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VOICE

International CS Education

Leading a Tribe

Pat Phillips

Every once in a while, something catches your attention that makes you sit up and take notice. Recently, that happened to me when I was planning this issue on Advocacy. Just by chance, I heard Seth Godin on the National Public Radio (NPR) *TED Radio Hour* ask the question, "Can ordinary people become leaders?" The longer I listened, the more I realized that this show could have been about CSTA!

Godin describes how individuals become leaders when they possess two critical elements: a vacuum to fill and a "tribe." As computer science educators we certainly have our share of vacuums to fill in recruitment, curriculum, public understanding, and training. And we certainly have a tribe; there are now more than 17,000 CSTA members—enough leaders in filling many vacuums!

Successful leaders challenge the status quo, define a cause, build commitment to the tribe, connect people, and encourage curiosity and a culture of growth. Advocacy should NOT be working for average stuff for average folks… rather super stuff for extraordinary folks. This is the character of the CSTA tribe and I'm proud to be member!

In this issue of the *Voice*, you will read advocacy success stories, as well as find opportunities for becoming a leader at many levels. I invite you to take the challenge; put your leadership skills to work to make serious and lasting change—CSEd Week presents the perfect time to take the next steps in rallying the tribe.

Become inspired. Listen to this and other shows on leadership on the *TED Radio Hour* at *www.npr.org/2014/01/17/261096538/can-ordinary-people-become-leaders*.

First Steps in Changing Your State

Mark Guzdial

It's hard to change state policies to better support computing education. What makes it even harder is that there is no guide or template to follow. Every state is different; in some states, the department of education defines K–12 curriculum and high school graduation requirements. In other states, these decisions are delegated to local districts and school boards, so the curriculum and graduation requirements may differ from one region of the state to the next. In many states, the admission requirements for public higher education strongly influence high school graduation requirements.

The Expanding Computing Education Pathways (ECEP) Alliance (*www.ECEPAlliance.org*) has several roles in helping individual states improve and broaden computing education. We work to ensure everyone has access to high-quality computing education with a particular focus on increasing the number of women and other underrepresented groups involved. We work with states to start summer camp programs, create teacher profes-

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FIRST STEPS IN CHANGING YOUR STATE

sional development programs, and improve transfer pathways from two-year to four-year higher education institutions. At the 2014 NCWIT Summit, we offered a workshop on "changing a state." Even though states vary greatly, these "getting started" steps work nearly everywhere.

Step 1: Find leaders. Computing education reform doesn't just happen. Someone or a team has to take the initiative.

Step 2: Figure out where you are and where you're going. The leaders need to understand the big picture of how schools, higher education, businesses, and state politics work together to make change. Who makes the decisions about graduation requirements, certification, curricula, and public higher education? Where does computing fit in state policies?

Leaders in several of the states we work with in ECEP have created landscape reports that lay out the state of computing education within the state. Several are available on the CSTA website (*csta.acm.org/Research/sub/MajorResearch.html* and *csta.acm.org/Advocacy_Outreach/sub/CSTAPresentations.html*).

Does computing count towards high school graduation? Who can teach it? What certifications or licenses are needed? Who makes K–12 computing education policy, and who influences that policy? State-by-state information to answer some of these questions is available in the *Bugs in the System* report (*csta.acm.org/Communications/sub/Reports.html)* and the associated interactive map (*csta.acm.org/ComputerScienceTeacherCertification/sub/StateRequirements.html)*. This information enables leaders to communicate the current state of computing education to

stakeholders and make a case for what is lacking and what changes to make. To help you get started, we've gathered links to resources for state-level information on the ECEP website.

Step 3: Gather your allies. Locate the high school teachers, university faculty, business leaders, and state department of education leaders who are interested in improving and broadening computing education in your state. We find that multiple voices from different sectors promoting computing education tend to get attention and have more influence in state government. Several states have held computing education summits where these stakeholders gather, face-to-face, to talk about shared goals and to come up with strategies for tackling the challenge. It is critical that the allies share common goals to improve and broaden computing education and can speak with one voice in convincing policy makers.

Step 4: Get initial funding. There are big ticket items required for developing quality computing education, including professional learning opportunities for teachers. But there are smaller items that require funding early in the process. Landscape reports require research time and writing time. Summit gatherings cost money. Larger summits are usually better if they can include all of your allies, as well as the people you would like to influence.

