

## Professional Development Situation: Meeting

Skill Focus: Making Connections to STEM Careers

Time Required: 30 minutes

# CAREERS WITH CODE

Participants will explore the resource “Careers with Code” and develop ways to incorporate it in their programs to create awareness of the importance of computer science with youth.

## Agenda

Introduction and welcome – 2 minutes

Explore Careers with Code – 20 minutes

- [Careers with Code online magazine](#)

Share personal strategies – 8 minutes

## Materials

For Facilitator:

- Computer with internet connection and online meeting tool (i.e. Zoom)

For Participants:

- Computer with internet connection and online meeting tool (i.e. Zoom)
- Paper (for taking notes while brainstorming)
- Pen or pencil

## Before the Session

- **Read this meeting guide** to become familiar with the content and allow time to personalize the activities to your presentation style.
  - *Italics indicate text that can be read aloud or emailed to the participants.*
- Send a reminder about the meeting. Determine if any participants require accommodations (sight, hearing, etc.).

- *The next professional development opportunity to enhance our computer science skills will be on DATE at TIME. We will be using (online meeting tool, i.e. Zoom). In this session, we will focus on “Making Connections to STEM Careers” by exploring online resources for careers in computer science and showing the importance of computer science. We will be looking at “Careers with Code,” an online magazine.*

*The 2017/2018 issue of “Careers with Code” can be found at [https://issuu.com/refractionmedia/docs/careers\\_with\\_code\\_us\\_2017](https://issuu.com/refractionmedia/docs/careers_with_code_us_2017) and the 2016 issue can be found at [https://issuu.com/refractionmedia/docs/careers\\_with\\_code\\_us](https://issuu.com/refractionmedia/docs/careers_with_code_us).*

*During the meeting, you may want to have some paper handy for taking notes. I am happy to answer any questions you have and look forward to meeting with you virtually. I can be reached at CONTACT INFO.*

- Read the article “9 ways tech can change the world,” and review the online magazine “Careers with Code” and related resources.
- Develop a list of possible questions participants might have during the meeting. Create potential responses to be explored through informal conversation. Review any key terms or ideas that may be unclear.
- Practice with the online meeting tool you will use. Be sure you are comfortable setting up breakout rooms where the participants can work in small groups.

## Session Outline

### Introduction (2 min)

- Welcome Participants.
- Introduce the focus of this session.
  - *When teaching a computer science curriculum, it is necessary to teach youth the importance of computer science along with making connections between their world and the things you will be teaching them. Youth may know about some apps and devices, but not the careers in computer science which design the apps and programs to run the devices. While not all youth want to program computers, there are careers in industries such as fashion, medicine, cyber security and art where computer science is required. It is very important that youth see how what they are learning applies to their daily lives. One way is showing them how computer science is currently affecting them, and another is*

showing them potential careers. Youth can start learning how to code now if they are interested in computer science as a career. Today we are going to think about how you can use online resources to do this.

- Currently, there are two issues of “Careers with Code”. Each issue has interviews with people who work in computer science, ideas on how to get youth coding, and lots of other information. This free resource can be viewed and downloaded from [issuu.com](https://issuu.com/refractionmedia/docs/careers_with_code_us_2017). The 2017/2018 issue can be found at [https://issuu.com/refractionmedia/docs/careers\\_with\\_code\\_us\\_2017](https://issuu.com/refractionmedia/docs/careers_with_code_us_2017) Click on the link and open it up on your computer.
- Be sure everyone is able to access the online journal.

