While not every student will become a computer scientist, access to CS helps ensure that students develop the collaborative, coding, and technical skills that unlock opportunities in the classroom and beyond−no matter what their future goals may be. (Google Education, 2020)

&-&-&-&-&-&

NEW LINK→ Hour of AI - Are You Ready?

One moment, One world. Millions of Futures to Shape

Building on over a decade of success with the Hour of Code, our new global initiative launching this fall is designed to help students and educators everywhere take their first step into understanding and creating with AI.

Through hands-on, easy-to-follow activities, learners around the world will demystify AI and imagine what's possible when they harness it for good.

Because the future isn't something we wait for. Hour of AI is year-round and anchored during CSEdWeek and also other "special moments of activation."

It's something we build—together. Be part of a global moment that helps millions take their first step into AI—with curiosity, creativity, and purpose.

&-&-&-&-&-&

Table of Contents: (links work in Google Doc)

- **[Opportunities for Students](#)**
  - **NASA TechRise Student Challenge**
  - **Due Soon**→ CyberPatriot 18 registration closes soon
  - **Reminder**→National Cyber League (cyber skyline)
  - From previous issues
    - **Reminder**→ Congressional App Challenge for 2025
    - **Continuing**→ Last Mile Education Fund - Community College support
    - **Updated**→ GirlCon newsletter
- **[Opportunities for Educators](#)**
  - Updated → ISTE+ASCD AI Explorations - Fall course section
  - **From previous issues**
    - Recording available→ AI Explorations for Educators - an ISTE U Course
    - Reminder→ Pathfinders Online Institute
- **Updated → [CSTA](#)** - Largest CS Dept in the World; latest newsletters
- **[Student Publication](#)**
  - **Updated**→ Reinvented: Watt's Up Girl video #5, Issue 19 available
- **[Professional](#) Development/Conference Opportunities**
  - **New**→ Back to School with NCWIT including Counselors 4 Computing (C4C)
  - **New**→ AP Teachers Roundtable
  - **Coming**→ Grace Hopper (early November)
  - **Coming**→ SLATE 2025
- **new → [Your homework reading assignment](#) - Action Item**
  - AI for Economic Opportunity and Advancement
- **new → [NCWIT Resource](#)**
  - Aspirations in Computing Award - application period open until Oct 28, 2025
- **new → [Resources](#)** - online tutors for programming students

&--&

CS Education Highlights This Month

CSTA Wisconsin Dairyland   **Computer Science News for Wisconsin CS Educators**

Further details are available [here](#)
- NEW - Public Review of updated WI CS Academic Standards
- Continuing→ Mentor Program - call for Mentees in WI
- Registration OPEN→ CSTA WI Dairyland Summit Nov 11, 2025
- Reminder→ 2nd Annual AP Teacher Roundtable at Oconomowoc HS
- New→ CSTA WI 2025-26 virtual event on Sept 17 pm CS Pathways
- Update→ Learning Blade software - planning for 2025-26
- other useful info and links

<p style="text-align:center;color:red">&--&--&--&--&--&--&--&--&--&--&--&</p>

CS Education Resources

NEW→ AI Learning Priorities for All K-12 Students. CSTA and AI4K12 were awarded funds from the National Science Foundation for the Identifying AI Priorities for All K-12 Students project. The primary outcome of the project was a community-generated list of **the most important AI-related content and skills for ALL students to learn as part of their K-12 computer science education.** Download the report at <https://csteachers.org/ai-priorities>

Reminder→ Two Recent AI Resources

AI Guidance for Schools - TeachAI (updated May, 2025)
This toolkit is designed to support education authorities, school leaders, and teachers in creating thoughtful guidance to help their communities realize the potential benefits of incorporating artificial intelligence (AI) in primary and secondary education while understanding and mitigating the potential risks. **https://www.teachai.org/toolkit**

Still looking for your feedback → Empowering Learners for the Age of AI: An AI Literacy Framework for Primary and Secondary Education. Why AI Literacy? AI literacy empowers learners to understand AI and make decisions about its use in meaningful and ethical ways. When integrated thoughtfully into learning, AI provides new opportunities to exercise critical thinking and creative expression. https://ailiteracyframework.org/ This is a draft - see feedback request in the document.

<p style="text-align:center;color:red">&--&--&--&--&--&--&--&</p>

Reminder→ Hello World #27 - Integrated Computer Science. As digital technology increasingly shapes our world, it may be that thoughtfully integrating CS across subjects is the most effective way to empower all young people to become confident and critical technology users.

