The Voice of K-12 Computer Science Education and its Educators

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Advocacy is Everyone's Job

Mark R. Nelson

In 2015, we saw significant gains for K–12 computer science (CS) education. We expect accelerating activity throughout 2016 as more states move toward CS licensure and/or requiring CS courses in K–12. This makes it a good time to discuss the nature of advocacy in an association like CSTA.

What is "advocacy"? Simplified, advocacy involves building support for a cause or community, and converting that support into educated action for the cause or community. For an association, effective advocacy relies on the credibility, data, and ultimately the relationships, embedded in the membership and the organization. There are many rules governing advocacy in associations, particularly in relation to government.

Advocacy goes beyond just legislation. For an association like CSTA, we must advocate to many groups, such as other teachers, school administration, the school board, parents, academic institutions, potential corporate supporters, other non-profits, students, and the public in general. Advocacy is an ideal area for member engagement, because the community voice, and the voice of many individuals, can make a meaningful difference. The great work by CSTA Arkansas this year is just one example of the power of community-based advocacy.

In this time of change, it is critical that the voice of the CS teacher community be heard.

In the year ahead, we will expand CSTA's ability to support and enable advocacy. In conjunction with the review and updates to the CSTA standards, we agreed to participate with Code.org, several state entities and other stakeholders, to engage in convened conversations around the standards' framework.

We will create more opportunities for members to participate in advocacy initiatives. Most notably, we will implement advocacy tools to make it easier to inform members of opportunities to make a difference for K–12 CS education on a broader scale.

Those are just some of the initiatives in development that will enhance CSTA's capacity to advocate on behalf of CS teachers both in the U.S. and internationally. A new website, more tools to support chapters, new partnerships, new professional development opportunities, and several other initiatives, will all enhance the visibility of K–12 CS education and those who advocate on its behalf. Of course, we will continue to participate and engage in many of our current advocacy efforts, such as CSEdWeek.

As 2016 approaches, I look forward to an exciting year for the CSTA community. I welcome input from members on what we do well, and where we could do better. Until then, keep an eye out for more announcements about CSTA advocacy work in the near future.

CSEdWeek is Almost Here...Dec. 7-13 Are You Ready?

Check out the ideas and resources at *csedweek.org*. How much time do you have? Ideas for 15, 30, 60, or more minutes can be found in the CSTA Advocate blog: *blog.csta.acm.org*.



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Chic@s Code

Yasko Chanoki Endo

A Joint U.S. – Mexico CSEdWeek Project

With more than 41 million native Spanish speakers and over 11 million bilingual speakers, the U.S. currently has the world's second largest Spanish-speaking population in the world, behind only Mexico. The over 11 million bilingual speakers are predominantly the children of Spanish-speaking immigrants.

Though our schools are seeing an increase in the number of Spanish-speaking students, participation in computing and computer science (CS) careers by these same diverse students remains low, and participation of Latinas in our discipline is even lower.

To help address this lack of participation of Hispanic students, Latinas in particular, in computing and CS, the Scalable Game Design (SGD) project at the University of Colorado Boulder created a partnership project with Instituto Tecnológico de Monterrey, a university in the state of Nuevo Leon, Mexico.

The project is called SDG Mexico: Chic@s Code, and is funded through a Google RISE K12 Education Outreach Partnership. The purpose of Chic@s Code is twofold: the first is to develop Spanish materials that can be used in Mexico as well as the U.S. to increase participation of Spanish-speaking students; the second is to see if the SGD CS education strategy and curriculum can be adapted successfully for Spanish-speaking students.

SGD is an in-school, in-class CS education program and curriculum that engages and motivates students and teachers to program, think computationally, design, and problem solve through game and simulation design activities. SGD is a curriculum as well as a research study. Through in-school implementations and research, we work to

broaden participation in CS and increase the pipeline of students pursuing careers in the field. We offer teacher professional development during the summer as well. SGD work is funded primarily by the National Science Foundation.

To learn about SGD through our 2013 CSEdWeek/Hour of Code activity, AgentCubes Online, the team from Mexico sent three staff members to our teacher professional development Summer Institute. SGD Summer Institute shows teachers how to program games within the context of computational thinking, how to teach their students using guided-discovery pedagogy, and how to assess their students' progress and incorporate SGD into their existing course offerings.

