



Voice

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

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CSTA Chapters

2013 CSTA Annual Conference A Resounding Success!

Lissa Clayborn

IT IS EASY TO SEE why 2013 has been an exciting year for CSTA's premier professional development event. This year's CSTA Annual Conference was the biggest and best yet. With a rebranding (formerly known as the Computer Science & Information Technology conference), the addition of another strand of three-hour workshops, the inclusion of sponsors' row where attendees could meet conference sponsors, and three in-conjunction events, the conference was abuzz with activity.

The main conference kicked off with ten three-hour hands-on workshops. These workshops provided educators with opportunities for more intense, hands-on professional development on a diverse set of topics including the new Advanced Placement Computer Science (AP CS) Principles course, Greenfoot, App Inventor, and Scratch to name a few.

Monday evening wrapped up with a reception at Microsoft's New England Research and Development (NERD) Center. With stunning views of the St. Charles River from the 11th floor and Microsoft's fun and unique workspace, attendees learned about the latest innovations in DreamSpark, Kodu, Small Basic, and Surface. They also heard about Microsoft and CSTA's work with Code.org and how the three organizations are working together to improve CS education through exciting new advocacy efforts. The evening concluded with several entertaining skits and a drawing for

great prizes. Every attendee also received a CS education advocacy t-shirt.

Tuesday continued with a fantastic lineup of sessions, beginning with open-source evangelist Selena Deckelmann as the opening keynote speaker. Selena shared information on code, communities, and resources available to teachers from the open source community. Tuesday's 20 one-hour sessions included insights into how to use CSTA's K–12 CS Standards in your classroom, using robots to teach CS, programming from Alice to Java, and many more.

Hadi Partovi, co-founder of Code.org, closed the day and stirred the crowd with his plans for growing CS education. He inspired educators to participate in the "hour of code" project and plans for CSEdWeek. The conference wrapped up with the CSTA Big BIG Raffle and thanks to our generous sponsors, this year there were more prizes than ever.

All of the conference sessions and keynotes for the CSTA annual conference are chosen through a proposal and review system and according to Conference Chair Dave Reed, this year the number of proposals almost doubled, ensuring that the reviewers and program planning committee had a wide range of high quality proposals for the agenda.

If you missed out on the 2013 CSTA Annual Conference, you will be able to view some of the sessions in September on the conference *continued on page 2*

SAVE THE DATE

CSTA Annual Conference



July 14–15, 2014

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2013 CSTA ANNUAL CONFERENCE – A RESOUNDING SUCCESS!

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microsite, *cstaconference.org*.

Don't miss out on this spectacular opportunity for K–12 CS professional development next year. Save the date July 14 and 15, 2014. Additional information and housing reservations

will be available in September.

A big thank you to the 2013 CSTA Annual Conference sponsors: the Anita Borg Institute, BirdBrain Technologies, Microsoft, Microsoft Research, and Oracle Academy.

Local Advocacy – It Works

G. Lynne Ryan

Editor's note: *Congratulations to Lynne for being named CSTA Advocate of the Year for her extraordinary efforts as a Leadership Cohort member in Texas.*

My CSTA membership has spurred me to become an advocate for computer science (CS) education in my community of Crowley, Texas. As a result of these advocacy activities, enrollment in district CS courses more than doubled in the 2013-2014 school year and two additional CS teachers were hired. Our students are a critical part of any comprehensive community advocacy program. Here are some of the student-centered projects that have had a positive impact in Crowley.

School Board Presentation

I, along with several students, delivered a "state of CS in the Crowley ISD" message. We used a PowerPoint presentation to illustrate key points, including a definition of CS, employment figures, and data on the shortage of CS graduates. Students spoke passionately about their CS Club activities, competition successes, and their reasons for taking CS courses. I used facts and slides from documents available on the Leadership Cohort website.

Recruitment Flyer

A colorful flyer listed the CS courses offered in the district and described a suggested sequence. Flyers were distributed at district registration events. Students visited pre-AP Algebra I and Geometry classes to tell students about CS and distribute the flyers.

