# BLACK WOMEN AND GIRLS IN COMPUTING ROUNDTABLE

August 19, 2016 | Executive Brief

Hosted by







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# **OVERVIEW**

On Friday, August 19, 2016, more than 70 people from 40 non-profit, industry, media, education, and policy organizations gathered for a Black Women and Girls in Computing Roundtable hosted by NCWIT and Google in Venice, California. The goal was to connect black women and girls in computing with related organizations in tech, education, government, policy, and media to discuss influence, intersectionality, and media messaging, emerging with a commitment to sustain the community of black women and girls through tangible resources and actions.

After the roundtable, attendees were surveyed to gather their reactions. Participants reported that at the roundtable, they met new people, laid the foundation for future collaborations, increased awareness about how to encourage black women and girls, and were reminded of the importance of supporting this community. In the months following the convening, many attending organizations have been developing collaborative activities to raise awareness and increase opportunities in computing education and tech in the Black community.

## **FORMAT OF THE EVENT**

The event began with a reception the evening prior to the daylong conference, to introduce attendees to each other and lay the groundwork for the following day. Participants divided into pre-set discussion groups with an icebreaker challenge to select one word to summarize the goal for the Roundtable. The words chosen by the five groups were: **Ignite, Actionable, Revolutionary, Reprogramming, and Empowering.** 

The next morning began with a welcome by Avis Yates Rivers, Technology Concepts Group International, LLC and NCWIT Board Member, and Hai Hong from Google's K-12 Education Outreach department. Dr. Jamika Burge was the moderator and introduced the three panels: Student Influences; Creativity, Innovation and Intersectionality; and Media and Messaging.

After each panel, there were five breakout groups led by trained facilitators to discuss the ideas. These discussions included pre-set questions such as What influences black girls (and women) to engage and succeed in computing? How might we amplify those influences? How can we help to create culturally-responsive computing environments? What are the opportunities for creating positive images and messages across media for black women and girls in computing? After small group discussions, attendees returned for a quick recap of discussions and suggestions for calls to action. The third panel was followed by a whole-group discussion, after which the conversation turned to actionable items suggested by the audience. The day ended with a recap by Lucy Sanders, CEO of NCWIT, and a call to action by Kamau Bobb, CISE program officer at the National Science Foundation, and final comments from Dr. Burge.

The facilitators for the roundtable were: Dr. Catherine Ashcraft, NCWIT; Ryoko Yamaguchi, Plus Alpha Research & Consulting, Dr. Jamika Burge, Design & Technology Concepts, LLC; Dr. Wendy DuBow, NCWIT; and Ms. Daraiha Greene, Google.

\*A wide range of ideas were discussed throughout the day; to maintain focus, the recap that follows only includes those ideas that directly pertain to black women and girls in computing.

# **PANEL 1: STUDENT INFLUENCES**

#### **MODERATOR**

Dr. Allison Scott, Kapor Center

#### **PANELISTS**

Ms. Keila Banks, High School Ninth grader

Ms. Sydney Turner, USC, Incoming CS Undergraduate

Ms. Alona King, Stanford, CS Undergraduate

Ms. Angelica Willis, NCA&TSU, CS Undergraduate

Ms. Jasmine Berry, USC Graduate Student

#### KEY THEMES FROM THE STUDENT INFLUENCES PANEL

- Parental encouragement
- Practical application of CS
- Change stereotypes of "who does tech"
- Learning to own the space and mitigate isolation
- Change the CS narrative to CS can change the world

#### THOUGHTS RAISED BY THE DISCUSSION BREAKOUT

The facilitators for this breakout led discussions about how to amplify the influences that encourage black girls and women to persist in computing. Ideas raised were to "manufacture" early encouragement experiences and share them broadly; focus on parent outreach about CS and what a critical role tech can play to alleviate some social and economic problems; make connections between episodic experiences/programs and make the connections and create synergy between formal and informal education; motivate students with careers, skills and potential salaries in tech to gather attention; and use CS as a tool for social issues and activism because it is important to see how tech can be applied. People also discussed the importance of recognizing that although great programs exist, the messaging doesn't always seem to be "for me."

#### **ACTIONABLE IDEAS**

#### Connect to parents

- Reach parents on Snapchat or Facebook; use social media.
- Get the families to learn with their students. But make it inclusive, don't assume deficiencies. Make it easy for parents to take part in simple, low bar, low entry small actionable steps.
- Reach parents where they are include churches, barber shops, hair salons.
- Create a DIY Packet for Parents.
- Normalize Computer Science in households.

