Back at Headquarters

CYBERSECURITY

October is Cyber Awareness Month

With a myriad of concerns highlighted in the media surrounding cybersecurity, data security, and student data safety, October is a good time to review policies and practices at school, work, and home. According to the federal Cybersecurity & Infrastructure Security Agency, October is designated Cybersecurity Awareness month to "raise awareness about the importance of cybersecurity across our Nation, ensuring that all Americans have the resources they need to be safer and more secure online."   The U.S. Department of Homeland Security shares helpful resources. Governor Pritzker proclaimed October as Cyber Awareness Month in Illinois.

The Learning Technology Center of Illinois "supports Illinois districts through cybersecurity-related technology services, resources, and professional development." The Learning Technology Center "selected 43 security best practices that all districts should implement to comply with the Student Online Personal Protection Act" and "in partnership with the Department of Innovation & Technology (DoIT) and Ed Leaders Network, developed two cybersecurity online courses that are available to all Illinois educators."

"Privacy and Security Curriculum for K-12 Schools," is a free curriculum resource that can be requested from Professor Daniel Solove, John Marshall Harlan Research Professor of Law at the George Washington University Law School. This resource provides an overview of privacy issues and "includes suggestions for appropriate learning activities for each grade level."

Cyberstart America provides a "free immersive cybersecurity training game for high school students, with over 200 fun-to-play challenges." Registration is open now for students in 9th-12th grade to gain "hands-on experience of real-world cybersecurity tasks and simulations that help you learn the skills you need to succeed!" Students can play CyberStart between October 27, 2021 to April 27, 2022.

Let off some STEAM with these fun activities!

K - 4

Little STEAMers Early Childhood Programming from the Illinois Mathematics and Science Academy

5 - 8

The Many Worlds of the Quantum Multiverse—PBS Space Time

9 -12

QUANTUM COMPUTING ZINES FROM ENABLING PRACTICAL-SCALE QUANTUM COMPUTING (EPSQC)

Educator's Corner

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

- STEM Teaching Tools

- Illinois Model Program of Study Guides in crucial industry areas

- Scratch Education Collaborative

- Computer Science for All Teachers

- READWRITECODE blog

- The Code It! Challenge

- CS for Success

News & Events

USDOE Data Literacy STEM Webinar October 15, 2021 1:00 p.m. to 2:30 p.m.

"Big data"—the ability to harness and use data at scale—has transformed our economy, our democracy, and our daily way of life. Yet, there are significant skills gaps in the data science and Artificial Intelligence (AI) fields. The power of data is rapidly transforming careers in manufacturing, health care, and education. AI has made navigating social media and online information a societal conundrum. Join us to understand what Federal, state, and local partners are doing to address these gaps, and what resources exist to bring data education programs to your school. Register here."

Engaged Learning Conference October 16, 2021 from 8:30 a.m. to 12:00 p.m.

"Join the Illinois Digital Educators Alliance, in partnership with MACUL, NETA, and TCEA, on October 16 for a Virtual Mini-Conference focused on best practices for student engagement. The virtual **HYBRID** mini-conference will bring a variety of speakers from across the U.S. to share their best practices in student engagement. We are excited for LIVE engagement sessions AND all sessions will be recorded and available for 30 days post mini-conference."

Northern Illinois University STEM Fest 2021 Saturday, October 23 from 10 a.m. to 4 p.m.

"STEM Fest is a FREE in-person event every October that celebrates science, technology, engineering and math with hands-on activities, exhibits and talks.

STEMFest

Find Your SPARK

STEM Fest is held in the heart of NIU's DeKalb central campus in the Holmes Student Center, MLK Commons and Founders Memorial Library. Sign up for our newsletter for detailed updates."

NASA TechRise Student Challenge
ENTRIES DUE: 11:59 p.m. (PT) November 3, 2021

"The NASA TechRise Student Challenge invites teams of sixth to 12th-grade students to design, build, and launch experiments on suborbital rockets and balloon flights during the upcoming 2021/2022 school year.

IETC Illinois Education & Technology Conference

November 17-19, 2021 | Springfield, IL & Online

The Learning Technology Center is hosting the 2021 Illinois Education and Technology Conference (IETC) on November 17-19. IETC is an edtech conference focused on technology integration strategies, engaging instructional practices, digital tools and resources, and timely topics like SOPPA, computer science, digital equity, maker spaces, funding, and personalized learning. Attendees can join virtually or in person. Early-bird registration closes October 9.

Learning Technology Center of Illinois Computer Science Symposium

A One-Day virtual conference on Computer Science January 14, 2022

"Join your peers from across the Prairie State for the **2022 Computer Science Symposium.** This one-day, virtual gathering will feature numerous presenters from around the state who are excited to share their CS teaching experiences from across multiple grade levels. CS Symposium attendees will also have the chance to obtain proven curricular resources that can help their school or district fan the flames of their burgeoning CS program without needing to reinvent the wheel." The LTC is still accepting proposals for the Symposium here.

STEAM Resource Spotlight

University of Illinois College of Veterinary Medicine "The Round Barn Podcast"

"Welcome to the Round Barn podcast, where faculty members from the University of Illinois tackle issues that are relevant to today's challenges, from livestock production to diagnostics and clinical cases. Look for the Round Barn podcast on your favorite podcatcher or tune in here to get the latest episodes. "
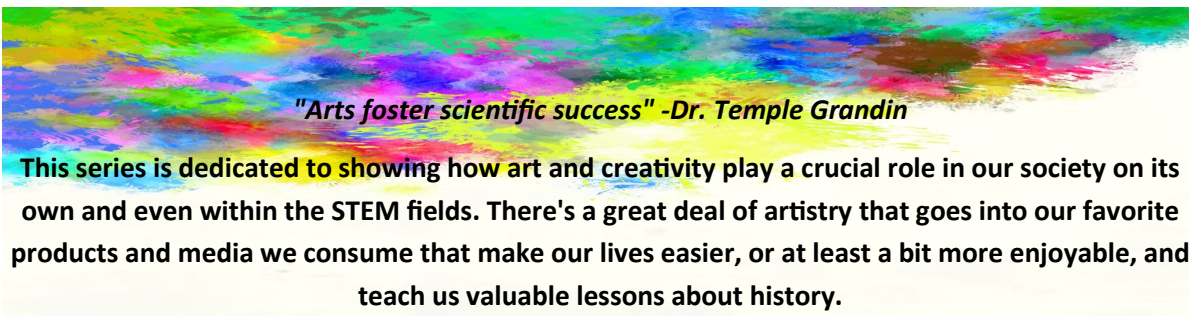
Artifical Intelligence for K-12

"The Artificial Intelligence (AI) for K-12 initiative (AI4K12) is jointly sponsored by AAAI and CSTA.

The initiative is developing (1) national guidelines for AI education for K-12, (2) an online, curated resource Directory to facilitate AI instruction, and (3) a community of practitioners, researchers, resource and tool developers focused on the AI for K-12 audience."

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 teach us valuable lessons about history.

Tunepad
Pick up code. Drop the beat.

TunePad was created by the [Tangible Interaction Design and Learning (TIDAL)](#) Lab at Northwestern University in collaboration with the EarSketch team at the Georgia Institute of Technology and with funding from the National Science Foundation.

"[TunePad](#) is a **free** online platform for creating music with the Python programming language. Our [step-by-step tutorials](#) are perfect for beginners, and our advanced production tools power music making for experienced users. Music production with the power of code."

🌐 www.illinois.gov/doit-steam

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