Whether or not you teach CS in an integrated way, this issue of Hello World offers plenty of ideas from your fellow educators for how to empower your students. And much, much more. Learn More about this issue and Download. **Also as a paid member of CSTA, you can get one copy of each Hello World as it is published!**

<p style="text-align:center;color:red">&--&--&--&--&--&--&</p>

NEW→ NCWIT Counselors for Computing (C4C): Connected Counseling Newsletter (Sept '25)

<p style="text-align:center;color:red">&--&--&--&--&--&--&</p>

Latest Issue→ Coding and More provides Artificial Intelligence education for the K-12 grade band. Every month they put together a newsletter with fun and useful learning resources for students, teachers and parents.

Their August 2025 Newsletter is here. Among articles included "The Role of AI in Education" and "To spark curiosity and learning for students, teachers, and parents alike" !

The July 2025 newsletter can be accessed at https://bit.ly/ai_newsletter_jul25
The June 2025 newsletter can be accessed at https://bit.ly/ai_newsletter_june25

&--&--&--&--&--&--&
Previous CS Educational Resources
&--&--&--&--&--&--&

Reminder→ Experience CS: A New Way to Teach CS

From Raspberry Pi Foundation, Experience CS, a free, integrated computer science curriculum for elementary and middle school students (8–14 years old) that will be available in June 2025.

Experience CS enables educators to teach computer science through a standards-aligned curriculum that integrates computer science concepts and knowledge into core subjects like maths, science, languages, and the arts. Read this blog post for further information **https://www.raspberrypi.org/blog/experience-cs-a-new-way-to-teach-computer-science/**
To subscribe to their newsletter: **https://experience-cs.org/subscriptions/new**

&--&--&--&--&--&--&

Updated→ CS Teaching Tips

Dr Lewis recently updated and released several Tip sheets: Peer Instruction, Help Seeking, and Lecturing, These and 8 other **CS Classroom Teaching Tips** might be very helpful to you. Author Colleen Lewis is an excellent presenter.

&--&--&--&--&--&--&

Reminder→ Reimagining CS Pathways Report. This is a community-wide project that explores how CS learning opportunities can be reenvisioned for highschool students. For more information see our January, 2025 newsletter

&--&--&--&--&--&--&

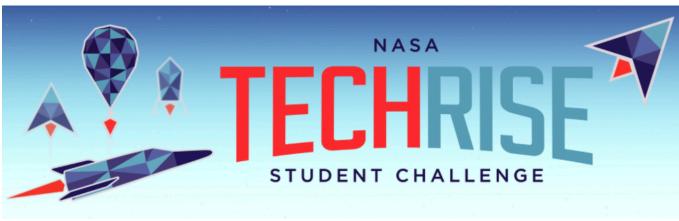**Reminder→ Guidance on the Future of CS Education in an Age of AI**

This publication was developed by TeachAI and the Computer Science Teachers Association (CSTA) in partnership with a community of thought leaders. For more info see the January, 2025 newsletter.

Updated→ AI Resources that have appeared in this newsletter

Opportunities for Students

NEW→

Middle and high school students can reach for the stars with the NAS TechRise Student Challenge, opening this September. This free NASA program invites teams in grades 6–12 to design experiments to fly on a commercial suborbital flight such as a rocket or high-altitude balloon.

Sixty winning teams will receive $1,500 to build their experiment, a spot to test it on a NASA-sponsored flight, and technical support from NASA TechRise advisors. The challenge includes free classroom resources, educator pacing guides, and a student virtual field trip in th fall. All skill levels are welcome to apply.

Last year's winners explored topics from environmental monitoring to space-based agriculture. What will your students dream up next?

Learn more and pre-register for updates

Due soon → Cyberpatriot 18 Security Competition - Registration Closes October 1, 2025. CyberPatriot is the National Youth Cyber Education Program created by the Air & Space Forces Association to inspire K-12 students toward careers in cybersecurity or other science, technology, engineering, and mathematics (STEM) disciplines critical to our nation's future. At the core of the program is the National Youth Cyber Defense Competition, the nation's largest cyber defense competition that puts high school and middle school students in charge of securing virtual networks.

CLICK HERE for everything you need to know about coach/team registration (instructions and screenshots).