Publicity

Throughout the year I submitted pictures and short articles about student successes for broadcast and publication in school announcements, on the district website, and in the local newspaper.

Student Promotional Videos

Third-year students created individual 30-second "Why I Took CS" videos to articulate their personal reasons for enrolling in CS courses. The projects were compiled into a single video and posted on the district website and used in recruitment activities.

Bullying Awareness Program

At the request of our counseling staff, a CS Club member created a video about

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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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cyber-bullying. The project was created with Scratch and is available on the district website.

CSEdWeek

The CS Club hosted a CSEdWeek Open House. Guests were invited to explore student programs, play the Cisco Binary Game, and view student awards and student-produced videos. In addition to many parents, guests included the Superintendent and the Director of Technology of the Crowley ISD, IT Director for the City of Fort Worth, a local Congressman, and the Associate Dean of Science and

Engineering and the Department Chair of CS and Engineering from two area colleges. Additionally, the CSTA career videos were played each day during school announcements.

2013 will see more student engagement in local advocacy and ventures into state-level advocacy projects. Perhaps the next Steve Jobs or Grace Hopper will be in one of our classes because I took the time to tell people in Crowley about the value of CS education. For more information, visit computer-sci.northcrowleyhigh.crowleyisd.schoolfusion.us or e-mail gryan@crowley.k12.tx.us.

CSTA Leadership Cohort Invitation

IT IS BACK TO SCHOOL TIME in the U.S., and for many K–12 teachers that means it is also time to make new plans for advocating for computer science (CS) education. Being the solo voice in the crowd can be very hard and frequently frustrating. But you are not alone; CSTA has an entire group of CS educators just like you who are passionate about making CS an integral part of the core academic curriculum.

The CSTA Leadership Cohort is a dedicated group of K–12 CS education advocates who have strengthened their leadership skills, identified and built part-

nerships with stakeholders, and worked to organize state and local CSTA chapters. The Cohort participates in an invitation-only online community to share their goals, experiences, strategies, and resources. The site includes a wealth of resources including an advocacy toolkit, presentations, videos, flyers, and the latest advocacy news.

Join the CSTA Leadership Cohort community. Contact Lissa at l.clayborn@hq.org to discuss becoming part of this amazing team. Learn more at: csta.acm.org/Advocacy_Outreach/sub/LeadershipCohort.html.

Computational Thinking Dispositions and the Common Core Math Standards

Joe Kmoch

THE NUMBER OF STANDARDS and concepts that educators are expected to teach can seem overwhelming. This is particularly true when the standards are derived from a variety of disciplines. This article explores the relationships among computational thinking (CT) dispositions related to computer science (CS), the Standards for Mathematical Practice (SMP) that are included in the Common Core State Standards in Mathematics (CCSSM), and the Standards for Mathematical Content (SMC), also included in the CCSSM.

CT skills are supported and enhanced by a number of dispositions or attitudes that are essential dimensions of CT. These dispositions reflect values, motivations, feelings, and attitudes applicable to CT and CS (csta.acm.org/Curriculum/sub/CompThinking.html). These dispositions include:

- Confidence in dealing with complexity.
 - Persistence in working with difficult problems.
 - Tolerance for ambiguity.
 - The ability to deal with open-ended problems.
- continued on page 4*



Let us know if
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information changes.

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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.

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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.

ADVOCACY TOOLS

CSTA Advocacy Toolkit

Comprehensive guide

Advocacy Presentation

Promote AP CS Principles Course

Computer Science Education Act

U. S. Legislation

Running on Empty

ACM and CSTA report

Sourcing the C in STEM Video

Making the Connection between CS Education and Jobs

Call for More HS CS Video

Microsoft speech at the Brookings Institution

Computing in the Core (CIC)

An advocacy coalition

Computing Education and Future Jobs

Data on jobs and CS education



csta.acm.org/Advocacy_Outreach/sub/AdvocacyTools.html

COMPUTATIONAL THINKING DISPOSITIONS AND THE COMMON CORE MATH STANDARDS

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- The ability to communicate and work with others to achieve a common goal or solution.

