



Celebrating CSEdWeek 2020: A Resource for Counselors and Educators

Computer Science Education Week (CSEdWeek) is an annual program dedicated to inspiring K-12 students to explore computer science. How can you join the movement to spark interest in CS? In this document, you'll find free resources and easy-to-implement activities that you can use to generate excitement and increase participation in CSEdWeek at your school.

CONTENTS

[Background](#)

[Promoting CSEdWeek](#)

[Sample Morning Announcements](#)

[Download Free Posters](#)

[Inspire Your Students](#)

[View Inspirational Videos](#)

[Invite a Speaker](#)

[Curriculum Resources](#)

[Activities](#)

[Lessons](#)

Background

Computer Science Education Week (CSEdWeek) is an annual program dedicated to inspiring K-12 students to take an interest in computer science. Originally conceived by the Computing in the Core coalition, CSEdWeek is now organized by Code.org as a grassroots campaign supported by 350 partners ([including NCWIT](#)) and more than 100,000 educators worldwide. CSEdWeek is held in recognition of the birthday of computing pioneer [Admiral Grace Murray Hopper](#) (December 9, 1906), and for that reason, it takes place every year during the week of December 9. Schools, clubs, organizations, families, and individuals of all ages can all participate in this week-long celebration by joining in coding activities and by spreading awareness about opportunities in computing.

Promoting CSEdWeek

Getting the word out about CSEdWeek is a key component of a successful celebration. Below, you'll find free posters and pre-written announcements that can double as blurbs in your school's newsletter or social media.



Download Free Posters

- These posters from [CSTA](#) introduce #CSforSocialJustice Heroes who are using computing in a variety of ways to support social justice causes.
- [Code.org](#) offers printable posters featuring diverse, recognizable role models with quotes about the importance of computing.
- [Rob-Bot Resources](#) has free downloadable poster collections that cover a wide variety of topics in computer science and highlight the intersection of computing skills with specific content areas, such as art, music, humanities, PE, and more.
- [CreateCodeLoad.com](#) offers free classroom posters that combine a growth mindset with drag-and-drop coding. These posters are ideal if your school uses [Scratch](#).
- [Nevertheless](#), a podcast that celebrates women transforming teaching and learning through tech, has eight free posters celebrating women role models in STEM fields. The posters are available in eight languages and feature women from around the world.
- The [March for Science](#) posters feature influential women in a variety of science fields. These posters have a more mature feel (not cartoony), and would appeal to middle and high school level students.
- How does what a student is learning during CSEdWeek translate to a career? [The National Initiative for Cybersecurity Careers and Studies](#) has 15 free downloadable posters that spotlight a variety of cybersecurity careers, including educational pathways, job descriptions, salary ranges, and more.
- In these posters, [TECHNOLOchicas](#) ambassadors share inspirational quotes about their tech journeys and illustrate the wide range of careers available in the computing field.

Sample Morning Announcements

The sample morning announcements below use information from Code.org, and are designed to be shared as morning announcements throughout CSEdWeek. Customize these announcements with details about your school's activities, computing classes, or extracurricular opportunities. You can also find sample emails to send to your school community [here](#), and shorter blurbs that are ideal for social media [here](#).

M	This week we celebrate Computer Science Education Week! Did you know that computer science is involved in EVERY career? Are you interested in art? If so, people who have a background in computer science and art can be employed in a field to restore artwork using technology! Are you interested in sports? Amy Acuff is a track and field world champion who used video analysis tools to help her excel in the field. Are you interested in social good? Did you know there are many ways that students just like you are getting involved in making our world a better place by solving problems in our local, state, national, and global community? Computer science is a field that intersects with EVERYTHING you are interested in!
---	--



T	<p>Happy #TechTuesday and Day Two of Computer Science Education Week! Did you know that computer science is all around us? We often don't think about it because our devices and the coding behind them make our lives easier. For example, the first thing I do when I wake up each morning is to brush my teeth with my electric toothbrush. It beeps every 30 seconds to let me know that I should move on from brushing that section of teeth and move to a new area. If it weren't for the algorithm and beeps every 30 seconds, I might only brush my teeth for 30 seconds each morning. That would cause major social problems with friends who chat with me, and it would cause cavities, since my dentist says I need to brush all my teeth and for longer than 30 seconds. Also, one of my chores, before I leave for school, is to set our electronic vacuum to clean. This certainly makes my life easier! I wonder if there is a connection between the vacuum technology and self-driving cars. Maybe today is not only #TechTuesday but also #TuesdayThoughts!</p>
W	<p>Happy #WednesdayWisdom and Day Three of Computer Science Education Week! Do you know which field within computer science has the HIGHEST growth rate? It's a field that every single one of us has a vested interest in. Need a hint? It sure is important to keep our information SECURE from CYBER attacks. That's right! The field of cybersecurity has a projected growth rate of 28%! Wow! This huge number reflects the fact that every person needs ALL of our information to remain secure and safe.</p>
R	<p>Happy #ThrowbackThursday and Day Four of Computer Science Education Week! Did you know that the first iPhone came out in 2007? Many of the technologies used in our smartphones started as accessibility tools for people with physical or cognitive challenges. For example, if someone is having trouble typing, a touchscreen to click on icons makes it easier to surf the internet. Or, if someone has difficulty tapping a screen, using voice to text or electronic assistance helps not only people who have difficulty typing, but also those who have their hands full with other tasks!</p>
F	<p>Happy #FridayFeeling and Day Five of Computer Science Education Week! There are many reasons why young people should consider careers in computing and information technology.</p> <ol style="list-style-type: none"> 1. It's important. They can use their skills to help solve pressing problems in a variety of fields. 2. It's creative. They can use their creativity in many different jobs and roles; they will always find new challenges in their work. 3. It's team-oriented. They will do much more than use a computer. They will work with others as part of a creative team. 4. It's valued, respected, and flexible. They will enjoy challenging work in a well-respected field that pays well and often offers flexible hours. 5. It's everywhere. Most 2- and 4-year colleges offer programs in computing and related fields. <p>Check out the programs nearest you, meet with your school counselor, and start planning now.</p>