## Bridge school and industry

- Build a pilot program that bridges the pipeline from school all the way to industry, so individuals can take it back to their communities to invite in more girls.
- Have a program where we pay students to work in research labs and include the transportation.
- Reach out to industry professionals. One identified need: black men and mentors from industry.
- Use messaging and outreach to make companies seem less intimidating. It is important to realize that although programs exist, the messaging doesn't doesn't always seem to be "for me."

#### Scale informal education

• Especially important in communities where there are fewer outside school programs and opportunities.

# Highlight and connect role models

- Near peer mentoring get girls to reach back to connect to others and build community.
- Personal outreach to tell girls "CS is for You."
- Encourage women and girls to create role model profiles on <u>Fab Fems</u>.
  - » Activate your networks to add role models to the website and raise awareness to connect others to use it as a resource.

# PANEL 2: CREATIVITY, INNOVATION, & INTERSECTIONALITY

#### **MODERATOR**

Dr. Quincy Brown, White House Office of Science and Technology Policy

#### **PANELISTS**

Mr. Solomon Russell, El Camino College

Ms. Whitney O'Banner, Dev BootCamp

Dr. Kimberly Scott, CompuGirls

Ms. Trina Fletcher, National Society of Black Engineers

#### KEY THEMES FROM THE CREATIVITY, INNOVATION, & INTERSECTIONALITY PANEL

### Intersectionality

- Asset vs deficit education approaches
- "Supporting" vs. "saving"
- "Culture" is a critical thread for the black community
- Systemic change is needed to address and acknowledge intersectionality
- Are there real differences between groups? When is it a good idea to move beyond race & gender?

# Ideas for Inspiration/Persistence

- Tell accurate stories, change the narrative
- Form communities
- Be authentic; eliminate fear

# Innovation & Creativity - Better Technology

The facilitators for this breakout engaged attendees in a discussion about how we might improve tech environments in our schools and workplaces. Thoughts raised in the discussion included but were not limited to: creating culturally responsive computing environments and building awareness to create an activation of allies; put an intentional focus on women and pay attention to what happens after college since degree attainment is not in itself a hurdle; educate the majority and create new patterns of decision-making; create an experience that mimics the black women/girls in computing lived experiences (e.g., the game of Life).

#### **ACTIONABLE IDEAS**

- Focus on alliance building.
- Streamline messaging in media where kids are already engaged.
- Invest in academics as much as in athletics.
- Take advantage of media channels to reach younger girls: YouTube, Snapchat
- Create/ add to a collection of resources about:
  - o Gender, race, class, accessibility, geography, language, culture, identity
  - Mentorship, near-peer, project-based learning

# PANEL 3: MEDIA & MESSAGING PANEL

#### **MODERATOR**

Dr. Knatokie Ford, White House Office of Science and Technology Policy

#### **PANELISTS**

Ms. Beverly Bond, Black Girls ROCK!

Ms. Madeline Di Nonno, Geena Davis Institute on Gender in Media

Dr. Yalda Uhls, Common Sense Media

#### **KEY THEMES FROM THE MEDIA & MESSAGING PANEL**

#### **Narratives & Storytelling**

- Behavior & career aspirations impacted by the media
- Can't change the landscape overnight
- Don't forget about music

# **Current Messaging/Image**

- Often dehumanizing towards women
- Often defaults to stereotypes
- Black women not realistically included in media
- Limited possibilities presented in media

This panel was followed by a whole group discussion lead by Julie Ann Crommett and Daraiha Greene from Google that started with What are the opportunities for creating positive images and messages across media for black women and girls in computing? Ideas generated included: celebrating and affirming role models; creating tools for data collection and research in media and the production jobs inside media; try to get the media to shift mainstream norms about what represents someone who is popular & smart and interrupt the status quo of the white male chosen to represent the techie; small businesses should tell their stories; there should be resources and messaging about hiring practices; create a Youtube channel to promote positive messaging around black women and girls in tech; produce a song about STEM-technology (created by kids for kids or by a major artist); companies should put pressure on their vendors for higher standards.