Similarly, the SMPs include eight varieties of expertise that mathematics educators at all levels should seek to develop in their students (www.corestandards.org/assets/CCSSI_Math%20Standards.pdf). CT dispositions and SMP expertise have much in common. Key phrases found within lesson plans and activities can be clues to the CT concepts and dispositions being addressed in learning experiences.

Correlation of SMP Expertise and CT Concepts and Dispositions

1. Make sense of problems and persevere in solving them.

Key phrases: Explain, analyze, conjecture, plan a solution pathway, analogous problems, evaluate.

CT Concepts: Data collection, analysis, representation; Problem decomposition/analysis.

CT Dispositions: Confidence with complexity; Persistence in working through problems.

2. Reason abstractly and quantitatively.

Key phrases: Make sense, decontextualize, representation of a problem.

CT Concepts: Abstraction.

CT Dispositions: Ability to deal with open-ended problems.

3. Construct viable arguments and critique the reasoning of others.

Key phrases: Build a logical progression of statements, analyze into cases, justify conclusions, communicate to others and respond, reason inductively about data, compare arguments, reason.

CT Concepts: Algorithms and procedures.

CT Dispositions: Ability to communicate and collaborate to achieve a common goal.

4. Model with mathematics.

Key phrases: Solve problems from everyday life, develop a function, simplify complicated situations, use

mathematics concepts, evaluate in context.

CT Concepts: Modeling and simulation.

CT Dispositions: Tolerance for ambiguity.

5. Use appropriate tools strategically.

Key phrases: Effectively use various tools, choose appropriate tool, estimation, visualize results, use data effectively, use technological tools.

CT Concept: Automation.

CT Dispositions: Ability to communicate and collaborate to achieve a common goal.

6. Attend to precision.

Key phrases: Use clear definitions; carefully specify units, accuracy and efficiency, explore explanations with others.

CT Concepts: Data collection, analysis, representation.

CT Dispositions: Persistence in working through problems.

7. Look for and make use of structure.

Key phrases: Discern a pattern or structure, recognize objects composed of objects.

CT Concepts: Parallelization, algorithms, procedures.

CT Disposition: Ability to deal with open-ended problems.

8. Look for and express regularity in repeated reasoning.

Key phrases: Observe repeatability, look for a general method and shortcuts, maintain oversight of problem and attend to details, reasonableness.

CT Concepts: Algorithms and procedures.

CT Dispositions: Ability to deal with open-ended problems.

In many schools, the CCSSM SMCs are being emphasized over the SMPs for a variety of reasons:

- Changing pedagogy is difficult and requires a different mindset.

- Changing textbooks is difficult and expensive.
- Following a set of standards (similar to CCSSM) is common in most schools.
- The SMP as identified will require extensive, systemic, and long-term training.

However, incorporating the CT dispositions into mathematics classes at all levels can help ensure that SMP expertise is deeply infused into classroom practice. It will also embed relevant CS content

into the mathematics curriculum without creating extra work for the teacher.

As schools and districts begin professional development on the CCSSM requirements for the Content Standards and Practice Standards, the CT dispositions should be examined and used to both enhance the mathematics curriculum and to implement the sometimes elusive SMP. Doing so will provide the necessary modern enhancement to support students in their development of essential 21st Century skills.

Service-Learning in the CS Classroom

Mindy Hart

WHEN I WAS A CLASSROOM TEACHER, I enjoyed the summer break, but I also found myself getting excited for a new school year during that time away from the classroom. I would daydream about how the next year would be different than the last and think about new projects that would excite my students. Sadly, some of those dreams evaporated as other important and urgent demands competed for my time. Unlike my daydreams, the content of my CSTA Conference presentation, *Service Learning in the Computer Science Classroom*, has the power to impact your classroom for years to come.

