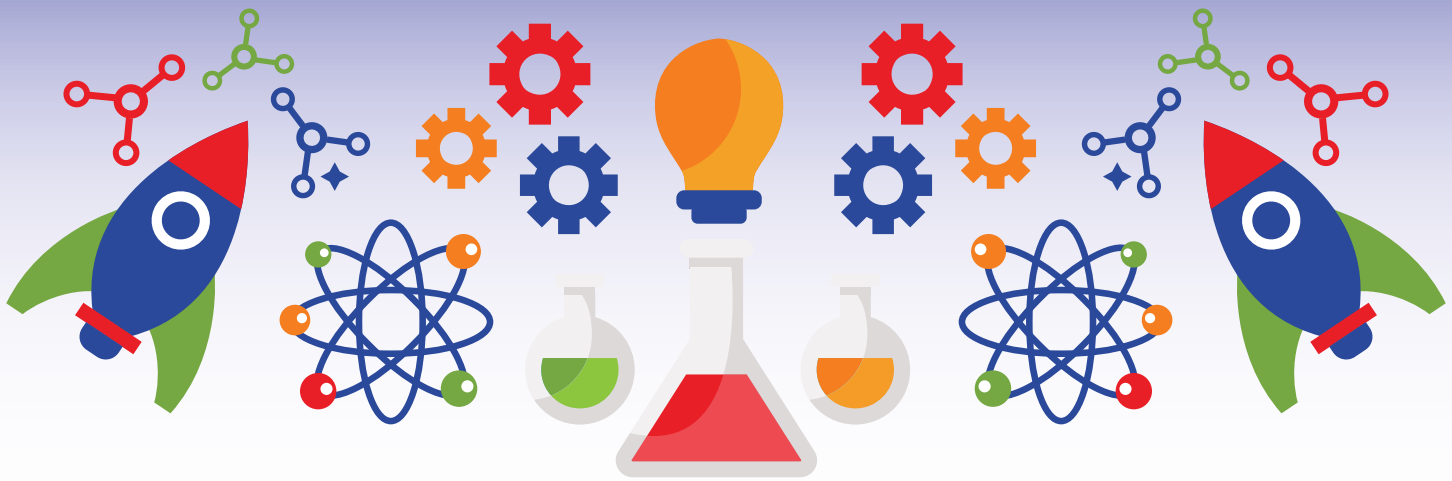

2018 DC STEM SUMMIT

Dec. 11, 2018

OVERALL AGENDA

TIME	ACTIVITY	LOCATION
8 - 8:30 a.m.	Registration and Exhibit Hall	Lobby/Atrium
8:30 - 9 a.m.	Welcome & Introduction to The STEM Network 2.0	Ballroom ABC
9:15 - 10:15 a.m.	Breakout Sessions	Breakout Rooms
10:30 - 11:30 a.m.	Breakout Sessions	Breakout Rooms
11:35 a.m. - 12:25 p.m.	Lunch and Exhibit Hall	Ballroom ABC
12:25 - 1:00 p.m.	DCSN Recognition Ceremony	Ballroom ABC
1:15 - 2:15 p.m.	Breakout Sessions	Breakout Rooms
2:15 - 2:30 p.m.	Closing Activity	Breakout Rooms

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DCSTEM network

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GOVERNMENT OF THE DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