Reminder→ **National Cyber League**

—--> **Register** for the NCL Fall 2025 Competition (opens Aug 18, ends Oct 11, 2024 at 10:59pm CDT)
Over 8,500 students across the country joined last year's NCL Fall Competition Season. Get in on the opportunity to gain practice with real-world cybersecurity skills that will help you land a job or internship!

Why Participate in NCL?

- Develop your own technical cybersecurity skills
- Gain a Scouting Report which demonstrates that you are job-ready
- Represent your school in the Cyber Power Rankings
- Have fun in a CTF!

<u>View NCL Flyer</u>

Learn more about the NCL Competition at: cyberskyline.com/events/ncl/info

Previous Opportunities for Students

Reminder!

Code Your Future is the theme of the app creation competition for middle school and high school students in districts where their Representative in the US House Representatives has chosen to participate.

Students can register individually or as a team.

Deadline: October 30, 2025 at 11am CT

Much more information at <https://www.CongressionalAppChallenge.us>

Reminder→ Last Mile Education Fund

This Fund's Mission: The Last Mile Education Fund offers a disruptive approach to increasing diversity in tech and engineering fields by addressing critical gaps in financial support for low-income underrepresented students. For more info please see January, 2025 issue of this newsletter

&--&--&--&--&--&--&--&--&--&--&--&--&

Updated info→ GirlCon - International tech conference for Womxn by high school and college womxn, for high school womxn.

Their 2025 conference took place in person in Chicago and virtually in June 2025. On their website <https://girlcon.org/> they now have many of the recordings of sessions available. Also they invite you to apply to organize GirlCon2026.

Follow our Instagram @girlcontech and Join their mailing list here to stay updated! Here is their latest newsletter (May 2025). Here is their newsletter archive. Make sure to check out their website!

&--&

Opportunities for Educators

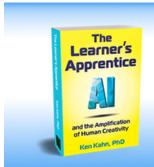# Enroll through Oct 6, 2025 → AI Explorations for Educators

Artificial intelligence (AI) is no longer the stuff of the future; today's students can expect to interact with AI in both their personal and professional lives. To prepare students for success, educators need to understand how AI technologies can be leveraged to facilitate learning and solve real-world problems.

In Artificial Intelligence Explorations for Educators, you'll learn to identify the various types of AI, hear about AI technologies on the horizon and build some of your own tools to make AI concrete and accessible for you and your students.

This is a 15-hour, self-paced course with ongoing instructor support. No previous knowledge of AI or experience coding is required. Fall 2025 Session: October 6-December 7. Enrollment periods now up through the first day of the session

Updated→

ISTE+ASCD AI Explorations Webinar Series: AI and the Amplification Creativity

📍 **Link to Recorded Webinar:**

https://iste.zoom.us/webinar/register/WN_uoMtcHfBSQaAWodNw8lvYw

Join us as Ken Kahn, the author of The Learner's Apprentice: AI and the Amplification of Human Creativity, shares his insights on using generative AI while boosting knowledge construction and creative thinking. Learn how educators and students can be creative with chatbots, exploring how to co-create apps, adventures, debates, and panel discussions with AI.

&--&--&--&--&--&--&--&

brucehavel@gmail.com

Reminder→Pathfinders Online Institute "This online platform is designed to support K-12 teachers who want to bring dynamic computer science and maker education to their classrooms. Sign up for live events, and download free on-demand content: K-5 streamable courses, webinars, mini-lessons, and courses featuring free materials, kits and licenses. Get started today!

&--&--&--&--&--&--&

CSTA - the largest CS Dept in the World!

We Encourage all to Join - very much worth $50 annual fee
Take Advantage of the many events and ways to engage
https://csteachers.org/join/
https://csteachers.org/Events
NEW→ *Recent CS Today Newsletter - September 4, 2025*
Also 8/7/2025, 8/14/2025, 8/21/2025 and 8/28/2025
Including CS Ed News, CSTA PD opportunities, Events listings and Resources available in each issue!!
Subscribe to CS Today Newsletter

&--&

Student Publication

Updated→ Reinvented, Inc. aspires to break barriers and aid the movement to get more girls involved in STEM by creating the nation's first print magazine for women in STEM written by women in STEM.

GREAT NEWS: Fortnite is going to fund Reinvented's 2026 operations, but we need your help! Donate to the campaign, score some cool dragon queen merch, and pledge to play on launch day 9/20! **Learn More.** "The realm calls upon thee to take up arms and enter 'The Dragon Queen' -- a mythical new Fortnite adventure forged to inspire the next generation of princesses in STEM."

