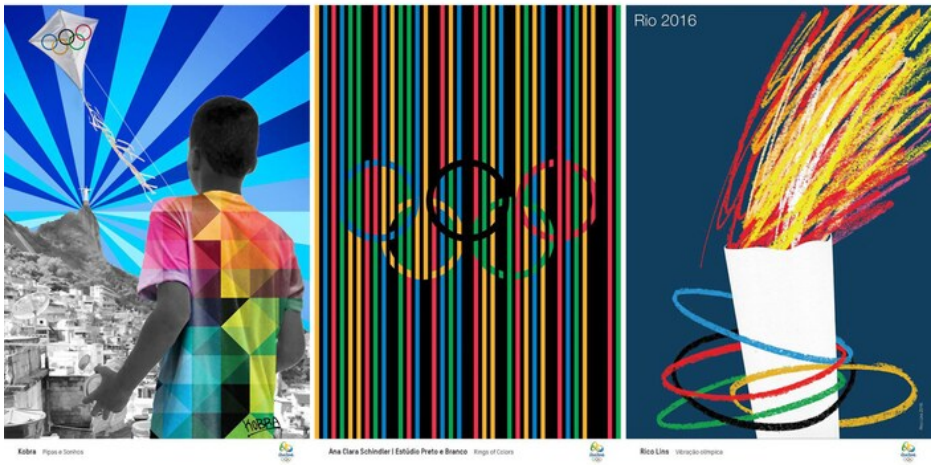
THE 'A' IN STEAM

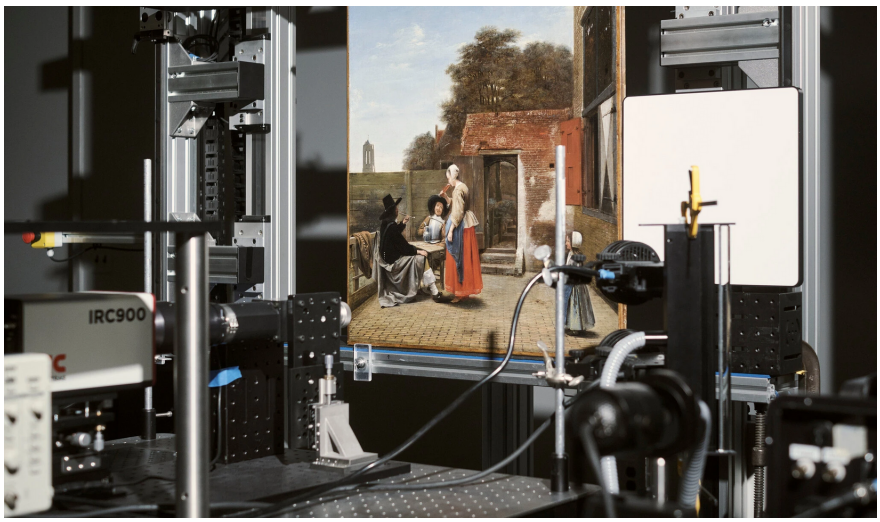
"Arts foster scientific success" -Dr. Temple Grandin

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.

A DIFFERENT PERSPECTIVE: ARTS + CULTURE OF THE OLYMPIC GAMES

"Arts and culture have long been part of the Olympic programme. In Ancient Greece, art and sport were considered perfect partners. The ideal was to achieve harmony by exercising both the body and the mind."





IN THE NEWS

The New York Times

"Peering Under Vermeers Without Peeling Off the Paint: High-tech scanning techniques used by geologists, planetary scientists, drug companies and the military are revealing secrets of how artists created their masterpieces."

www.illinois.gov/doit-steam

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