



Discussion Section for the NGCP Webinar: Celebrate Computer Science Education Week with SciGirls!

December 8, 2020

How have you been teaching CS in your virtual settings?

Beth Schecher: We use a lot of videos that they can view ahead of time

Beth Schecher: We encourage girls to help out the ones that are stuck on a problem.

William T Fee: All of our coding has been free and online, so things like Tynker and Hour of Code, plus various robot simulators

Beth Schecher: Not leaving a girl behind because she is stuck is one of our biggest challenges

Alanna Howe: I've been investigating with a website called Code for Life (based on UK Comp Sci standards) which is able to run online both on Chromebooks and PC

Ellen: it's neat seeing the girls help each other out when they get stuck coding too

How are the SciGirls strategies evident in your practice?

SciGirls Strategies: 1. Connect STEM experiences to girls' lives. 2. Support girls as they investigate questions and solve problems using STEM practices. 3. Empower girls to embrace struggle, overcome challenges, and increase self-confidence in STEM. 4. Encourage girls to identify and challenge STEM stereotypes. 5. Emphasize that STEM is collaborative, social, and community oriented. 6. Provide opportunities for girls to interact with and learn from STEM role models.

Adrienne Provenzano: include images of women in STEM in presentations, diversity

Jennifer Hartsell Stockdale: Tell the girls to anticipate and value the process, even the struggles; don't just focus on "who finishes" or the end product

Adrienne Provenzano: keep learning about current role models as well as historical figures

Alanna Howe: Having the students explain their interests while providing an extensive list of how STEM can relate to that is helpful to understand the presence of STEM in our lives.

Sarah Megyesi: encouraging girls to share their ideas, their struggles, their victories

Adrienne Provenzano: engineering challenges - opportunities to "fail forward"

Adrienne Provenzano: ask open ended questions, listen

Nicole Rife - Indiana State Museum: 3 - With our design activities, we stress again at the end of the activity how they had the same materials but different solutions. There is no single right answer. Celebrating their testing and adjusting as they go. Ask what they would do differently if they had more time or could do it again.

Ellen: we highlight women and diverse scientists to model

William T Fee: We were Sci-Girls trained, so we try to use all of them. We're better about 2, 3 and 6, though

Jennifer Hartsell Stockdale: Smaller groups; the girls seem to share more and relax in smaller groups

Adrienne Provenzano: sharing information on women in STEM with disabilities

Alanna Howe: Working together with the leadership for the students is really important. In the older grades like HS giving the students the opportunity to be the ones leading a larger club or group is important, so the teacher leaders step back and provide input rather than being the ruling hand.

William T Fee: Giving girls collaborative projects that either have a social purpose, or that tie in to wider use work. Like citizen science or community gardens

Adrienne Provenzano: provide "neutral" materials to work with

Adrienne Provenzano: rather than pink/blue

Carol Fletcher: Modern Figures Podcast that features Black, female Computing professionals