What happens next—from influencing school boards, to revising public higher-education admission requirements, to legislative actions—depends on your state. But these steps will help you envision where you want to go, and how you are going to get there, and who will support you along the road.

Chapter Advocacy Wins the Day

Mayra Bachrach

Editors's Note: Mayra Bachrach has been named CSTA Advocate of the Year. In this article, she describes the challenges and successes experienced by the CSTA New Jersey (NJ) Chapters as they advocated for New Jersey Assembly Bill 2597. The bill recently passed 76-0-0. For those not familiar with AB2597, it states that beginning with the 2014-2015 school year, for the grade nine class, the Advanced Placement Computer Science (AP CS) course may satisfy a part of either the mathematics or science credits required for high school graduation.

While this is not the final step for this legislation, it is a very important component of it. The collaboration, hard work, testimony, and grassroots advocacy efforts of the New Jersey chapters, led by Mayra Bachrach (Northern NJ) and Daryl Detrick (Central NJ), have been the driving forces for this legislation. Congratulations, Mayra and Daryl!

Every activity and every connection is an opportunity for advocacy.

New Jersey is moving towards making CS count. Two bills are making their way through the state Legislature with nearly unanimous support from legislators. The first bill (AB2597, which passed June 26, 2014) will make AP CS count as a math or science credit towards graduation. The second bill will require the New Jersey Department of Education to establish CS curricular standards and for NJ schools to incorporate the new standards into the curriculum for grades six to twelve within a year after the standards are published.

I am fortunate to be part of an active network of New Jersey CS advocates. There are two CSTA chapters, CSTA of Central NJ and CSTA of Northern NJ. Under the leadership of Daryl Detrick, president of the Central chapter, a local CSTA advocacy outreach group, CSNJ, was formed in June of 2013. CSNJ consists of 22 CS advocates representing K–12 schools and colleges throughout the state. The mission of CSNJ is to establish K–12 CS as an essential discipline in New Jersey. A variety of strategies have had a positive impact in New Jersey and may be applicable to other states.

Communicate, communicate, communicate
A CSTA chapter meeting is held every month. Central NJ CSTA meets during even-numbered months and the Northern NJ chapter during odd-numbered months. In addition, CSNJ meets at least once a month to brainstorm, plan, and evaluate activities. A Google site and Google groups have been established for communication. Meeting notices are sent out through Google calendar. Meeting minutes, links to relevant news and articles, announcements of training, and other important announcements are distributed through the Google groups e-mail list. Members can attend meetings either in person or virtually through Google Hangout or Skype.

Partner with colleges and universities
CSTA NJ has members from several colleges and universities. We work closely with Rutgers University and Kean University and are currently working on a proposal for CS teacher endorsement with both Rutgers and Kean. The collaboration has proved invaluable with added perspectives.

Publicity—every connection counts
We have made presentations to local school boards, parent groups, and at computer festivals throughout the state. Literature is distributed to teachers, administrators, legislators, and other CS stakeholders who may not be aware of the importance of CS or our advocacy efforts. During October and November, with funds from CSTA chapter mini grants, we will staff booths and present workshops at the New Jersey Education Association (NJEA) and the New Jersey School Board Association (NJSBA) conferences.

CHAPTER ADVOCACY WINS THE DAY

No connection is too small

Every activity and every connection is an opportunity for advocacy. Daryl Detrick held an all-day Hour of Code event at his school, Warren Hills Regional High School. One of his former students wrote an online news article on the event. A high ranking member of the New Jersey Department of Education commented on the activity. Daryl then followed up on the comment with an e-mail, which resulted in an important connection and subsequent meeting with the New Jersey Department of Education.

Build on the success of others

We use the plethora of published work completed on behalf of CSTA and other CS education stakeholders. The *CSTA Advocacy Toolkit* was one of our initial guiding documents. The *CSTA K–12 Computer Science Standards* document was presented to the New Jersey Department of Education. *Bugs in the System* has served as a resource for proposing a New Jersey CS teacher endorsement. The *Exploring Computer Science* curriculum and the *CS Principles Framework* have been shared as examples of model curriculum. Statistics, videos, and activities developed by CSTA and code.org have been featured in our presentations and welcomed by participants.