# **IDEAS GENERATED BY ATTENDEES IN ALL-GROUP DISCUSSION**

- Create a landing page that connects to alliances that build girls/women holistically. Below is an initial list based on information attending organizations provided.
  - o Coalition of Black Women and Girls in Computing <a href="http://blackwomenincomputing.org/">http://blackwomenincomputing.org/</a>
  - Information Technology Senior Management Forum (ITSMF) <a href="http://www.itsmfonline.org/">http://www.itsmfonline.org/</a> host events around the country all year and when in a city, they invite local high school and college students to come participate to see what the opportunities are.
  - EmpowHer Institute <a href="http://empowher.org/">http://empowher.org/</a>
  - AAFAI \*African American Female Achievement Initiative
  - National Society of Black Engineers
  - Black Girls ROCK! is a nonprofit organization, that has been committed to enriching girls through leadership, education, and positive identity development since 2006.
  - Black Girls Code empowering girls of color ages 7 to 17 to become innovators in STEM fields, leaders in their communities, and builders of their own futures through exposure to computer science and technology.
  - Kapor Center for Social Impact aims to make the technology ecosystem and entrepreneurship more diverse and inclusive.
  - National Center for Women & Information Technology (NCWIT) <a href="https://www.ncwit.org/">https://www.ncwit.org/</a> with over 700 member organizations and 300+ informational and educational resources to encourage and promote diversity and equity in tech including these <a href="resources to help-encourage-girls">resources to help-encourage girls in CS</a>
  - Geena Davis Institute announced a tool that employs video- and audio-recognition technology, along with algorithms, to identify gender, speaking time and additional details about characters presented in films, television shows and other media

- Hidden Figures Use the launch of this movie as an opportunity to celebrate black women in computer science and highlight role models as well as create connections to engage women and girls in computer science.
  - Create a screening companion toolkit about organizing a local film viewing that teaches community members how to get involved in STEM learning activities and connect students and parents to existing opportunities.
    - In addition to the premiere of the movie these tools can be used for the release of the DVD and when it is available to stream and in February for Black History month
    - Add resources for next steps after viewing film NCWIT's resources to help encourage girls in CS plus links to where people can go to learn CS
    - Activities to integrate in a screening:
      - Panel discussions
      - Celebrity appearances
      - CS Education Activities
      - Livestreaming panels of STEM professionals and/or students
    - Organizations that have already expressed interest:
      - <u>Intel</u>
      - ASU's Center for Gender Equity in Science and Technology
      - National Society of Black Engineers
      - Coalition of Black Women and Girls in CS
      - Blaze Mobile
    - Set up STEM booths every weekend at theaters.
      - Google and Geena Davis Institute possibly to get STEM booths at AMC and Arclight
      - Provide resources to get women and girls engaged and involved
        - Develop a promo card that sends people to a site with linked resources, organizations and events for next steps
    - Tie trailer or promotional items for the film to a YouTube channel that promotes positive messaging of black women and girls in computing.

- NCWIT is planning an awareness campaign around "Hidden Figures" to begin during CSEdWeek (December 5, 2016). This campaign will highlight the stories of black women in tech. The awareness campaign will target girls and their adult influencers to encourage aspirations in computing by describing the benefits of a computing career, engaging ways to study computer science and engineering, and more. The multi-phase campaign, lasting through Black History Month, will leverage several NCWIT communications channels and networks (e.g. dedicated website, social media, newsletters, etc.).
- Girls' STEM day/week
  - Get support from all industry partners
  - Outreach to universities
  - Lab visits coordinate one week of funded lab visits.
  - Engineers week Girls' day already exists
- Create a hashtag that all attendees can coalesce around
- Disruptive measures around media
  - Consumers: demand better images
  - Support positive media, call out bad examples

# **ACTIONS ALREADY IN PROGRESS (AS OF OCTOBER, 2016)**

- There will be a film screening on Black women engineers at Grace Hopper
- @GodComplx Digital/ YT web series starring Shameless Maya about a black.
  - Reach out to Daraiha to organize a screening of GodComplx. (<a href="mailto:rayag@google.com">rayag@google.com</a>)
  - Subscribe to YouTube channel: goo.gl/DDvTXR
- Google has launched <u>Careers with Code</u>, a free magazine that inspires students to use problem solving CS skills to create the future. Created in partnership with Google and Refraction Media, Careers with Code redefines stereotypes around what a computer science career can be. Check out the virtual magazine here and the accompanying educator user manual.
- Google is creating a Black student brief on Google Gallup report on *Diversity Gaps in* Computer Science: Exploring the Underrepresentation of Girls, Blacks and Hispanics and Trends in the State of Computer Science in U.S. K-12 Schools. (i.e., detailed cut of data on Black students and access to / perceptions of Computer Science). Break out data on Black students slated for February.

Question Still to Consider: How do we engender mutual learning, unification, as a philosophy? How do we leverage good intentions of those who want to help but may not look like black women and girls?

