Bridging the Digital Divide

What is iQ: smartparent?

iQ: smartparent is an Emmy-winning multimedia television and web series designed for parents that will empower them with new knowledge, tools, and abilities to successfully guide their children through the changing landscape of digital media and technology. It's a growing community of caregivers, national experts, educators, and parent bloggers who want to understand the opportunities and challenges of media as it relates to the development of their children. *iQ: smartparent* was created by WQED Multimedia in 2012.

About this Episode

This episode addresses the serious issue of engaging talented young people of both genders and all backgrounds in STEM and STEAM education, in order to create equity in the technology workforce. National and regional experts will discuss initiatives for underrepresented minority populations in order to meet the nation's accelerating demands for STEM talent. This episode also features the founder of All Star Code, Christina Lewis, who was inspired to start the organization by her renowned businessman Reginald L. Lewis. Ms. Lewis explains her organization's mission to attract and prepare young people of color for jobs in the tech sector.

Discussion Questions

1. Why do you think it is so difficult to bridge the digital divide in the workforce and in education?

2. What are some of your ideas about how to engage young people in STEM and STEAM fields?

3. Why isn't just providing devices and technology to schools and the workforce enough to bridge the digital divide? What kind of training do you think educators and students need?

4. What are your thoughts on this focus on STEM and coding? How do those thoughts change if you think about how artificial intelligence will replace many of those STEM and coding jobs?

5. What does a "diverse" workforce mean to you? Race, ethnicity, gender, and age are all part of diversity. Why is it important to have diversity in a workforce?

6. Think back to your own education experiences. How did the school and teachers make efforts to ensure digital equity by making sure that students were not unfairly advantaged or disadvantaged by their use of and expectations for students and family use of technology? How did they create inequities and exacerbated the digital divide?

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About the Guests

Christina Lewis is the Founder and CEO of All Star Code. She was recognized in 2016 as a "Woman of Power" by the National Action Network, in 2014 as a White House Champion of Change for STEM Access and in 2015 as an Echoing Green Black Male Achievement Finalist. Christina has a BA from Harvard College in History and Literature and is a sought-after writer and speaker on the future of the workplace, entrepreneurship, equity, philanthropy, culture and personal transformation. In 2005, Christina set a goal of publishing a front-page 'A-Hed' at the Wall Street Journal. But, even as her two closest friends published dozens, Christina never published one. She lives in New York City with her husband, dog and two children. www.allstarcode.org/christina-lewis/

Jerome is an All Star Code Alumni. In the summer of 2018, Jerome was a Teaching Fellow at The University of Pittsburgh for mentoring underrepresented kids in computer science. He is actively in the middle of creating two mobile apps for the community. One for kids who need transportation to programs such as the one at Pitt. The second one is meant to help construction workers find jobs in their own community. His career objective is to help make the world a more substantial place through technology and automation.
https://remakelearning.org/blog/2018/11/29/building-a-network-of-the-future-a-qa-with-two-all-star-code-alumni/

Marcus is an All Star Code Alumni. At school he is student body president and participates in a number of other activities. He first was a student at All Star Code during the summer of 2017 and came back as a Teaching Fellow in 2018. Marcus is also involved in a Google after school mentorship program where he works with software engineers to enhance a website he created. The website, Dime Inc., uses Google Maps APIs (Application Program Interfaces), government databases and various programming languages to provide neighborhood crime and demographic statistics to homebuyers and concerned citizens.
https://remakelearning.org/blog/2018/11/29/building-a-network-of-the-future-a-qa-with-two-all-star-code-alumni/

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Susie Puskar is the Director of Youth Innovation with Partner4Work, the workforce development board for Allegheny County and the City of Pittsburgh. In this role, Susie oversees the public system of workforce development for young adults, helping guide youth in career exploration, thinking about their future, and learning new skills. She helps create connections between programs serving high school students and young adults, builds opportunities for young people to participate in paid work experience through year-long and summer programs, and provides opportunities for young adults to learn occupational and 21st Century skills. Susie holds a Master's of Public Affairs from the School of Public and Environmental Affairs at Indiana University. She is also a Remake Learning Ambassador.