EPICS High (Engineering Projects in Community Service – High School Version) enables high school students to connect engineering and computing design with local community needs. While interest in computing and engineering has fallen in the past few years, civic engagement among teenagers is near historic highs and many schools now require service as a condition for graduation. Since 2006, EPICS High has provided opportunities to tap into the wave of volunteerism while interesting students in STEM and computer science (CS) fields.

Reaching underrepresented minority populations is an important part of the EPICS High mission. Progress is being made in recruiting females and minorities, as well as with students in free and reduced lunch programs, into the EPICS program.

EPICS High student teams partner with not-for-profit organizations to better

serve residents in the local community. Additional partnerships are critical to the success of the EPICS program; community partners serve as the customers, corporate and higher education partners assist as expertise mentors, and additional partners offer financial and/or material support.

EPICS High continues to create a variety of programs that can serve as models to a variety of educational scenarios. Current models include programs appropriate for urban, suburban, and rural schools; programs offered after school; programs included within the school day; and programs that complement existing courses. The variety of program models enables EPICS High to successfully replicate and expand.

As CS teachers, we typically teach our students to design and create to fill a need; the EPICS High program extends the students' reach by adding the motivation to meet the needs of their community with their skills in computer science.

Editor's note: Mindy Hart shared program specifics during a session, *Service Learning in the Computer Science Classroom*, at the CSTA Conference on July 16, 2013 (csta.acm.org/ProfessionalDevelopment/sub/CSTA13/Presentations.html).

LEARN MORE:

EPICS High
engineering.purdue.edu/EPICSHS

Meet the Authors

Lissa Clayborn

Director of Development, CSTA

Lissa has over 15 years of experience with K–12 CS education. In her role she works with educators, volunteers, partners, and industry personnel to expand and develop programs for members and the organization.

Malia Fredrickson

NCWIT

Malia is the Aspirations in Computing Program Manager. She works closely with partner organizations to provide a robust and engaging community.

Mindy Hart

Purdue University, IN

Mindy is the coordinator of the EPICS High program at Purdue. She is a former member of the CSTA Board of Directors.

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CS Educator

Joe is a former AP CS teacher; AP Exam Reader, Table Leader, and Development Committee member and currently serves on the CSTA Computational Thinking Task Force.

Randy Richards

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Randy serves as the Sr. Director of Corporate Marketing and develops creative strategies and initiatives for the academic market.

G. Lynne Ryan

Educator, TX

Lynne was a training instructor and computer services manager before becoming a CS teacher in Maryland. She moved to TX in 2001 and currently teaches CS at North Crowley HS.

Chris Stephenson

Executive Director, CSTA

Chris is the founding Executive Director of CSTA and a long-time advocate for K–12 CS education.

AP CS Principles Update

A New Advocacy Tool from CSTA

Chris Stephenson

The creation of the Advanced Placement Computer Science (AP CS) Principles course is one of the most exciting developments in CS education in many years. As the work progresses in refining the course content and developing the assessments, classroom teachers are also beginning the work of advocating for the inclusion of the course in their schools and districts. CSTA has created a new resource that we hope will help these efforts.

Many schools have already begun teaching the AP CS Principles course, either as official pilots supported by the National Science Foundation (and the work of project leads Owen Astrachan and Amy Briggs) or as independent pilot sites. But if we are to reach the audacious goals of the CS10K Project (10,000 schools offering AP CS Principles) we are going to need many more teachers and administrators to advocate for and offer this course.

To assist with this advocacy effort, CSTA (with help from many members of the CS education community) has created a new PowerPoint presentation directed at teachers and administrators. The slides and talking points are intended to help advocates provide a powerful argument for offering the new AP CS Principles course in schools. The slides touch on topics such as the critical role of CS in innovation, the link between computing and jobs in STEM, the content and focus of the new course, and how everyone can become involved.