Their most recent newsletter: 9/5/2025. Sign up for their excellent newsletter on any page of their website.

- **Their newest project are fun and interesting videos titled "Watt's Up, Girl?" appearing on a YouTube channel of the same name.**
  - **The Newest Episode #5: "Day In The Life Of a Space Mechanical Test Engineer"**
- **Previous episodes:**
  - **Episode #1 - "How Xyla Foxlin Got Started On YouTube"**
  - **Episode #2 - "AI Wrote Our Theme Song!?"**
  - **Episode #3 - "Did You Know Earth Has Planetary Defenders??"**
  - **Episode #4 - "The Art and Tech of Fortnite Mapmaking with JoCee"**
- **And Issue 19 of Reinvented magazine, the semiconductor issue (read now) (order printed copy)**

&--&

Professional Opportunities

NEW→ ✏️ Back to School with NCWIT

Sept 24 | 5:30pm CT

Join our upcoming meeting with our all of our K-12 Alliance programs; C4C, Aspirations in Computing (AiC), and Teach Engineering! This is a unique opportunity to equip yourself with new tools and knowledge for the academic year. **[More Info and Register Here](#)**

&--&--&--&--&--&--&
Reminder→ AP Teachers Roundtable

Oconomowoc High School (WI) is excited to offer the second annual AP Teacher and Coordinator Roundtable on Thursday, November 13, 2025.

This FREE annual event is a chance for new and veteran AP teachers and AP Coordinators from multiple schools to:
- **Share best practices with one another**
- **Review their instructional planning reports and plan for instruction**
- **Collaborate around use of AP Classroom to enhance instruction**
- **Compare and refine assessments**
- **Other topics as defined by individual subject areas**

There will be a short session related to AP Programming overall, and then we will break into specific department groups. We plan to host AP CSA and CSP together, as many teachers instruct both classes. We could also branch into discussing new AP Career Kickstart: Cybersecurity curriculum.
Click here for more information and to reserve your spot.

The AP Roundtable will be held at the Oconomowoc High School East Campus at 915 Summit Ave., Oconomowoc, WI 53066. Please feel free to share this invitation with interested colleagues. We welcome new and returning participants! (from Laura Finke <finkel@oasd.org>)

&--&--&--&--&--&--&
New Listing → [Grace Hopper Celebration of Women Conference 2025](#)

Grace Hopper Celebration of Women in Computing, GHC 24 - Unbound, is the world's largest gathering of women technologists. This year again the conference will be presented in person in Chicago and also virtually from Nov 4-7, 2025. GHC25 is produced by the Anita Borg Institute and presented in partnership with ACM. [Register here](#)

New Listing→ [SLATE 2025](#). The School Leaders Advancing Technologhy in Education

conference is set for December 8-10, 2025 at the Kalahari Resort in Wisconsin Dells. SLATE is Wisconsin's Comprehensive Educational Technology Convention designed to meet the needs of all schools and districts. This convention is designed for a wide variety of educators including Teachers, Principals, Associate Principals, District Administrators, Library Media Specialists, IT Coordinators, Directors of Curriculum and

Instruction, and other school leaders. Over the course of three days, 1,200 educators of all backgrounds and expertise levels gather to learn about the newest in education technology, as well as practical tips and tricks to implement in their schools and districts. Registration will open soon.

&--&

New → *Your Reading Assignment - Call to Action*

AI for Economic Opportunity and Advancement: A Call to Action. A report of Jobs for the Future (JFF). Their focus is on the entire US workforce in which they maintain that 92 million (more than half of the labor force of 170million) are not in quality jobs and face barriers to advancement.

...Reminder of the reading from the August, 2025 issue: (No July issue)
Using AI as a Thought Partner, Not a Shortcut Engaging in a back-and-forth with AI programs to refine the prompt and the output can help educators generate high-quality learning materials.

...Reminder of the reading from the June, 2025 issue: (No July issue)
The world needs a 'premortem' on generative AI and its use in education
Commentary from the Brookings Institute. Generative AI technology, like any technological innovation, can and will have unanticipated consequences for the world. Rather than wait for its widespread adoption to study the effects of this technology, the Center for Universal Education has launched a task force aimed at anticipating its effects on education.