Contact your legislators

We have testified at NJ legislative hearings related to CS bills and pending legislation. Members of CSTA NJ have written letters, made phone calls, and attended meetings with legislators or their staff to discuss the CS bills. Much work remains to be done but the support given to the recent legislation by NJ legislators is encouraging. In part, we are riding the national CS education wave and reaping the benefits of the CS advocacy efforts of the last 10 years by CSTA and other leaders in the CS community.

CSEd Week Ideas

Ideas to Fit Your Schedule

CSEdWeek is quickly approaching and it's likely that you already have some great projects planned for the week of December 8–14. But if not, here are a few ideas, small to large, to fit the time you have.

You will find many more ideas and resources at *csedweek.org/resources*, *hourofcode.com/us*, and *csta.acm.org*. Great projects can be used any time of the year so don't limit your computer science (CS) education advocacy ideas to just one week in December.

Pledge your support for CSEdWeek and start planning how you will fuel the future with CS education at *csedweek.org*.

15 MINUTES	30 MINUTES
Use CSTA video and audio announcements to make students aware of opportunities in CS. *csta.acm.org/Advocacy_Outreach/sub/CSEd-Week.html* Add the CS History Gadget to your website. *csta.acm.org/includes/Gadget.html* Assign students to view the Why CSE? videos and discuss the stories they most identify with. *www.cs.washington.edu/WhyCSE*	Assign students to ask their families to spend an entire day without using any computing technology (including no car, microwave, or digital television) and record their experiences. Discuss their findings in class the next day and relate to CS careers. Engage students to plan, design, and prepare a showcase of their computing projects that they think their peers will find interesting and and relavent.

15 MINUTES	30 MINUTES
Go prepared with CSTA brochures to talk with your administrators or counselors about the value of CS education. Make CSTA career brochures available in your counselors' offices. *csta.acm.org/Resources/sub/Brochures-PostersVideos.html* Make your classroom inviting. Stand outside the door between classes and greet students as a friendly computer scientist. Ask for student input into assignment or activity topics. Encourage collaboration and a "maker ethos" whenever possible.	Offer a lunch break "CS Escape" once a week or once a month to invite non-CS students to "play" with CS concepts and tools such as CSUnplugged, Scratch, AppInventor, or Kodu. Schedule your students to take turns in the cafeteria or student commons to demonstrate cool CS projects from your class to other students. Learn a few "magic tricks" to spark up your introduction to CS concepts. *www.cs4fn.org/magic* Redecorate your classroom with new posters among the many available from CSTA or code.org. *csta.acm.org/Resources/sub/BrochuresPostersVideos.html, code.org/educate/inspire*
1 HOUR	3+ HOURS
Participate in Hour of Code. *csedweek.org/educate/hoc* Invite former students who are college CS majors to visit your classroom to tell about the exciting things they are learning. Assign cross-curricular projects. Ask other teachers to allow your student to "show off" their computing version of the assignment. Submit proposals to share your innovative CS teaching strategies at conferences. Plan CS projects that involve "social causes." Recruit community members to serve as students' "clients." Encourage your CS students to host an open house for other students. Invite students in the middle or grade school. Engage students in playing a matching game of inspiring CS quotes from famous people. Expand into a unit on careers. *code.org/quotes* Explore resources for engaging Hispanic and Latino/a students. *www.cscproject.org/node/162*	Arrange a field trip to a local high-tech company or corporate IT department. Structure the event to focus on careers and training required. Invite counselors and parents also. Host a parents' night that showcases the fun, exciting, and meaningful career opportunities in computing and debunks the myths about the reduced IT job market. Plan a CS exploration day for potential students and parents. Gather ideas from programs such as Computer Mania. *www.computer-mania.info* Look for technology contests to showcase your students' ideas such as the ACSL, Google Code-in, Aspirations in Computing, Imagine Cup, Verizon Innoative APP Challenge, and others. *www.acsl.org, www.google-melange.com, www.aspirations.org, www.imaginecup.com, verizonfoundation.org/appchallenge, csta.acm.org/Resources/sub/CSEventsforKids.html* Investigate ways to engage underrepresented students in computing. *www.ncwit.org/resources, www.ngcproject.org* Form an advisory team of students, parents, teachers and administrators, business leaders, and others to plan CS promotion projects in your community year round.

Meet the Authors

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Mayra teaches CS and is also the president of the Northern NJ CSTA chapter, a NJ CSALT member, and co-chair of CSNJ, an advocacy outreach group of CSTA.