The presentation is now available on the CSTA website at csta.acm.org/Advocacy_Outreach/sub/AdvocacyTools.html. Please feel free to download and use this presentation in any venue where educators meet to talk about courses and critical learning issues. If you require more information related to the presentation or would like ideas on how to use it, please contact me at cstephenson@csta.acm.org.

This presentation is the first in a series of resources and events to promote the adoption of the AP CS Principles course that CSTA is creating with support from Google and in partnership with other industry and education partners.

Advocating for CS Education

Support the CS Education Act

Computer science (CS) education issues have been getting a lot of attention from Congress lately. *The Computer Science Education Act* was recently introduced in the U.S. House of Representatives with the goal of making important changes to federal education laws, and the importance of supporting CS educators was the subject of an amendment to legislation that would rewrite the *Elementary and Secondary Education Act*. Both efforts raise awareness around the exciting opportunities in CS and support providing access to CS in elementary, middle, and high schools.

The Computer Science Education Act (HR 2536) was introduced in the House of Representatives by Representatives Susan Brooks (R-IN) and Jared Polis (D-CO) and a bipartisan group of their colleagues on June 27, 2013. The legislation and the issues it addresses have won attention from Republicans and Democrats. The modest legislation addresses the urgent need for more CS education in our classrooms and would:

- Amend the statutory definition of “core academic subjects” to add CS.
- Define CS.
- Add CS to the academic subjects addressed by federal teacher professional development programs.

It would clarify that federal funds can be used to invest in CS and support local and state educators who want to put CS curriculum and teachers in schools. There is no cost to the federal government for these changes and they do not create new requirements for states or local education agencies.

While the bill was introduced in June, in mid-July the House of Representatives debated and approved a bill that would rewrite federal K–12 education policy. During that debate, Representatives Brooks and Polis again showcased their commitment to improving CS education by offering an amendment to that bill that would support CS teachers. The amendment was approved without any dissent from their peers and was included in the bill passed by the House. CS advocates, like you, hope that the Senate also chooses to address CS education when they debate similar legislation, expected to happen later this year.

These developments present an opportunity for you to wear your CS-advocate hat. Call, write, or e-mail your members of Congress and tell them to co-sponsor this commonsense, no-cost legislation. The more sponsors the bill has, the more likely that leaders in Congress will pay attention to the issues it addresses, so building support for the bill continues to be a goal for advocates.

If you need help forming your message, visit the Computing in the Core (www.computinginthe.org/csea) website. You can also use the U.S. House of Representatives website (www.house.gov/representatives/find) to find your representative by just entering your ZIP code. Once you identify your Representative, you can send a message. Be sure to include local stories or concerns in the note that underline the importance of K–12 CS in your community. Tell your Representative why CS is important in your community and how it has made a difference in the lives of your students.

And while you have your advocate hat on, don't forget about CSEdWeek (www.csedweek.org). Mark your calendar for December 8–15, 2013. Watch for announcements from CSEdWeek organizers on exciting new ideas to mark the week and begin thinking about how you will advocate for CS education in your community.

Career Corner

Meeting Employability Needs in the Digital Age

Randy Richards

Achieving college- and career-readiness for today's students is a challenge. What is somewhat surprising, however, is the daunting task that many IT-focused businesses face in what is generally an employer's market: finding enough qualified applicants for their job openings in the field of computer science (CS). And the challenge is not just based on future demand. The U.S. Bureau of Labor Statistics confirms that the immediate need for qualified job candidates as compared to the numbers of college graduates in CS is almost overwhelming.

An additional challenge is found in the growing trend for K–12 educators to focus on computer literacy, rather than on advanced CS content that may better prepare students for careers. This trend is noted in the CSTA publication, *Running on Empty: The Failure to Teach K–12 Computer Science in the Digital Age*. According to the publication, when comparing CS across a variety of fields

of study, no other subject has the potential to prepare students for job opportunities in an increasingly technology-centric world, regardless of a student's ultimate field of study or occupation.