Inspire Your Students

Whether in school-wide assemblies, morning broadcasts, or individual classrooms, use these resources to get students excited about the world of possibilities that coding has to offer.

View Inspirational Videos

For Educators

- [Teach Girls Bravery, Not Perfection](#). In this TED Talk, Girls Who Code Founder Reshma Saujani asks educators to teach girls “to take risks and learn to program – two skills they need to move society forward.”

For Students

- [Computer Science is Changing Everything!](#) This video from Code.org emphasizes the ways that coding is woven into every career and subject area.
- The [What is Creativity playlist](#) from Code.org features short interviews with celebrities from many fields, all talking about elements of creativity that can be found in the tech world.
- As the name suggests, the [Careers in Tech playlist](#) from Code.org showcases tech professionals talking about their jobs and the paths they took to get there.
- On the [TECHNOLOchicas YouTube Channel](#), you can find numerous short videos featuring Latina STEM professionals from diverse backgrounds. They share how they got into computing, why they love tech, and what their jobs are like. From NASA to Microsoft and everything in between, there’s something to inspire everyone.

Inspirational Women in Tech

[This C4C resource](#) collects videos of talks given by members of the NCWIT Aspirations in Computing Community and TECHNOLOchicas Ambassadors. A few highlights include:

- [Limitless](#) by Sophia Sanchez-Maes, a keynote from the 2018 Infosys Crossroads
- [How Computer Science Made Me Brave](#), a TEDx Talk by Madeline Griswold
- [Hacking a Solution to Global Cybercrime](#), a TEDx Talk by Kyla Guru
- [A STEMinist’s Plan to Roll Up the World](#), a TEDx Talk by Ruby Rios
- [Everyone Deserves a Seat at the Table: Opinions from a #WomaninTech](#), a TEDx Talk by Caitlin Stanton



Invite a Speaker

Whether in-person or virtual, guest speakers can help students make real connections with diverse role models and see themselves in tech. Here are a few starting points for making contact with potential guest speakers:

- Your local NCWIT Aspirations in Computing Regional Affiliate can be a great resource to connect you with CS educators and computing professionals in your area who may be available to speak to your students. Use [this map](#) to find the Regional Affiliate for your area. You can email the person identified as the “Main Contact” for your region to request a connection with a local speaker.
- The [FabFems directory](#) is an international database of women in STEM professions who are inspiring role models for young women. This is a great place to look for both guest speakers and one-on-one pen pals.
- The [Code.org Volunteer](#) program matches educators and tech professionals with schools and organizations for one-time or ongoing visits.
- [TECHNOLOchicas](#) Ambassadors can visit your school virtually to talk with students about careers in tech, overcoming obstacles, and the joys of coding.

Curriculum Resources

Below, you’ll find ideas and resources for integrating coding activities into the classroom during CSEdWeek. Many of these activities do not require the facilitator to have any prior knowledge of computer science. That makes them perfect for introducing relevant coding concepts in subject classes across the curriculum. Whether you’re looking for a single activity or a week’s worth of content, these materials will help you get started.

Activities

- Code.org has a large collection of [educator resources](#), and their [Hour of Code activities](#) offer unplugged activities as well as online games and dance parties that gamify learning to code.
- Looking for an engaging, self-guided cybersecurity lesson for students? In [CyberStart America](#), students can explore life as a cybersecurity professional and take on more than 200 real-world cybersecurity challenges. After the game is over, explore the website to find information about the many exciting careers available today within the cyber workforce, including interviews with industry leaders.
- [Family Code Night](#) pairs parents with their young children to do their first hour of coding, together. Parents and educators can download an Event Kit for free, easy, scripted activities. This year’s offerings include materials that are tailored for remote learning.



Lessons

- The [Cyber A.C.E.S.](#) (Activities in Cybersecurity Education for Students) program aims to demystify cybersecurity through interactive learning, equipping kids ages 5 to 15 with an understanding of how to protect their digital future. Lessons are designed so they can be facilitated by anyone, regardless of their knowledge level, with each module tailored to a specific age group.
- [Nearpod](#) offers free, interactive digital lessons on many foundational computing topics for CSEdWeek and all year long. Virtual Career Fair sessions introduce students to job possibilities in computing, while coding lessons let them try out the tools of the trade.
- The NCWIT resource [Computer Science-in-a-Box: Unplug Your Curriculum](#) introduces fundamental building blocks of computer science – without using computers. Use it with students ages 9 to 14 to teach lessons about how computers work, while addressing critical mathematics and science concepts such as number systems, algorithms, manipulating variables, and logic.