BREAKOUT SESSION DESCRIPTIONS

Room	Session Title	Audience	Presenters	Session Description
BREAKOUT SESSION ONE 9:15—10:15 a.m.				
Ballroom ABC	Energizing STEM in Your Classroom	Upper elementary and intermediate educators; Out-of-school providers; Library/media specialists	**Kimberly Swan**, Program Assistant, The NEED Project	Learn about Energizing Student Potential (ESP), a program designed to infuse energy into the STEM classroom. Activities included in the program allow students to think, explore, share, and develop a profound respect for energy and the world around them. We'll discuss how to implement in your classroom or after-school club and participants will also try their hand at some of the programs hands-on activities! Great for classroom teachers and library media specialists!
Room 6ABC	Integrating STEM into Classroom Teaching: Lessons Learned from the iSTEM Development Program, Panel Hosted by Northrop Grumman	LEA and school leaders; Out-of-school time providers; Educational researchers	**Jason Porter**, Director of Programs, TGR Foundation	Conflicting interpretations of STEM education can confuse educators when considering how to incorporate STEM into their teaching. Professional learning offers educators an opportunity to clarify STEM integration. This workshop will highlight a STEM activity and professional learning best practices from the 2018 Integrated STEM (iSTEM) Development Program. Included in the workshop is a panel of iSTEM participants who will discuss how they have incorporated best practices in STEM integration within their school. Panelists are staff from DCSN recognized STEM schools and iSTEM participants, Burroughs and Kimball Elementary Schools.
Room 5AB	The Future Speaks: Student Voices in STEM Education	School leaders; Out-of-school time providers; Industry, nonprofit, and government employees	**DC Public Schools and Public Charter School Students**	Come hear from the Future! "The Future Speaks" seeks to connect you, the participant with those first impacted by STEM education, our students. In this session, you will learn from students about their feelings and experiences with STEM both in and out-of-school, and reflect on the impact the programs are having. The session will have an interactive format.
Exec. Boardroom	Future Ready Career Pathways: Exploring STEM Career and Technical Education (CTE) Opportunities in the District of Columbia	Intermediate, secondary and adult/alternative educators; School leaders; Out-of-school time providers; Industry, nonprofit, and government employees; Parents and families	**Robert Kinkaid**, Deputy Director of Career and Technical Education, Division of Postsecondary and Career Education, District of Columbia Office of the State Superintendent of Education	Attendees will have the opportunity to learn about the newly articulated course maps for the Districts STEM CTE Pathways and engage in a dialogue about the infrastructure being developed to support students as they pursue industry-level certifications in the field. Come learn about opportunities to get involved.
Room 7	Transforming Learning through Environmental Literacy	Elementary, intermediate, and secondary educators; LEA and school leaders	**Grace Manubay**, Environmental Literacy Coordinator, Division of Health and Wellness, District of Columbia Office of the State Superintendent of Education **Rebecca Davis**, Clean Air Partners	Learning about the real world and engaging in hands-on, student-centered activities are at the crux of the Next Generation Science Standards and environmental literacy. Over 30 schools in the District are part of the Environmental Literacy Leadership Cadre, a professional learning community that focuses on infusing environmental activities at every grade level within a school, and also ensures that these activities are firmly grounded in the NGSS. Discover how this program might enhance or transform the science-based initiatives at your school.
Room 4ABC	Changing the Game for Girls in STEM 2.0: Best Practices for In and Out of School Time	Elementary, intermediate, secondary and educators; School leaders; Out-of-school time and informal education partners; Industry, nonprofit, and government employees; Parents and families	**Jennifer Rivers**, Program Manager for Professional Development, Techbridge Girls-DC	This workshop provides practical strategies for creating girl-friendly STEM environments. In this workshop, participants will discuss biases and gender inequities in STEM and how they may influence facilitation of STEM activities with youth, explore gender and culturally responsive practices that encourage youth from low-income communities to remain interested in STEM and STEM careers, and experience hands-on implementation of these strategies during a STEM lesson.