In a recent report, Arne Duncan, the U.S. Secretary of Education, emphasized the need to transform Career and Technical Education (CTE) to provide students with the skills and knowledge to successfully pursue post-secondary education and employment. Duncan suggests that "CTE programs must offer a streamlined and structured sequence of courses that ... lead to an industry certification or license and a postsecondary certificate or degree, and enable graduates to gain employment in a high-growth industry upon program completion." One way this transformation is already taking place is through co-curricular integration of industry certifications, such as those offered by Microsoft, Adobe, Autodesk, and HP.

For Microsoft, one area of focus has been to engage with students who desire advanced certification, but who also need an entry-level and industry-focused starting point. The answer is the Microsoft Technology Associate (MTA) certification. With MTA, students receive essential CS training that introduces them to development fundamentals in software, web, Windows, database, system administration, networking, and security design. This broad approach does not provide the depth of some of Microsoft's more advanced certifications, but MTA students who complete certifications gain associate level recognition.

Students also must prepare for advanced certification and future careers. MTA certification, which is designed especially for academia, is increasingly being implemented by institutions that are recognizing the benefits of including a certification track along with existing curricula. Additionally, students view certification as a way to explore and pursue future technology-based education and compete in the job market.

For example, when Florida's Career and Professional Education (CAPE) program implemented technology-based certifications, it found that students with certifications graduate at a significantly higher rate (23%), have a higher GPA (17%), and are more inclined to enroll in college-level courses (61%) than their non-certified peers.

Additionally, the La Salle College High School in Pennsylvania implemented an innovative hands-on learning experience in conjunction with MTA certification. The program offers MTA certified students the opportunity to help maintain the school's IT infrastructure. Student responsibilities range from setting up printers to troubleshooting the network.

And finally, for more than ten years, Northwestern Michigan College (NMC) has offered industry certifications with their degree programs. By integrating the MTA exam into their SQL Server Database course, they experienced immediate success. Keith E. Kelly, the MTA program coordinator at NMC asserts "the exam was just what we needed—an introductory certification

that our students could complete during a two-year program to prove they have the capacity to go on and earn other, more challenging certifications in the future."

The combination of education, real-world experience, and recognizable industry certifications provides the kind of innovation and engagement that CS students want. As instructors promote the value of this holistic approach, the tangible benefits of pairing industry certification with existing curricula will continue to attract the attention of school administrators and parents.

LEARN MORE:

Free MTA Student Study Guides
www.certipoint.com/Portal/desktopdefault.aspx?page=common/pagelibrary/MTA_study_guides.html
 Learning Plans and Preparation Guides for MTA exams
www.microsoft.com/learning/en/us/certification/mta.aspx#certification

Equity Initiatives

Aspirations in Computing Recognition

Malia Fredrickson

The need for more women in computing is widely accepted. In 2011, just 18% of undergraduate Computing and Information Science degrees were awarded to women; in 1985, women earned 37% of those degrees. The National Center for Women & Information Technology (NCWIT) Aspirations in Computing talent-development initiative is working to increase these numbers by encouraging and recognizing technically-inclined young women.

NCWIT has inducted more than 2,300 young women into this unique community. In 2012-2013, over 1,000 young women were recognized at events in all 50 states, the District of Columbia, the U.S. Virgin Islands and Puerto Rico. Many CSTA Chapters helped with these events.

The Aspirations in Computing award honors young women at the high school level for their computing-related achievements and interests. Recipients are selected for their computing and IT aptitude, leadership ability, academic history, and plans for post-secondary education. It offers both a national and local affiliate competition to generate support and visibility for women's participation in computing nationwide. Applications for the award open annually from September 15 to October 31.