Their attendance led to conversations around helping Spanish-speaking students coming from Latin cultures become more involved in CS. As a result of the relationship, we applied for and received a Google RISE International Partnership Award in January 2015, to develop Spanish materials and initially expose more than 3,500 Nuevo Leon students, half of them girls, to SGD CS activities in classrooms.

In coordinating activities in Mexico, many challenges have been encountered that have parallels in under-funded schools in the U.S. Examples are obsolete hardware that cannot run the software, not enough computers for all students to participate together, competition for the use of computers with other classes, large class size, insufficient bandwidth for the software, and the challenge of learning CS with a language barrier.

Coping strategies successfully implemented include

• Pair and group programming; programming

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CSTA Voice is a quarterly publication for members of the Computer Science Teachers Association. It provides analysis and commentary on issues relating to K–12 computer science education, resources for educators, and information for members. The publication supports CSTA's mission to promote the teaching of computer science and other computing disciplines.

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in shifts, that is, half the class work on the computer while the other half do off-line activities like designing a game's agents, behaviors, and actions.

- Showing the tutorial video on a projector from a DVD copy to save bandwidth.
- Using both browser and download versions of software.
- Using loaner computers.
- Advocating with schools for short-term exclusive use of labs.
- Partnering with colleges to bring student volunteers into the classroom.
- Translation of all lesson plans and support materials into Spanish.
- Creating visual dictionaries, wall signs, and tutorials that help bridge the language gap for non-English speaking students and teachers working with English software.

The tools created to support non-English speakers will be particularly helpful to U.S. students whose Spanish is stronger than their English skills, and increase the chances of their

success participating in a SGD activity.

SGD Mexico: Chic@s Code culminates in a U.S.-Mexico joint CSEdWeek/Hour of Code bilingual activity in December where thousands more Mexican students are anticipated to participate. Using a fully-translated version of AgentCubes Online (agentcubesonline.com/quickstart) which includes a Spanish tutorial video and materials, students all over Mexico, and Spanish-speaking students in the U.S., can learn that programming can be fun and exciting.

Through this partnership, SGD will continue to make more Spanish materials available to teachers and students in the U.S., which we hope will open up a pathway for Hispanic students to give CS a try in their strongest language.

LEARN MORE

CSEdWeek Activity in Spanish: sgd.cs.colorado. edu/wiki/Spanish_Featured_Lesson_Plans Project Wiki: sgd.cs.colorado.edu/wiki/ Scalable_Game_Design_wiki Software: www.agentsheets.com

Piedmont adopts CSTA Standards

Nathan Mattix

In the spring of 2014, the Piedmont Unified School District (PSUD) Board of Education (California) unanimously adopted the CSTA K–12 Computer Science Standards (csta.acm. org/Curriculum/sub/K12Standards.html). This was the result of a process that had started several years earlier on multiple fronts. This was also a newsworthy event, as Piedmont was one of the first school districts to formally adopt these standards.

Many Bay Area computer science (CS) teachers had expressed support for these standards, but getting a school district to formally act on them proved to be difficult. When the word got out that the Piedmont school board was going to vote on this issue, I received an email from another area teacher that stated, "That PUSD is explicitly stating that it wants meaningful standards and is acting on it is a big deal. That makes you leaders in our discipline. What you are doing needs to be shouted from the hilltops."

Adopting new standards was a big deal, and it took a lot of effort from all stakeholders – teachers, parents, administrators, and students.

A few years earlier, I had started to work with researchers at UC Berkeley on the develop-

ment of a new, innovative curriculum for AP CS. This work brought me in contact with members of the Golden Gate Chapter of the CSTA. In addition, it brought to my attention a new course that was being developed by UC for high schools called the Beauty and Joy of Computing (BJC). There was much enthusiasm surrounding this course and before too long Piedmont High School (PHS) had joined the BJC pilot group.

This meant drastically changing (and improving) our beginning CS class. (BJC is still currently under development as an AP CS Principles class.) At that time, there was much talk among CSTA members about improving high school CS education by adopting a three-course sequence advocated by CSTA. This sequence included a new course under development called Exploring CS, the new AP CS Principles class, followed by the AP CS A class. Because of the pilots already in progress, PHS was already moving toward implementing CSTA K–12 CS Standards.