Room	Session Title	Audience	Presenters	Session Description
Ballroom D	Pathways to Inclusion: Preparing Students for STEM Jobs of the Future	School leaders; Out-of-school time providers; Industry partners, nonprofit, and government employees; Parents and families	**Joycelyn James**, Tech & Innovation Portfolio Manager, Executive Office of the Mayor, Office of the Deputy Mayor for Planning & Economic Development **Maya M. Garcia,** Director, Science Technology Engineering and Mathematics, Division of Teaching and Learning, District of Columbia, Office of the State Superintendent of Education	In November 2016, DC Government, through the Office of the Deputy Mayor for Planning & Economic Development, released Pathways to Inclusion, Washington, DC's first study examining the state of inclusion in the tech economy. Developed with Mayor Bowser's Innovation & Technology Inclusion Council, the report included a number of recommendations for ways to prepare students for jobs of the future, and recommendations on how employers can be engaged. This panel will discuss ways that private industry and government agencies are partnering with educators to increase access to high-quality STEM learning opportunities for students in the District of Columbia. Panelists: **Shanika Hope**, PhD, Digital Content Strategy & Research Lead, Amazon Web Services **Delano Squires**, Director, Connect.DC, Office of the Chief Technology Officer (OCTO) **Aaron Saunders**, Founder & CEO, Inclusive Innovation Incubator, In3 Education
BREAKOUT SESSION TWO 10:30—11:30 a.m.				
Room 7	Supporting Early STEM Inquiry through Learning Partnerships	LEA and elementary school leaders; Early education providers; Educational researchers; Out-of-school time and informal education partners	**Lauren Allen**, Lauren Allen, Management Analyst, STEM Integration, Division of Teaching and Learning, District of Columbia Office of the State Superintendent of Education **Kim Cherry**, DCPS Teaching & Learning, Deputy Chief of STEM **Sarah Massie**, DCPS Plummer ES, Early Childhood Grade Level Chair; **Dawn Sherman,** Ph.D., DCPS Teaching & Learning, Manager, Assessments & Data Strategy	Supported by 100Kin10 - the District of Columbia Office of the State Superintendent of Education, DC Public Schools, and the National Air and Space Museum have partnered to improve active STEM learning in the early grades by providing rich professional development for teachers and connecting young learners to STEM in their community. We will share the program progress and will provide participants with a snapshot of a hands-on inquiry STEM experience focused on early learners.
Ballroom ABC	Home Run STEM Engagement-Building Relationships and Holistic Programs to Meet Stakeholder Needs	Elementary educators and out-of-school time providers	**Collin Lever**, Senior Manager, Community Engagement, Washington Nationals Baseball Club	Building and maintaining meaningful relationships with schools requires a comprehensive engagement strategy for a wide range of stakeholders. In this session, we will discuss the Washington Nationals Grand Slam Schools program and how it manages the variety of needs and priorities of a diverse school network. We will also discuss how to prove value to an assortment of stakeholder groups and the versatility of the Washington Nationals engagement model.
Room 6ABC	Rewriting the Code	Secondary educators; LEA and school leaders; Industry partners	**Keshia Ashe**, AAAS Fellow National Science Foundation **Allyson Kennedy**, Ph.D., AAAS Fellow National Science Foundation **Sharon McPherson**, Einstein Fellow National Science Foundation	The National Science Foundation (NSF) Computer and Information Science and Engineering Directorate implements policies addressing the longstanding underrepresentation of women, minorities, and persons with disabilities in the field of computer science (CS). By strategically funding inclusive curriculum, building community among CS education stakeholders, and implementing effective communications campaigns to raise public awareness, NSF continuously works towards broadening participation in computing.

Room	Session Title	Audience	Presenters	Session Description
Room 5AB	Building Digital Futures- Family Learning in Libraries	Elementary educators; LEA leaders; Out-of-school and informal education partners; Parents and families	**Paula Langsam**, Librarian, DC Public Library **Patricia Ballentine**, Librarian, DC Public Library **Amy Steinbauer**, Librarian, District of Columbia Public Library	Precoding skills start early and are analog. Learn how the District of Columbia Public Libraries are getting families to Ready Set Code!!
Ballroom D	Building Future Engineers	Secondary educators; LEA and school leaders; Industry partners	**Danielle Hamberger** Director, Education Initiatives A. James & Alice B. Clark Foundation	Engineering is a high demand profession across the globe and has been identified as a priority sector in the District of Columbia, and programs have emerged to support this work. This past summer participated in the Stevens Institute Pre-College ECOES (Exploring Career Options in Engineering & Science) program, an immersive two-week summer learning experience in engineering education. In this session, participants will learn firsthand about the Clark Summer Scholar/ Stevens Institute of Technology partnership model and its approach to supporting the engineering career pathway. Additionally, panelists and participants will have the opportunity to discuss how our city can best support the development of engineering pathways by connecting secondary education, employers, and higher education campuses through student experiences. Panelist will include Seth Moncrease, Director of Pre-College Programs, Stevens Institute of Technology; Beth Dunn, NAF Academy of Engineering Director, HD Woodson STEM High School; and DC student program participants.
Room 4ABC	Seeding Entrepreneurial Ecosystems	LEA and School leaders; Secondary educators; Industry, non-profit, and government employees	**Katherine Mereand**, Program Manager, Innovation & Equitable Development Office, District of Columbia Department of Small & Local Business Development	The future of work includes owning a small business. This discussion-based, interactive workshop will explore how to incorporate key lessons of entrepreneurship into any training or educational curriculum and to use entrepreneurship as empowerment for all students. The session will also feature information about local supports for young entrepreneurs.
Exec. Boardroom	Building Pathways to Employment & Economic Self Sufficiency	Secondary educators and School leaders; Industry partners	**Krystal Stackhouse**, Senior Program Manager **Genesys Works Jasmine Wilson**, Program Coordinator, Genesys Works	Genesys Works (GW) is a national nonprofit that provides meaningful work experiences in technology for low-income high school students who undergo intensive eight-week professional development and technology training during the summer and a year-long paid internship during their senior year. The GW team will provide a demonstration of the training program and students will describe their experiences working in local companies.
BREAKOUT SESSION THREE 1:30—2:30 p.m.				
Room 4ABC	Lightning Talks: STEM and Entrepreneurship at Lightning Speed	Intermediate and secondary educators; School leadership; Out-of-school time and informal education partners; Industry partners	**Alicia (AC) Lane**, Executive Director, Techbridge Girls-DC **Tacharna Crump**, Youth Entrepreneurship Institute **Lauren McDanell,** SEED SPOT **Aaron Saunders**, Clearly Innovative	A lineup of lightning talks is an innovative way to quickly and compellingly share a wide range of information from multiple presenters, without overwhelming the audience. The lightning talks in this session are from leaders at the exciting intersection of STEM and entrepreneurship. Presentations will inform attendees of their work and best practices for improving STEM career exploration, particularly with entrepreneurial connections for DC students.