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Stephanie has taught HS CS for 16 years. She is a founding member and officer of the Ohio CSTA chapter and has served as a CSALT member and on the CSTA Board of Directors.

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Voice

A Favorite Lesson

Potato Head – A Perfect Vegetable for CS

Stephanie Hoeppner

Editor's Note: This is the second of a new series of *Voice* columns: A Favorite Lesson. Please submit your favorite activity for possible inclusion in a future issue of the *Voice* (*cstapubs@csta.acm.org*).

Lesson overview: I have a large number of potato head toys in my room and I don't know what I would do without them. They are put to use in a variety lessons and activities in throughout the year.

Grade, course level, or prior experience: Computer survey or computer programming course.

Materials and preparation: Potato head toys.

Pedagogy tip: Play has been shown as a powerful learning opportunity. Incorporate it often, especially when the concepts are especially difficult.

Lesson steps: On the first day of my Introduction to Programming course, each student designs a potato head. In small groups, they create a list what is unique to the potato heads of the group members (properties). Then they list what their potato heads can do (methods). This is fun and can get crazy as their imaginations soar. I connect their "design" results together with a discussion about the potato head as a "class." We end with a pseudo code-like write up of our potato head class. From that point on, if they are struggling with classes, objects, or related topics, I refer back with an example using a potato head and they get it every time.

Later in the course, students use potato head characters for a game they create in Greenfoot (*www.greenfoot.org*). They take photos of their potato head characters and learn to how to edit and upload the images for their game. They love it—and their enthusiasm for learning how to program the game using their own crazy characters is unbeatable.

Students can use the potato heads to learn sorting strategies by grouping, ordering, and classifying the toys according to different parts. Various sorting algorithms can be practiced by moving the toys.

During a problem solving unit in my Computer Science Survey course, students learn about giving precise instructions. Students work in teams of two. I describe a specific potato head to one of the partners. That student must then give directions to the other student without using typical, normal words to describe the steps to follow. It is a fun activity for a survey class and guaranteed to produce lots of laughter.

Lesson differentiations and extensions: I leave the toys out year 'round and many students will wander over and just build a character and then wander back to their seat. It can be cathartic, providing a way for their brains to process the programming challenges they are working on while they take a break and play.

CSTA K–12 CS Standards:
CT.3A-3. Explain how sequence, selection, iteration, and recursion are building blocks of algorithms.
CT.3A-9. Discuss the value of abstraction to manage problem complexity.

Equity Matters

Advocating for Girls in CS Education

Karen Bouldin

In the U.S., there is a growing demand for computer scientists. According to the Bureau of Labor Statistics, computing occupations are some of the fastest growing occupations. The agency estimates that computing occupations will grow 17.7% from 2012 to 2022. Overall job growth is estimated to be only 10.8% in the same period. However, it is projected that many of these computing jobs will go unfilled due to an insufficient number of college graduates with computing-related degrees.

Advocating for and encouraging girls to take computer science (CS) courses is crucial to addressing the low numbers of college graduates with computing-related degrees. Currently, high school girls account for only 19% of the Advanced Placement (AP) CS exam takers, although they represent 55% of total AP exam takers. Women only earn 17.7% of CS degrees despite earning 57% of all bachelor's degrees. And, women hold just 25% of computer and mathematics occupations, even though they make up 47% of the workforce. These statistics demonstrate that a large segment of our population's talents are underutilized in CS education and occupations. Thus, advocating for and encouraging girls to pursue CS courses and careers has the potential to increase the number of college graduates with computing-related degrees in the labor force.

Furthermore, it is important to advocate for girls in CS because achieving a better gender balance in CS education ensures that girls and women have access to some of the fastest growing, well-paying jobs. In addition, gender balance in CS increases the likelihood that computer software, programs, and other applications are better aligned with the needs of all members of society, are more productive and relevant, and have a positive impact on economic growth and international competitiveness.

Achieving better gender balance in CS will take a comprehensive approach that includes program and advocacy efforts. Programs, people, and policies that encourage early exposure to CS, and engagement with mentors and role models who can share relevant career information, play key roles in determining girls' course and career choices.

Teachers can be effective advocates. Sometimes all it takes is access to comprehensive programs and resources that engage girls in CS, mentorships, information about current statistics regarding girls' and women's participation in CS, and resources and tools for advocating for girls.