Around this same time, a group of parents who worked in the technology industry had asked to meet with our Assistant Superintendent Randy Booker to discuss improvements in CS education. Booker formed and headed a commit-



Let us know if your contact information changes.

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Contribute to the CSTA Voice

The editorial board of the CSTA Voice is dedicated to ensuring that this publication reflects the interests, needs, and talents of the CSTA membership. Please consider sharing your expertise and love for computer science education by contributing newsletter content.

Potential writers for the CSTA Voice should send a brief description of the proposed article, estimated word count, statement of value to members, author's name and brief bio/background info, and suggested title to the editor at: cstapubs @csta.acm.org. The final length, due date, and title will be negotiated for chosen articles. Please share your knowledge.

Volunteer today!

The CSTA Voice welcomes your comments.

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Letters to the Editor are limited to 200 words and may be edited for clarification.



ACM founded CSTA as part of its commitment to K–12 computer science education.



CSEd Week

DECEMBER 7-13

What are YOU doing?



Hold an open house
Host a competition
Give a presentation
Invite parents
Give awards
Gather support

Involve the community

Invite a speaker

Contact a legislator

Write to the media

Celebrate Grace Hopper's birthday

Visit a CS department

Take a field trip

Host a CS movie night

Host a technology show-and-tell

Hold a Twitter event

Showcase your students

Join a CSTA Chapter



tee of teachers, parents, administrators, students, and tech support professionals to examine CS education. This committee met several times throughout the year and advocated for more and better CS educational opportunities for our students. One of the proposals was to adopt the CSTA K–12 CS Standards, and it was highly favored by the committee. The parents group wrote a letter of support for this recommendation to the school board and circulated it within the community as a petition. For any group that is considering adopting the CSTA K–12 CS Standards and needs a strong argument to win support, this letter would be a good place to begin (tinyurl.com/nene7ck).

In the last two years, the enrollment of students in CS classes at PHS has more than doubled. We opened a new computer lab and hired a new teacher. In addition, we added new courses to meet our new standards and the increased demand for classes such as Exploring CS, BJC, AP CS, Advanced Web Development, and Mobile Apps Programming. The AP CS class has three full sections. Just five years ago, we had to cancel this class because only nine students signed up.

The future looks bright for Piedmont CS students. Our courses are poised to provide students with the technological education they will need. Adopting and being committed to CSTA

The Connectory

A Tool for CSEdWeek and Beyond Jolene Gustafson

In 2018 – when today's high school sophomores are getting ready to head off to college – there will be an estimated 350,000 unfilled jobs in computer science (CS). With that chasm to narrow, CS educators need additional tools to help foster their students' interests and inspire them to seek careers in programming, software engineering, computer and information systems, and database administration.

Beyond those seeking CS careers, all students must develop 21st Century skills to thrive in a world where "change is constant and learning never stops." Critical thinking, problemsolving adeptness, and the ability to utilize technology are all aptitudes fostered by exposure to CS and STEM (Science, Technology, Engineering, and Mathematics) disciplines. In short, producing CS savvy students is central to the nation's ability to remain globally competitive.

The Connectory (www.theconnectory.org) is a new, free resource that CS educators can use on two fronts: curriculum enhancement and family involvement. Managed by the National Girls Collaborative Project, in partnership with Time Warner Cable, this free, online directory connects STEM-rich, youth-serving programs to families and the general public, as well as to other like-minded organizations.

High-quality CS and STEM opportunities help youth enhance creativity, engage in an investigative process, and develop critical thinking, collaboration, and problem-solving skills. Yet, finding local partners with resources and tools to enhance your classroom work and assignments can be a time-consuming challenge – one busy teachers have little capacity to tackle.

The Connectory is a powerful online collaboration tool, offering access to a network of more than 5,000 STEM program providers in all 50 states, and several countries, with a volume that continues to grow. Get details about signing up and take a look at some of our featured providers and the guidelines we use when approving programs (www.theconnectory.org/provider-portal).