# **NEXT STEPS**

The goal of the Roundtable was to connect black women and girls in computing with related organizations in tech, education, government, policy, and media. After the roundtable, attendees were surveyed to gather their reactions. Participants reported that at the roundtable, they met new people, laid the foundation for future collaborations, increased awareness about how to encourage black women and girls, and were reminded of the importance of supporting this community.

To continue the conversation and continue building relationships:

- Google and NCWIT have been invited to join the Black Women and Girls in Computing Coalition.
- Opportunities for women and girls in computing were shared via email to the people who attended the meeting
- A Slack group was started to facilitate communication between attendees
- All attendee emails and organization websites were shared with attendees.

# **IN ATTENDANCE:**



FIRST NAME	LAST NAME	ORGANIZATION
Leslie	Aaronson	National Center for Women & Information Technology (NCWIT)
Morgan	Agee	King Drew HS student
Catherine	Ashcraft	National Center for Women & Information Technology (NCWIT)/ facilitator
Phillip	Banks	Banks Networking
Carole	Banks	Los Angeles Unified School District
Keila	Banks	Student Panel Speaker
Tony	Baylis	Lawrence Livermore National Laboratory
Jasmine	Berry	University of Southern California
Kamau	Bobb	National Science Foundation
Beverly	Bond	BLACK GIRLS ROCK!
Quincy	Brown	White House OSTP
Lesley Slaton	Brown	HP Inc
Kimberly	Bryant	Black Girls CODE
Jamika	Burge	Design & Technology Concepts, LLC

Helen	Butapetch	King/Drew Magnet High School
Sultanah	Corbett	AAFAI *African American Female Achievement Initiative and Oakland Unified School District
Tiffany	Crawford	CREATE
Julie Ann	Crommett	Google
Madeline	Di Nonno	Geena Davis Institute on Gender in Media
Wendy	DuBow	National Center for Women & Information Technology (NCWIT)
Cyntrica	Eaton	Norfolk State University
Layne	Eskridge	Netflix
Lauren	Ewing	Google
Dori	Farah	National Center for Women & Information Technology (NCWIT)
Jannie	Fernandez	National Center for Women & Information Technology (NCWIT)
Michelle	Fisher	Blaze Mobile
Tina	Fletcher	DC Govt
Trina	Fletcher	The National Society of Black Engineers (NSBE)
Knatokie	Ford	White House OSTP
Lisa	Gelobter	The White House/U.S. Dept of Education
Gabriela	Gonzalez	Intel Corporation
Daraiha	Greene	Google
Hai	Hong	Google
Lee	Wills	
Rhonda	James	Intel Corporation
Michael	Jenkins	Blacks in Technology (BIT)
Sandra	Johnson	SKJ Visioneering, LLC
Elva	Jones	Winston-Salem State University
Keyonna	Keith	EmpowHer Institute
Alona	King	Stanford University (Student)
Betty	LaMarr	EmpowHer Institute
Errika	Mallett	IT Senior Management Forum
Viola	Maxwell-Thompson	IT Senior Management Forum
Omar	McGee	High School Principal

Lauren	Mims	White House Initiative on Educational Excellence for African Americans
Lori	Mitchell	Black Women in Technology
Whitney	O'Banner	<u>Dev Bootcamp</u>
Jacqueline	Paredes	Augustus F. Hawkins High School
Qiana	Patterson	QP Advisors
Stephanie	Rodriguez	NSF (AAAS S&T Policy Fellow)
Janae	Royston	<u>SpaceX</u>
Solomon	Russell	El Camino College
lman	Saint Jean	Emery Unified School District
Lucy	Sanders	National Center for Women & Information Technology (NCWIT)
Kimberly	Scott	ASU-Center for Gender Equity in Science and Technology
Allison	Scott	Kapor Center for Social Impact
Jim	Stanton	Massachusetts Computing Attainment Network (MassCAN)
Yalda	T. Uhls	UCLA, Common Sense Media, author
Jakita	Thomas	Auburn University, Social Change Youth Foundation, Inc.
Constance	Thompson	The National Society of Black Engineers (NSBE)
Sydney	Turner	<u>USC - student speaker</u>
Zanetta	Tyler	North Carolina A&T State
Richunda	Wideman	Augustus F. Hawkins High School
Angelica	Willis	North Carolina A&T State
Ryoko	Yamaguchi	Plus Alpha Research & Consulting
Avis	Yates Rivers	NCWIT/TCGi
Shaela	Young	King Drew HS student