...Reminder of the reading from the May, 2025 issue:
To Read:
Quantum Computing In Education: 5 Things To Know

Quantum computers have been making waves in the tech industry for a while now, but in recent months the interest in these next-generation devices has intensified.
To View:
Quantum Computers Explained – Limits of Human Technology
Where are the limits of human technology? And can we somehow avoid them? This is where quantum computers become very interesting. This (a little over) 7 minute video was created in Australia as part of the Nova Project <www.nova.org.au>

Archived Monthly CSN Newsletter readings October 2012 - April 2025
<*http://istecsn.pbworks.com/w/page/125926169/Monthly-Newsletter-Readings*>

&--&

Updated→ NCWIT - Resources (www.ncwit.org)

NCWIT widens inclusion in the technology ecosystem through innovative programs and research.

We develop and promote research-based strategies to extend computing education and career opportunities to all, regardless of background or location. Our research and resources support a holistic approach to both change the system to be more inclusive and develop tech talent to drive innovation.

NCWIT is a non-profit community of more than 1,600 universities, companies, non-profits, and government organizations nationwide that strives to ensure the broadest spectrum of people can contribute to the innovations that shape all of our lives. NCWIT helps organizations remain globally competitive in science and technology by sharing research-backed practices for creating environments where all students and employees thrive.

New →NCWIT Resources of the Month:

Aspirations in Computing
https://www.aspirations.org

NCWIT Aspirations in Computing (AiC) changes what's possible for underrepresented populations in technology from K-12 through career by offering the kind of encouragement that combats isolation, enables long-term persistence, opens doors, and changes lives. AiC recognizes and celebrates technical aspirations and abilities (**AiC Award Recognitions**); and, provides an expansive, supportive network (**AiC Community**).

NCWIT Aspirations in Computing (AiC) needs volunteers like you to complete its mission of revolutionizing the face of technology. Together, we can help to create a diverse and inclusive tech workforce—one where ideas are emboldened and possibilities thrive.

For more information, visit https://www.aspirations.org/get-involved/volunteer-with-aic

&--&

New→ CS Resource This Month

Online Tutors for programming students:
Now that ChatGPT can write any CS 1 program,
it is more important than ever for introductory programming students to be able to
understand how a program works: predict its behavior, debug it, clean it up, etc.

The following suites of tutors were designed to help students learn to do so by solving problems:
* Problets (https://problets.org) - Code-tracing tutors
* Epplets (https://epplets.org) - Parsons puzzle tutors
* Solvelets (https://solvelets.org) - Computational thinking tutors

* Auglets (https://auglets.org) - Code refactoring tutors
They are all free for educational use.
You are invited to consider using them in your introductory programming courses.

You can use as many of them as you wish.
You can use them in class or after class
for practice, assessment, assignment or as self-study supplements.
The tutors run on any Java-8 enabled computer.
They are digitally signed and safe to use.

If you are interested in using these tutors in your class(es) this semester,
please send me an email (amruth@ramapo.edu) specifying
1) the desired programming language(s) and
2) the tutors you would like to use (Problets/Epplets/Solvelets/Auglets/all).
Please pass this information along to your colleagues who
may also be teaching introductory programming courses.

More details of the suites of tutors follow.
* Problets cover 17 topics in C, C++, Java and C#.
Problets differ from exercise supplements in electronic textbooks in the following ways:
1) The problems are not multiple-choice. So, answers are harder to guess;
2) The tutors explain the correct answers step by step;
3) The tutors generate problems on only the concepts the student does not know.

* Epplets cover 6 topics in C, C+, Java and C#.
Their unique features include:
1) The puzzle pieces are single lines of code, not segments of code.
2) The tutors provide feedback to help students solve the puzzles.

* Solvelets cover 5 topics in C++ and Java.
Their unique features include:
1) They help the student write a complete and correct program for every problem.
2) They scaffold frame-first coding, problem-solving and computational thinking.

* Auglets currently cover 2 topics in C++ and Java.
Their unique features include:
1) They target semantic anti-patterns.
2) They prevent false positives and false negatives by comparing source code.

Oh, and One More Thing:
Ideas, news, conferences, materials? Interested in writing a 1-2 page article for the newsletter?
This is an opportunity for you to focus on some aspect of CS and computational thinking - maybe you have a favorite plan or unit that you could share or an idea you'd like to give your opinion about. Who knows - possibly the beginnings of fame and fortune for you (well, maybe not fortune…). Please contact Joe Kmoch with your ideas.