Educator tips

- Connect to other programs, share ideas, and network with a growing STEM Community by creating an account.
- Locate the perfect collaboration partner by searching by location, available resources, collaboration interests, and subject matter.

As the largest database of STEM opportunities in the U.S., The Connectory makes it easy for families to discover local STEM opportunities for the children in their lives. The benefits of family involvement in a child's education are well established. Research has consistently found that parental involvement improves student achievement, motivation, and attitudes about school, regardless of socioeconomic status, ethnicity, or educational background.

Yet, supporting STEM education and activities can be a challenge for families. Many do not understand the importance of CS as the underpinning of a successful future. Others are intimidated by their own lack of expertise. Providing opportunities for positive experiences can also stimulate enthusiasm and curiosity in parents, particularly when they actively participate alongside their children.

By visiting The Connectory, caregivers can

newsletters, and other communications.

- Add the free widget (www.theconnectory. org/widgets) to your website, customizing it to showcase opportunities in your area.
- Tell parents about The Connectory in conferences or other family meetings as a way
 they can help support their children's education, especially during school breaks.

When you create an account on The Con-

The Connectory is a powerful online collaboration tool, offering acces to a network of more than 5,000 STEM program providers in all 50 states, and several countries.

find events, programs, and activities in their community that inspire young people to develop the skills they need to become the problem solvers of tomorrow. In the process, they'll begin to understand what STEM is all about – exciting subjects that have the potential to captivate youth, unleash their potential, and address real-world challenges that are all around.

Educator Tips

 Visit The Connectory to find local events, festivals, competitions, and workshops to share with students and parents in emails, nectory, you'll automatically be signed up for our e-blasts. These biweekly newsletters let you know about exciting partnerships, new tools and offerings, and resources from our collaborators. Follow us on Facebook (www.facebook.com/connectory) and Twitter (twitter.com/the_connectory), where we highlight innovative programs and opportunities daily.

And please help us spread the word to the program providers you already work with. We're still growing our database and know that for every entry we have, there are at least three great ones that have yet to be added.

Advocating for CS in Connecticut

Chinma Uche

Connecticut CSTA members work hard yearround to shine a bright light on CS across the state and to provide opportunities for students. Real progress and change requires many strategies and persistence. We hope that this list will inspire you to create a plan to advocate for CS education in your school, district, and state.

CSEdWeek Activities: CTCSTA starts planning CSEdweek activities during the first meeting of the school year. Ideas are shared and every

CTCSTA member commits to execute at least one activity. At the very least, all members participate in the Hour of Code.

Member resources: We have used the opportunities provided to our members as K5 Code.org Affliates to introduce CS to elementary schools.

Read more about the many activities of CT CSTA in the Advocate blog: *blog.csta.acm.org*.

CSTA Congratulates, Chinma Uche

2015 Capitol Region Education Council (CREC) Teacher of the Year Chinma teaches at the CREC Academy of Aerospace and Engineering High School.

She is also the president of the Connecticut CSTA Chapter.

See more about Chinma's classroom: www.youtube.com/watch?v=gLzrdlyfOjE

Meet the Authors

Rhianon Anderson

Exec. Dir., Congressional App Challenge Rhianon works to engage U.S. high school students in CS.

Yasko Chanoki Endo
Program Manager, Scalable
Game Design
Yasko focuses on research,
outreach, and strategies to
bring SGD activities to diverse
students.

Jolene Gustafson

National Girls Collaborative
Project
Jolene is Community Manager of
The Connectory.

Jane Krauss NCWIT

Jane is program manager of the Counselor for Computing project at NCWIT.

Nathan Mattix

Piedmont High School
Nathan has been a CS teacher
for 16 years. In recent years, he
has worked with researchers at
UC Berkeley.

Mark R. Nelson

Executive Director, CSTA
Mark is the new Executive
Director for CSTA. He joins
CSTA with a rich background and
experience in teaching, research,
service, and executive roles.

Chris Yust

President, CompuScholar, Inc. Chris has 17 years' experience as a software engineer, consultant, and author.

Chinma Uche

President, CTCSTA
Chinma is a teacher recognized for excellence at the CREC
Academy of Aerospace and
Engineering High School in Hartford, CT.