### Explore Careers with Code (20 min)

- Introduce the activity.
  - We’re going to spend some time looking through this issue and thinking about how we can use it. I’m going to give you 10 minutes to browse through the issue, be sure you find the resources mentioned on the last few pages and read the article “9 ways tech can change the world” on page 28 of this issue. We will come back together to discuss that article at \_\_\_\_\_ (share what time it will be in 10 minutes).
- As participants are reviewing “Careers with Code,” prepare to divide the group up into breakout rooms with 3-4 participants in each room.
- Bring the group back together; you may want to have participants give you a raised hand or thumbs up sign so you know everyone has returned before you continue.
  - This article outlined nine ways that people are currently using their knowledge of computer science to change the world. In just a moment, you will work in small groups to use these ideas to brainstorm examples of how computer science is helping your community. Some of the ideas in the article may help your community, and some might not. I would like you to come up with new ideas that aren’t in the article. If you have attended the “Computer Science: It’s Easier than you Think” training session, you may remember brainstorming how computer science relates to other fields. You can use those ideas to help you think about how computer science is impacting your community. Your group will have 8 minutes to come up with as many ideas as you can and then pick one idea that you think will be unique to share with the entire group. Use your blank paper to record your notes.
  - When you get in your small group, quickly introduce yourself by sharing three things:

- *Your name*
- *One technological tool you've used so far today (i.e. cell phone, electric toothbrush, microwave, etc.)*
- *How you used the tool. For instance, you might say, "My name is Marta and I used my cell phone to wake me up this morning." Keep it brief, so you have time for brainstorming.*
  - Are there any questions? (resolve questions) Great. We will come back together at \_\_\_\_\_ (share what time it will be in 8 minutes).
- Separate participants into their breakout rooms and give them time to work.
- Bring the group back together. You may want to have them give you a raised hand or thumbs up sign so you know everyone has returned before you continue. Have each group type one of their ideas in the chat box so everyone can see it.
- Have participants review the list and look for three things:
  1. *Which idea would have the largest impact on their community?*
  2. *Which idea is the most cutting edge?*
  3. *Which idea would make the greatest improvement in the quality of life for the community?*

It is important for participants to understand how computer science impacts their community and their lives in order to explain it to youth.

### Share Personal Strategies (8 min)

- *Now I want to focus on how we can apply what we learned today in our work. What ideas do you have for using the "Careers with Code" online magazine in your program?*
- Depending on the size of the group, it may be easier to turn on microphones and take turns talking or have participants type their ideas in the chat box. If your group is not too large, take time to invite individuals to participate, "John, do you have any ideas?"
  - *Are there any other online resources we could use to help our program participants understand the different computer science careers, or help them find a career that might interest them?*
- Invite participants to use the chat box to share links to websites or other tools they know about.
  - <https://code.likeagirl.io/rolemodels/home>
  - Computer science is changing everything  
<https://www.youtube.com/watch?v=QvyTEEx1wyOY>
- *Thank you for your active participation in this session. Remember, it is up to you to take what you learned today and apply it with youth. I will download our chat and pull*

*together all the great ideas we discussed today and send them to you along with the links to “Careers with Code” so you have all this information in one email.*

**Before you end the webinar, download the chat. Compile the ideas about how computer science is helping your community and how to use “Careers with Code” into a sharable document to send to participants.**

## After the Session

- Email the participants:
  - *Thank you for your participation in the recent Click2Science module “Careers with Code.” I hope you found it useful and applicable to your practice. Here are the lists of ideas you brainstormed for how to use “Careers with Code” and how computer science is helping your local community. I have also included the links to the ISSUU website so you can download a copy of the “Careers with Code” magazine if you would like to do so.*

*The first link is to the most recent issue and the second link is for the issue published in 2016. Consider sharing what you learned with a co-worker, supervisor, or friend. Please let me know if you have any questions. You can reach me at CONTACT INFO.*

[https://issuu.com/refractionmedia/docs/careers\\_with\\_code\\_us\\_2017](https://issuu.com/refractionmedia/docs/careers_with_code_us_2017)

[https://issuu.com/refractionmedia/docs/careers\\_with\\_code\\_us](https://issuu.com/refractionmedia/docs/careers_with_code_us)

Want to Earn Credit? Click2Science has teamed up with Better Kid Care to provide continuing education units. Check it out at: <http://www.click2sciencepd.org/web-lessons/about>

This material is based upon work supported by the National Science Foundation under Grant No. 1840947

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.