Room	Session Title	Audience	Presenters	Session Description
Room 7	Instructional Strategies to Promote Positive Socioemotional Experiences in STEM Learning	Elementary educators; Out-of-school time and informal education partners; Educational researchers	**Jennifer Lee, Ph.D.**, Director of Assessment and Evaluation, Capstone Institute at Howard University; **Ladan Rahnema, Ed.D.**, Director of Training, Capstone Institute at Howard University	Participants will be introduced to asset based instructional strategies. Specifically, strategies to enhance students' sense of belonging and relational mattering in STEM will be presented with the ultimate goal of helping to increase students' awareness and interest in STEM. A thematic unit lesson planning will be demonstrated in order for teachers to recognize that STEM can be brought to life across subjects and in their students' everyday lived experiences. Session activities include but are not limited to: 1) an exercise to help participants practice affirming student strengths with an asset connection, 2) engaging in math problem-solving aligned to the Common Core Standards for Mathematical Practices, 3) hands-on designs of science experiments, 4) strategies to connect ELA instruction to STEM, and 5) reflective practices to further build on connections between the lesson content, students' assets, and future aspirations.
Exec. Boardroom	Work Pathways through Worldwide Recognized Certifications	Secondary and adult/ alternative educators; LEA and school leaders; Out-of-school time providers;	**Carsten Binsner**, Technology and Computer Science Teacher, DC International School	Learn why a Microsoft Certification is an industry standard that is recognized worldwide and can help open doors to potential job opportunities. When students pass the first Microsoft Certification exam, they become a member of the Microsoft Certified Professional (MCP) community with access to all the benefits provided through the Microsoft Certification Program. Students can use their Microsoft account to find ways to keep skills relevant, applicable, and competitive.
Room 5AB	The Case for Science Fair	Elementary, intermediate, and secondary educators; School leadership; Out-of-school time providers; Parent and families	**Victor Hall**, Senior Specialist for Outreach, Society for Science & the Public **Caitlin Sullivan**, Director of Equity & Outreach, Society for Science & the Public **Naveed Khan**, Associate Specialist, Society for Science & the Public	From improved writing skills to scholarships and travel experiences, learn more about science research competitions, and the educational and financial benefits students can receive from participating. Participants will do their own quick research project and walk away with tools and knowledge to help their students enter local and national competitions.
Room 6ABC	STEM Achievement in Baltimore Elementary Schools in Columbia Heights Village	Elementary educators and school Leaders; Out-of-school time providers; Industry, non-profit, and government employees	**Carolyn Parker**, Ph.D., Director of Graduate Teacher Education, American University **Christine Newman**, Assistant Dean, Engineering Educational Outreach, Center for Educational Outreach, Whiting School of Engineering Johns Hopkins University **Alisha N. Sparks**, Baltimore Programs Director, Center for Educational Outreach, Whiting School of Engineering, Johns Hopkins University	The STEM Achievement in Baltimore Elementary Schools (SABES) is an NSF-funded program through the Johns Hopkins University. Using the SABES program as a model, American University is delivering a STEM-focused out-of-school time program in Columbia Heights Village that supports students to identify an area to improve in their local community and use STEM to address it. We will present the program along with data that shows improved academic abilities and enhanced student attitudes toward STEM.
Ballroom D	Amgen Biotech Experience: Exploring Biotech in DC High Schools	Secondary educators and School administrators	**NaDaizja Q. Bolling**, Program Associate, Carnegie Academy for Science Education of the Carnegie Institution for Science	Join the Carnegie Academy for Science Education (CASE) for a hands-on session to learn about the Amgen Biotech Experience (ABE), a biotech curriculum and equipment loan program available to DC high school teachers. Through ABE, students use lab equipment to learn biotech skills, preparing them for post-secondary education or careers. Participants will be guided through the curriculum by CASE staff and high school interns. Students will share their experience with ABE and the significance this opportunity provides for their career pathway.