Student Opportunity

The ACM/CSTA Cutler-Bell Prize Announced

The ACM/CSTA Cutler-Bell Prize in High School Computing recognizes talented high school students in computer science (CS). The intent of the program is to promote, encourage, and empower young and aspiring learners to pursue CS and computing challenges outside of the traditional classroom environment. The program is supported by the Gordon Bell and David Cutler Endowment Fund.

Eligible applicants for the ACM/CSTA Cutler-Bell Prize in High School Computing include graduating high school seniors residing and attending school in the U.S. Four winners will each be awarded a \$10,000 prize and a trip to the ACM/CSTA Cutler-Bell Prize in High School Computing Reception in February 2016.

The Challenge will focus on developing an artifact that engages modern computing technology and CS. Judges will be looking for submissions that demonstrate ingenuity, complexity, relevancy, and originality, as well as a student's desire to further CS as a discipline.

Submission Guidelines

- · Projects should be new or current projects
- Students must submit a computing artifact electronically that addresses the criteria for the scholarship
- A K-12 teacher knowledgeable in computing must serve as an adviser to the student(s) and may offer minimal assistance. Teachers/peers are encouraged to test and debug final projects.

Application Materials

- Application form that includes name, school name and district, CS teacher name if applicable, mailing address, email address, phone number (both daytime and nighttime), parent/guardian contact information.
- · Personal interview conducted via Skype.
- Letter(s) of reference/teacher nomination/character evaluation form.
- Link to portfolio program.
- Project presentation/summary (video, PPT, live presentation) that communicates a description of the project and its relevance.

The deadline for submissions is January 1, 2016. Awards will be distributed at the ACM/CSTA Cutler-Bell Prize in High School Computing Reception, which will be held in February 2016 at an event to be announced later. During the event, the students will demonstrate their programs or briefly discuss why they chose to work on what they did, and present a slideshow of their project. Winners should be available for interviews by the local press. For more details visit: csta.acm. org/Advocacy_Outreach/sub/Cutler-BellPrize.html.

Advocacy Spotlight

Counselor Allies for Computer Science Jane Krauss

Recently, I met with a group of secondary computer science (CS) teachers to discuss the role school counselors play in promoting, recruiting, and scheduling kids into CS classes. First, I pushed a PollEverwhere poll and asked: Do your school's counselors help, hurt, or have little influence

on student enrollment in CS? Before I share their responses, what do you think teachers said? If you're a high school CS teacher, how would you have answered?

The results: 30% said counselors help, 30% said they hurt, and 40% said they have little influence on student enrollment. So, 70% reported their counselors were not supporting the CS program. It was time to turn to those 30% of teachers who said counselors' actions benefitted their program to learn: What are their counselors doing? What do they know that other counselors may not?

I was not surprised by their answers because they fall in line with the topics we address in the NCWIT Counselors for Computing (www.ncwit.org/project/counselors-computing-c4c) program. They said counselors who supported CS:

- understood the courses and knew how to talk about them;
- · had a broad and inclusive sense of who was right for CS;
- knew how CS fit in the larger school curriculum and how it counted toward graduation;
- recognized computing as a strong education and career pathway; and
- were attuned to opportunities for awards, scholarships, and extracurricular activity in computing.

How did they come to know these things? Among this group, most frequently it was through a relationship with the CS teacher. Sometimes this was born from natural collegiality; other times the teacher made a concerted effort to explain and inspire enthusiasm for the program.

So, if you're feeling your program could use better support, arrange a meeting and help your counselors get up to speed! Use NCWIT resources suited just for counselors to aid your conversation. Counselors for Computing kits can be ordered at no cost at: www.ncwit.org/c4ckit.

Another resource you might find useful was created by CS teacher Jackie Corricelli (West Hartford, CT). CS Pathways makes the case for CS and situates CS courses in the larger school curriculum. It may serve as a template for a communications document for your own school. Review the resource at: drive.google.com/file/d/0B77j5XClszcNb0lDVklVZDh2bE0/view?pli. (Imagine it printed on 11x17 paper and folded so it has four sides.)

