Professional Development Situation: Meeting

Skill Focus: Creating STEM Learning Environments

Time Required: 40 minutes

SETTING UP FOR COMPUTER SCIENCE SUCCESS

Participants will discuss ways to set up a space to be more effective for computer science activities.

Agenda

Introduction and welcome – 2 minutes

See the Skill in Action – 10 minutes

- Creating Learning Environments for Computer Science video-based learning module

Hands-on Learning – 15 minutes

- Hack Your Harvest Activity (p 27-32)

Discussion – 10 minutes

Conclusion – 3 minutes

Materials

- Computer with internet connection, video, camera, and video conferencing platform (i.e. Zoom)
- Paper and pens/pencils (for taking notes)
- Copy of Hack Your Harvest Activity (p. 27-39) for each participant
- Creating Learning Environments for Computer Science video-based learning module

click2sciencepd.org

CLICK 2 SCIENCE pd

Before the Session

- **Read this meeting guide** to become familiar with the content and allow time to personalize the activities to your presentation style. This meeting can be done in person or virtually.
    - *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 (*at* LOCATION [if meeting in person]). *We will be using* (online meeting tool, i.e. Zoom). *In this session, we will focus on "Setting up for Computer Science Success." Let me know if you require any accommodations to participate in the training. I can be reached at* CONTACT INFO.
    Include a link to [Game Changers National Youth Science Day Facilitator's Guide.](#)
- If holding a virtual training, set up the virtual meeting room with breakout. Take time to test the technology you will be using to be sure you are comfortable with it.

Session Outline
Introduction and Welcome (2 min)

- Greet participants as they arrive in person or to the virtual meeting. Make sure everyone feels welcome and comfortable in the learning environment.
    - In an in-person session, ensure participants are aware of the locations of restrooms facilities, refreshments, etc.
    - In a virtual training, ensure participant are familiar with using the video conferencing platform.
- Introduce yourself and the focus of the session: setting up for computer science success.
    - *The goal of this session is to help think about how to set up a space for computer science activities to maximize engagement and support learning for youth. We will be watching a video of an afterschool STEM educator discussing how he sets up his space for different activities with youth. We will do an activity to help you feel prepared to set up your space for the youth you work with.*

See the Skill in Action (10 min)

- Ask:
    - *What things should you consider when setting up a room?*

Pause to give participants time to think. Encourage participants in a virtual workshop to share their ideas in the chat. Possible answers include: the activity you're doing, versatility of space, what kind of work is being done, the flow of room, class size, and where computers or power outlets are located.

- Go to the Creating Learning Environments for Computer Science video-based learning module and play the Setting Up for Computer Science Success video then discuss the video using these questions.
    - *How does Pete set up the room to support learning?*

    Possible answers include: He is flexible. He wants to be sure everyone can see and hear. He wants to be able to talk to each of the small groups. He sets it up so he can move easily.
    - *Why does taking the time to set up a room matter?*

    Possible answers include maximizing youth engagement, support learning, make efficient use of the space and/or time.
- Ask:
    - *What does the space your program uses look like?*

    Most common settings for afterschool programs fit into one of these three categories: (1) gym/lunchroom; (2) classroom; or (3) library/computer room. You will want to refer to the settings that your participants are using in the next activity.

Activity: Hack your Harvest (15 min)

- Have participants read the instructions for part 1 of the activity "Hack your Harvest" on pages 27-32 of the Game Changers National Youth Science Day Facilitator's Guide. Give them about 5 minutes to read through the instructions. They don't need to know how to facilitate the activity, they need to know enough about the activity to decide how they would like to set up the room.
    - *I will give you 5 minutes to quickly read through this activity. We want to focus on part 1, "Get to the Barn" on pages 27-32. Focus on how the activity is supposed to be done.*
    - *As you read, think about the parts of the activity that would influence how you choose to set up your space. For example, is this activity done in groups? How many people should be in each group? How much space does each group need to do the activity? How many youths will you have doing the activity? You might want to jot down some ideas about how you want to organize your space or things you want to think about in organizing your space as you read through the activity.*
- After 5 minutes bring the group back together.

- o *Now that you have read the activity, I am going to have you work in small groups. I will give you 10 minutes to discuss how you would set up your space to do this activity with your small group. Each small group should select a spokesperson to share your ideas with the whole group when we come back together.*
  - o *As we discussed earlier, we work in different spaces. A lot of afterschool programs happen in (1) gym/lunchrooms; (2) classrooms; or (3) library/computer rooms. In your small group, decide what type of space you will focus on* (You may assign each group to plan for a different type of space.) *Think about:*
    - ▪ *Do you want to move tables or chairs? How?*
    - ▪ *Where will you stand to speak to the group?*
    - ▪ *Where will youth focus their attention?*
    - ▪ *Do you want to spread people out or bring them together?*
    - ▪ *How many groups will you have at a table?* (This may affect how you distribute supplies, i.e. sharing certain supplies instead of every group getting their own.)
  - o *We will come back together in 10 minutes. I will let you know when you have one-minute left.*
- If doing this meeting virtually, type instructions in the chat box and then send participants to breakout rooms. Click the "close all rooms" button when you have one-minute left (Zoom will give a one-minute countdown to participants and then automatically move everyone back to the main room).

Discussion (10 min)

- Facilitate a discussion and have each group share what things they considered in setting up their space.
  - o *Now that we are all back together, I would like to hear how each group would set up their space for this activity.* Allow time for each group to share briefly. Use these questions if needed.
    - ▪ *What kinds of things did your group consider when setting up for this CS activity?*
    - ▪ *How would these considerations help maximize youth engagement?*
- You can refer back to the things discussed in the video like versatility of space, what kind of work is being done, flow of the room, how the hack your harvest activity is structured.

CLICK 2
SCIENCE

click2sciencepd.org

- They could also consider things like class size, class composition (are most of the students all one grade or do you have different grade levels together), how much time you have to do the activity.

Conclusion (3 min)

- o *Today we've been thinking about to set up spaces for successful computer science activities. What are your thoughts? How does setting up a room for a specific activity increase youth engagement?*
- Pause to give participants time to think. Encourage participants in a virtual workshop to share their ideas in the chat.
  - o *What are you going to take away from today's workshop? Think about ideas from the video and from your small group discussion as well as what we've talked about together. Write down two things that you can do to adapt the space you work in. How can you make it more engaging? How can you promote more collaboration or discussion? How can you help youth learn computer science?*

  Pause to give participants time to think. Encourage participants in a virtual workshop to share their ideas in the chat.

After the Session

- Within a few days of your meeting, email the participants.
  - o *Thank you for your participation in the recent Click2Science training on "Setting up for Computer Science Success". I hope you found it useful and applicable to your practice. I am including a link to the Hack Your Harvest activity (p. 27-32) we did in case you want to do the activity with youth. Additionally, you can reach me at* CONTACT INFORMATION.

CLICK 2 SCIENCEpd

click2sciencepd.org