Expanding Code SciGirls Camp to Engage African American Girls

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What is the event? Since 2006, the National High Magnetic Field Laboratory (MagLab) through the Center for Integrating Research and Learning (CIRL) has offered a SciGirls Summer Camp to introduce middle school girls to various fields of science. Code: SciGirls was created in 2017 to increase the engagement in computer science studies and career paths for girls. This consistent commitment to girls in STEM led the SciGirls creators at Twin Cities Public Television (TPT) to invite CIRL to be a partner with them. In the summer of 2021, CIRL & TPT partnered with Florida A&M University Developmental Research School (FAMU DRS), to offer this coding experience to underrepresented minority middle school girls. The coding camp was led by Brooke Hobbes, with African-American role models that spoke on the importance of gender equitable computer science instruction, the impact of coding in all fields of science, and empowered the girls with experiences and best practices to welcome, prepare and build their identity in coding. The camp was held virtually due to COVID-19 over 5 days in July 2021.

Why is this important? Even though technology is pervasive in modern life, women, are underrepresented in STEM fields, especially computer science, compared to their overall representation in the U.S. population. In 2015, while 57% of professional occupations in the U.S. were held by women, only 25% of computing occupations were held by women [1]. Furthermore, the share of computer science degrees going to women is smaller than any other STEM field. Code: SciGirls [2] is designed to engage middle school girls in coding through online interactive programming which inspires and prepares them for future computer science studies and career paths.

(Above) A Zoom portrait of the Code: SciGirls students and their three instructors.

SciGirls show off their coding abilities by holding up a coded micro:bit (top) and spelling out words in binary (bottom).

Citations:

[1] Professional Women: A Gendered Look at Inequality in the U.S. Workforce. (n.d.). Department for Professional Employees, AFL-CIO. Retrieved from https://www.dpeaflcio.org/factsheets/professional-women-a-gendered-look-at-inequality-in-the-us-workforce

[2] NSF Award Search: Award #1712258—Code: SciGirls! Media to Engage Girls in computing Pathways, (n.d.) Retrieved from: https://www.nsf.gov/awardsearch/showAward?AWD_ID=1712258.