Finally, if your school district is interested in professional development workshops for counselors and others in an advising role, please get in touch with NCWIT. We can provide webinars or workshops customized to suit your local needs. Here's to getting everyone on board for CS!

Curriculum in Action

American Computer Science League (ACSL)

A merican Computer Science League (ACSL) organizes CS and programming contests for middle/junior and senior high school students. In this our 38th year of operation, over 200 teams in the United States, Canada, Europe, Africa, and Asia are participating.

ACSL organizes four regular season contests that are held at each participating school. The last date on which each contest of the 2015-2016 season may be given is as follows:

Contest #1: December 18, 2015 Contest #2: February 12, 2016 Contest #3: March 11, 2016 Contest #4: April 15, 2016 The ACSL consists of four divisions to appeal to the varying computing abilities and interests of students: **Senior Division**: high school students with programming experience, especially those taking an Advanced Placement Computer Science course.

Intermediate Division: high school students with little or no computer programming experience, and to advanced middle/junior high students.

Junior Division: middle/junior high school students with no previous programming experience. No student beyond grade 9 may compete in the Junior Division.

Classroom Division: open to students from all grades. It consists of a selection of the non-programming problems from the other three divisions. As its name implies, this division is particularly well-suited for use in the classroom.

We encourage schools to join more than one division. All divisions cover similar material, but in varying levels of detail and difficulty.

At the end of the year, an All-Star Contest is held at a common site. Invitations to the All-Star Contest are based on cumulative team scores in the Junior, Intermediate, and Senior Divisions. This year's All-Star Contest will be held in Nashua, NH, on Saturday, May 28, 2016. Learn more at: www.acsl.org.

ACSL is on the approved activities list of the National Association of Secondary School Principals (NASSP). ACSL is also an Institutional Member of CSTA.

Teacher Tools

New CS Tools for the Classroom Chris Yust

Editor's note: CompuScholar is a new CSTA Institutional Member. Welcome, CompuScholar.

ach year, tens of thousands of students take the Advanced Placement Computer Science (APCS) exam. That sounds impressive until you realize that hundreds of thousands of students will take the AP History and AP English exams. But if you look at today's job opportunities, those exam numbers should be reversed.

The U.S. Bureau of Labor Statistics predicts that software development will enjoy a 30% growth market over the next 10 years. Today, unemployment for software engineers hovers down near 4%. That's great news for our next generation of computer scientists, but what are we doing to groom these students? How can we make CS courses as common as English and history classes?

We know that many districts struggle to support CS education in their schools. Recent surveys indicate that much of the difficulty is due to three main reasons: a lack of available teachers, a lack of current curriculum, and a lack of student interest. CompuScholar, Inc. (www.CompuScholar. com) was founded to meet those challenges.

It can be difficult to find qualified CS teachers. We understand that sometimes a CS teacher is simply a willing individual borrowed from another subject. CompuScholar supports novice teachers with a turn-key Learning Management System (LMS), including built-in professional development and technical support for teachers. Our curriculum contains step-by-step instructions, full teacher's material and solutions, auto-scored guizzes and tests, and is

supported by staff members who are also experts in the field

CompuScholar was founded and is run by experienced software engineers. It's our mission to deliver courses that teach modern programming skills using industry-standard languages and development environments. Students can learn professional skills in Java, C#, VB, and HTML/CSS. Because the curriculum is delivered online instead of through a printed textbook, the material is up-to-date with year-to-year technical changes.

Each course track contains a "hook" such as website design, video game programming, or Android app development. We'll show them exactly how those things are done, but they will have to apply their coding skills to these creative efforts.

The delivery format of a course can also attract or repel students. Students want to engage with projects and not just read about theory. Each lesson has an instructional video and full-color lesson text. Students will practice their skills with hands-on chapter programming projects.

CompuScholar's system allows us to flexibly create courses with supplemental lessons to meet specific state needs. Each course comes with core material and a variety of supplemental material that teachers can use to meet state requirements or engage advanced students. If you'd like to find out more about CompuScholar's Computer Science course tracks and request a free trial, please visit: www.compuScholar.com.

Another Student Opportunity

Congressional App Challenge 2015 Rhianon Anderson

The Internet Education Foundation (IEF) is proud to announce that we are partnering with the CSTA for the 2015 Congressional App Challenge (CAC).