www.partner4work.org/about/susie-puskar

https://remakelearning.org/person/puskar-susie/

Christian J. Hughes is the founder and CEO of Drafting Dreams, but to over 150 school-age youth he is known as "Mr. Christian," a person that cares about their education and them as a person. With numerous years of architectural and urban design experience under his belt and a five-year architecture Master's Degree program from Hampton University, Hughes founded Drafting Dreams in 2013 with the purpose to expose students to the principles of architecture and urban design through creative design exercises and design-oriented curricula. The mission of Drafting Dreams is to inspire the next generation of design professionals and to increase women and minority interest and participation in design professions. Through design education, students learn the design process that brings about the places they interact with daily. "Students are also exposed to decision-making processes that involve the built environment where the exposure will equip them to be able to influence progressive and necessary changes in their built environment as needed as adults." https://newpittsburghcourieronline.com/2017/09/14/drafting-dreams-aims-to-assist-aspiring-black-architects/

Online Resources

All Star Code www.allstarcode.org

Lesley Ware- Fashion designer, author, educator www.lesleyware.com

What is the digital divide? www.internetworldstats.com/links10.htm

Drafting Dreams https://draftingdreams.org/

National Association of Workforce Boards www.nawb.org/

National Association of State Workforce Agencies www.naswa.org/

National Workforce Investment Areas – Map
www.upjohn.org/national-workforce-investment-areas-map

Racial diversity and discrimination in the U.S. STEM workforce
www.pewsocialtrends.org/2018/01/09/blacks-in-stem-jobs-are-especially-concerned-about-diversity-and-discrimination-in-the-workplace/

Diversity in the STEM workforce varies widely across jobs
www.pewsocialtrends.org/2018/01/09/diversity-in-the-stem-workforce-varies-widely-across-jobs/

'Diversity Does Not Happen By Accident' and Other Lessons About Equity in the Maker Movement
www.edsurge.com/news/2016-05-11-diversity-does-not-happen-by-accident-and-other-lessons-about-equity-in-the-maker-movement

How the 'digital divide' is holding the U.S. economy back
https://venturebeat.com/2018/02/10/how-the-digital-divide-is-holding-the-u-s-economy-back/

The Real Threat to Economic Growth Is the Digital Divide
http://business.time.com/2014/01/22/the-real-threat-to-economic-growth-is-the-digital-divide/

Increasing Education Opportunities for Minorities in STEM
www.forbes.com/sites/mariaklawe/2015/10/07/increasing-education-opportunities-for-minorities-in-stem/#e50ce71543f5

5 Ways To Support Minority STEM Students
www.popsci.com/5-ways-to-support-your-local-stem-student

When Making Is Inclusive, Good Things Happen
https://makezine.com/2016/03/11/fab-dream-making-inclusive-good-things-happen/

Makerspaces: the Benefits
https://curiositycommons.wordpress.com/makerspaces-the-benefits/

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Bridging the Digital Divide: Reaching Vulnerable Populations
www.ncbi.nlm.nih.gov/pmc/articles/PMC524624/

Partner4work www.partner4work.org/

Basic Digital Skills Can Bridge a Divide in the Workforce
https://medium.com/capitalonetech/basic-digital-skills-can-bridge-a-divide-in-the-workforce-4fe2a5b0cec6

A Grand Canyon Digital Divide between Employees and Their Bosses
www.forbes.com/sites/karenhigginbottom/2017/06/23/a-grand-canyon-digital-divide-between-employees-and-their-bosses/#7f69f05072b2

Creating space for equity in making
https://remakelearning.org/blog/2018/03/01/space-for-equity-in-making/

CSforPGH – Universal access to high-quality computer science programming
https://remakelearning.org/csforpgh/

Google Computer Science Education Programs
https://edu.google.com/computer-science/?modal_active=none

Common Sense Media: To Ensure a Right Start, We Need Digital Equity
www.commonsensemedia.org/kids-action/blog/to-ensure-a-right-start-we-need-digital-equity

Learning Network - closing the equity gap by transforming how young people access and experience learning. www.lrng.org/about

Digital Equity Toolkit https://cosn.org/digitalequity

5 things every educator should know about digital equity
www.iste.org/explore/articleDetail?articleid=654

Research from Digital Equity for Learning http://digitalequityforlearning.org/

Harvard Business School Initiatives www.hbs.edu/faculty/research/Pages/programs.aspx

Research Report: Opportunity for All? Technology and Learning in Lower-Income Families
http://joanganzcooneycenter.org/publication/opportunity-for-all-technology-and-learning-in-lower-income-families/

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