- **Black Girls Code** (*www.blackgirlscode.com*) aims to make computing and digital technology more accessible for girls from underrepresented communities. Through a combination of workshops and field trips, girls gain new skills in programming, meet role models, and build their confidence to become tech creators and entrepreneurs.
- **DigiGirlz** (*www.microsoft.com/en-us/diversity/programs/digigirlz*) provides high school girls with an opportunity to learn about careers in technology, connect with Microsoft employees, and participate in hands-on computer and technology workshops.
- **Made with Code** (*www.madewithcode.com*) is a Google initiative to teach middle and high school girls to code.

The website features coding events for girls, videos of mentors, and coding resources for girls, parents, and teachers.

- **National Center for Women in Information Technology** (NCWIT) (*www.ncwit.org*) aims to increase women's participation in computing and technology. NCWIT disseminates research-based resources that build capacity for people to implement change, raise awareness, and reach out to critical populations.
- **Girls Inc.** (*www.girlsinc.org*) inspires all girls to be strong, smart, and bold. Girls Inc. informs policymakers about girls' needs locally and nationally, educates the media about critical issues facing girls, and teaches girls how to advocate for themselves.
- **Girls Who Code** (*girlswhocode.com*) programs work to inspire, educate, and equip girls with the computing skills to pursue 21st century opportunities. In the Girls Who Code Summer Immersion Program, high school girls participate in seven weeks of intensive instruction in robotics, web design, and mobile development.

For additional resources and strategies on engaging girls in CS, visit the National Girls Collaborative Project website (*www.ngcproject.org*).

Student Opportunities

Introduce Open Source with Google Code-in
Stephanie Taylor

This is the fifth year of Google Code-in, a contest encouraging 13–17 year old pre-university students to get involved in open source software development. Over the past four years, 1575 students from 78 countries have participated by putting the skills they have learned in the classroom to use on various tasks of their choice in a variety of open source projects.

In the contest, teens work with real open source projects, such as disaster relief software for Sahana Software Foundation (*sahanafoundation.org*), children's software for Sugar Labs (*www.sugarlabs.org*), Wikimedia (*www.wikimedia.org*), KDE (*www.kde.org*), and many others. Because software development requires different skills, the open source projects create work tasks for the students in five categories: coding, documentation/training, quality assurance, outreach/research, and user interface.

While many of the tasks will involve using C++, C, HTML, Java, PHP, or Python, there are plenty of tasks for students new to software development—maybe they want to try their hand at documentation or perhaps they are artistic and could help design a logo or redesign a web page. There are even tasks where students can create a screencast or a video describing how to use the software or introducing a new feature. Mentors, dedicated and excited to work with teenagers, are assigned to each task to offer assistance and answer questions.

Community involvement is one of the hallmarks of both Google Code-in and Google Summer of Code. Students have the opportunity to not only see the work they are doing become integrated into the software that thousands and sometimes millions of people will use, but they also become part of that project's open source community. When students are welcomed into the open source community and become active contributors, they feel their work is appreciated.

Students earn prizes for their work in the contest. For completing one task, students receive a certificate of completion, and for three tasks, they receive that year's Google Code-in t-shirt. In addition, each open source project will name five students as finalists and they will each receive a GCI hoodie. Of those five finalists, the organizations will name two students as grand prize winners. The grand prize winners will receive a trip to Google's Mountain View, California, headquarters for themselves and a parent or legal guardian for four days in June 2015.

For more information on Google Code-in, visit: *developers.google.com/open-source/gci* and *www.google-melange.com*.

The online contest for teens will run from December 1, 2014, until January 19, 2015. Encourage your students to participate; email us at: *ospoteam@gmail.com*. We have a slideshow share and we will be happy to send stickers and pens for your students.

More Student Opportunities

NCWIT Award for Aspirations in Computing
Deadline November 2
Lauren Von Roenn

The Aspirations Award is really a spring board, it empowers you to apply yourself and try for bigger and better things." ~ Aspirations Award Recipient

Aspirations in Computing is a talent development initiative of the National Center for Women & Information Technology (NCWIT). The Aspirations Award honors high school girls for their computing-related achievements. Recipients are selected for their leadership ability, academic history, plans for post-secondary education, and computing aptitude. Since 2007, NCWIT has inducted more than 3,300 young women into this community of technically-minded students. Both national and local affiliate competitions are offered annually; last year, 1,400 students were recognized representing all 50 U.S. states, the District of Columbia, and Puerto Rico.