The CAC, now in its second year, is an annual initiative created by Congress to encourage the pursuit of technical and digital literacy in high school students across the U.S. It will take place from October 26, 2015 to January 15, 2016.

Individuals or teams of students in participating congressional districts compete against their peers to create a mobile application, using whatever platform they like. As long as it remains within the boundaries of propriety, students may create any type of app they like, whether it's immersive or focused on utility or productivity. The submitted apps will be judged by a panel of local STEM and tech professionals, and one app will be chosen (per district) as the winner.

The winner or winning team will be recognized by their Representative and will also have their app presented on a digital display in the U.S. Capitol building. This is a wonderful opportunity to highlight the work of your students on a national level and to interact with your Representative to help emphasize to them critical nature of STEM education.

It's also an opportunity to help address some of the disparities that currently exist in STEM. The CAC is broadly intended to engage all students in coding.



Computer Science Teachers Association 2 Penn Plaza, Suite 701 New York, NY 10121-0701

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

However, we recognize how deeply existing disparities in the tech sector damage the opportunities for young people in certain traditionally underrepresented demographics.

As such, we're paying deliberate attention to ensure that students of all backgrounds and demographics are included. IEF is making genuine efforts to make the Challenge as accessible as possible, especially for those who groups that are traditionally underrepresented in the tech sector. This Challenge creates an opportunity to dialogue with the House of Representatives on these issues.

In its first year, 84 Congressional districts participated in the CAC; this year we plan to double that to 168. Recognizing how critical your roles as teachers are to engaging young people, we ask for your help in accomplishing that goal.

There are many ways we could use your help: if your district isn't participating (see our website to find out), but you know students who'd like to participate, you can ask your Representative to sign up, using templates we offer on our website. If you don't oversee any students who are participating and would like to sign up as a judge, you can email your representative to do so.

Most importantly though, we'd appreciate it if you could share the news about this Challenge and encourage your students to participate. Your encouragement will make a world of difference to these students, and we look forward to seeing your students' submissions.

For materials and rules on how to participate, please visit: congressionalappchallenge.us.

Attention Job Seekers and Employers

The CSTA Career and Job Center is the perfect place for job seekers and employers in K–12 computer science (CS) education to find each other!

Job Seekers: The CSTA Career and Job Center will help you find your next great career opportunity in our searchable database of CS education jobs. Search CS education jobs in academia and corporate, including CS teacher, technical coordinator/administrator, curriculum developer, K–12 CS education outreach coordinator, and others. Post your resume, and take advantage of free career tools for job searchers. These services are provided FREE to CSTA individual educator members.

Employers: Begin your search for an exemplary educator by creating a company profile and posting your available jobs, and, while you're waiting for applications to arrive, search through the resumes in the database. What better place to find talent than your own CS community?

To access the CSTA Job Board, visit: http://cstajobs.acm. org or click the Job Board button from the CSTA homepage.

For the latest and greatest tips & tricks and news & views, check out

The Advocate Blog

blog.csta.acm.org

MARK YOUR CALENDAR

Consortium for Computing Sciences in Colleges (Eastern) October 23–24, 2015, Galloway, New Jersey www.ccsc-eastern.org

Consortium for Computing Sciences in Colleges (Southeastern) November 6–7, 2015, Salem, Virginia www.ccscse.org

WiPSCE (Workshop in Primary and Secondary Computing Education)

November 9–11, 2015, London, United Kingdom www.wipsce.org

CSEd Week

December 7–13, 2015, Communities Worldwide csedweek.org

ACSL Contest #1 December 18, 2015 www.acsl.org

Cutler-Bell Student Contest
January 1, 2016, deadline
csta.acm.org/Advocacy_Outreach/sub/Cutler-BellPrize.html

Congressional App Challenge January 15, 2016, deadline congressionalappchallenge.us

ACSL Contest #2 February 12, 2016 www.acsl.org

ACSL Contest #3 March 11, 2016 www.acsl.org

ACSL Contest #4 April 15, 2016 www.acsl.org

2016 CSTA Annual ConferenceJuly 10–12, 2016, San Diego, California 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 t.nash@csta-hq.org