The program also identifies outstanding educators who play a pivotal role in encouraging young women to continue exploring their interest in technology. The NCWIT Aspirations in Computing Educator Award recognizes educators

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Congratulations CSTA Member

Kelly Powers, Advanced Math and Science Academy (AMSA), Marlborough, MA, has been named the inaugural recipient of The Hall's Massachusetts STEM Teacher of the Year. The award is presented by The Hall at Patriot Place and Raytheon

thehallatpatriotplace.com/news-article/640/powers-named-halls-stem-teacher-of-the-year

SHOW ME THE NUMBERS

CSTA CONFERENCE 2013 RESULTS

Attendees	275
Workshop seats filled	356
States represented	40
Countries represented	7
Farthest miles traveled	9000 (NZ)

SAVE THE DATE: CSTA ANNUAL CONFERENCE 2014

JULY 14-15, 2014



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csta.acm.org

ASPIRATIONS IN COMPUTING RECOGNITION

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for their efforts to promote gender equity in computing. In the past three years, over 100 educators have been recognized and in total, over \$100,000 in professional development funding has been awarded to these exceptional educators. Each Educator Award recipient is entitled to up to \$1000 in professional development funds and is honored at the regional award ceremonies alongside their students. There is no application for the Educator Award—the recipients are selected from the pool of educators that endorse and encourage their female students to apply for the NCWIT Award for Aspirations in Computing.

“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 a college degree—it was overwhelming. NCWIT opened the door for me to walk into a field full of adventures. I will gather what I can so I can show others what is possible.” ~ Claribel Perez, CSTA member and NCWIT Educator Award Recipient.

Encourage the young women in your school to apply from September 15 through October 31, 2013. For more information visit www.aspirations.org or contact aspirations@ncwit.org.

Advocacy Mini-grants Coming Soon

The ACM SIG Governing Board has generously provided funding to CSTA for a Chapter mini-grants program to provide seed funding for advocacy activities and resources. Chapters will be encouraged to submit a mini-grant proposal to create a regional or local event or resource initiative that would support the engagement of new stakeholders, the creation of a new resource, or the organization of a local advocacy event.

Chapters should start brainstorming now for creative approaches for professional development and advocacy needs.

Applications will be available to chapters in mid-October.

Keep up with CSTA!

The CSTA conference, advocacy efforts, CS education news, chapter events—you name it and you'll find it on Twitter (@CSTeachersA and #csta13), Facebook (Computer Science Teachers Association), and soon, LinkedIn.

Join the conversation with the connection of your choice.

Post your professional development events on the CSTA website by contacting l.clayborn@hq.acm.org
csta.acm.org/ProfessionalDevelopment/sub/TeacherWorkshops.html

MARK YOUR CALENDAR

Consortium for Computing Sciences in Colleges (Midwest)

September 20–21, 2013, Findlay, Ohio
www.ccsc.org/midwest/conference

National Cyber Security Awareness Month

October 2013, Department of Homeland Security
www.dhs.gov/national-cyber-security-awareness-month

Consortium for Computing Sciences in Colleges (Northwestern)

October 4–5, 2013, Forest Grove, Oregon
www.ccsc.org/northwest/2013

Consortium for Computing Sciences in Colleges (Rocky Mountain)

October 11–12, 2013, Rapid City, South Dakota
www.ccsc.org/rockymt/

NCWIT Aspirations in Computing

Deadline: October 31, 2013
www.aspirations.org

Consortium for Computing Sciences in Colleges (Eastern)

November 1–2, 2013, Ewing, New Jersey
www.ccsc-eastern.org

WiPSCE: Workshop in Primary and Secondary Computing Education

November 11–13, 2013, Aarhus, Denmark
wipsce.org

Consortium for Computing Sciences in Colleges (Southeastern)

November 15–16, 2013, Greenville, South Carolina
www.ccscse.org

Virtual Training and In-class Training: Java Fundamentals

Virtual training: January 27–March 21, 2014
In-class training: April 4–5, 2014, Buffalo, New York
academy.oracle.com

TCEA

February 3–7, 2014, Austin, Texas
www.tceaconvention.org

Consortium for Computing Sciences in Colleges (Southwestern)

March 14–15, 2014, San Marcos, California
www.ccsc.org/southwestern

Check the most recent CSTA events on the CSTA website

csta.acm.org/ProfessionalDevelopment/sub/TeacherWorkshops.html