NCWIT also recognizes outstanding educators by offering the Aspirations in Computing Educator Award. Recipients are adults who play a pivotal role in encouraging young women to continue exploring their interest in computing and who work to promote gender equity in CS. Over 160 educators have been selected as recipients and $160,000 in funding has been awarded. Each recipient is given up to $1,000 in professional development funds, a trophy for the recipient and recipient's school, and is honored at the regional award ceremony alongside the young women. To be considered for the award, educators are asked to complete an online application by **November 2** and endorse at least one student for the Aspirations Award by **November 7**.

"*As a result of having won the NCWIT Aspirations in Computing Educator Award, I was recommended to participate in the NASA Summer of Innovation. For this Puerto Rican teacher—barely five feet tall, the daughter of poor people, and the only one in my family to finish college—it was overwhelming.*" ~ Claribel Perez, Educator Award Recipient

For more information about the NCWIT Aspirations in Computing, visit *www.aspirations.org* or contact *aspirations@ncwit.org*.

We're on the Web: csta.acm.org
Like our Facebook page!

Advocacy Resources from CSTA

CSTA is happy to help in your advocacy efforts by providing resources and making them readily available.

• **CSTA K-12 Computer Science Standards:** This document delineates a core set of learning standards designed to provide the foundation for a complete CS curriculum. *csta.acm.org/Curriculum/sub/K12Standards.html*

• **Bugs in the System: Computer Science Teacher Certification in the U.S.:** This report details the results of an 18-month research project to determine the nature of CS teacher certification in the U.S. The report includes state "report cards" that clearly show that each state has its own process, its own definition of CS, and where it fits in a young person's educational program. *csta. acm.org/ComputerScienceTeacherCertification/sub/ CertificationResources.html*

• **Posters, Brochures, and Videos:** In this section, you will find several downloadable posters and brochures that showcase CS. There are also links to videos and other classroom resources. *csta.acm.org/Resources/sub/BrochuresPostersVideos.html*

• **Advocacy Tools:** This collection includes presentations, toolkits, and supporting information to help inform and convince parents, fellow educators, administrators, and state legislators about the importance of CS education for everyone. *csta.acm.org/Advocacy_Outreach/sub/AdvocacyTools.html*

• **The Advocate Blog:** In addition to advocacy strategies, educators will find information on best practices, the latest news and trends in K–12 CS education, and practical tips for the classroom. *blog.acm.org/csta*

• **Featured Reports:** From statistics on the significance of CS education in our digital economy to strategies for addressing equity issues in CS education, the collection of key reports is an invaluable resource of information pertinent to the state of CS education. *csta.acm.org/Communications/ sub/Reports.html*

If you haven't explored the CSTA website lately, it's worth visiting again to discover the growing collection of resources.

MARK YOUR CALENDAR

picoCTF Competition
October 27 – November 7, 2014
picoctf.com

NCWIT Aspirations in Computing and Educator Awards
November 2 and 7, 2014, submission deadlines
www.aspirations.org

Consortium for Computing Sciences in Colleges (Southeastern)
November 7–8, 2014, Charleston, South Carolina
www.ccscse.org

Consortium for Computing Sciences in Colleges (Eastern)
November 14–15, 2014, York, Pennsylvania
www.ccsc-eastern.org

Verizon Innovative APP Challenge
November 24, 2014, submission deadline
verizonfoundation.org/appchallenge

Google Code-in Contest
December 1, 2014–January 19, 2015
www.google-melange.com

CSEd Week
December 8–14, 2014, at your school
csedweek.org

The Hour of Code
December 8–14, 2014, at your school
hourofcode.com/us

ACSL Contest #1 Deadline
December 19, 2014
www.acsl.org

2015 CSTA Annual Conference
July 13–14, 2015, Grapevine, Texas
cstaconference.org

Check the most recent CSTA events on the CSTA website
csta.acm.org/ProfessionalDevelopment/sub/TeacherWorkshops.html
List your CSTA event by contacting *l.clayborn@csta-hq.org*

The Advocate has a new look!

Check out CSTA's new and improved blog at *csta.hosting.acm.org/wp/*. You'll find Breaking News, Tips & Tricks, and other items of interest to our CS education community.