

STEMCAP Virtual Presentation Considerations
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Youth Center Technology

- Most centers will prefer you to present over Zoom while others prefer more secure platforms, such as Microsoft Teams or Google Meet. Make sure you have identified what the center's preferred platform is, and that you have downloaded the program and tested it on the device you will be using.
- During your presentation students in each classroom will be using a single camera.
- When facilitating a live-stream presentation, STEMCAP staff will introduce you to the class and then turn off their cameras to minimize distractions during the presentation.
- In the event that the Youth-In-Custody (YIC) center you are presenting at does not allow you to see the students, for security reasons, STEMCAP staff will leave their cameras on so that you are not presenting to black boxes.
- YIC classrooms can echo and students can be hard to hear, so be prepared to have the teacher relay questions.

Presentation process

- Unless otherwise agreed upon, virtual **live** presentations should about **50-55 minutes** long including hands-on activities.
 - If you are **pre-recording** a presentation it should be no longer than **35 minutes**.
- STEMCAP staff will start with a brief program introduction before you begin presenting.
- Start by **introducing yourself (1-2 minutes)**.
 - Start your introduction before you share your PowerPoint or other visuals using Screen Share. This allows students to get to know you in a more personal way before your video box shrinks to allow space for your shared screen.
 - After you've stated your name and current role at your university or institution, share your screen.
 - Your first slide should provide some photos of you or photos relating to your life.
- Provide a brief overview of your **path to your current position (2-3 minutes)**.
 - Include academic interests (or lack thereof) growing up, initial field of study, etc.
- Provide **background information and definitions (2-5 minutes** – this will depend on how much background information students need to understand your work).
- **Dive into the bulk of your presentation (15-20 minutes). The content here will depend on the type of activity you are presenting:**
 - Science Right Now!: Describe your current work as a scientist or other expert
 - Portal to Science: Lab tour and demonstration
 - Objects from Nature: Observation time and educational components
 - Art-Science: Connection between the art project and scientific topic

- **Hands-on Activity (5-30 minutes)**
 - If your workshop does not have a hands-on component, your presentation should include interactive engagement moments which will extend the bulk of your presentation and replace this portion of the workshop.
 - If this is the case, it is also helpful to stop sharing your screen during interactive moments so that students feel they are engaging with you rather than your PowerPoint screen.
- **Wrap-Up (2-3 minutes)**
 - Tie everything together. Reiterate the main points that you want students to take away from your activity.
 - Provide some insight into what you hope to do in the future and/or how you hope to impact the community with your work.
- Following the presentation, allow time for **YIC questions** (5 minutes).
 - Turn off your “Screen Share” so that students can engage in a face-to-face virtual discussion.
 - Once students no longer have questions, STEMCAP staff will lead a guided discussion between you and the YIC, as time allows. STEMCAP will share the discussion questions with you and with the YIC in advance.

Engaging Virtually

- Asking questions is a good way to keep students engaged, however, hearing each student can be a challenge, so be sure to work with the teacher to decide on a method for engaging with the students.
 - Think about ways to visually gauge student answers. Examples:
 - Have students write answers on white boards and hold them up for you to see (works best for one-word answers or numbers).
 - Have students demonstrate a movement or process relating to your presentation.
- **Q Cards** - These are colored cards that each student has, there are 5 different colors: red, green, blue, orange and yellow. You can ask multiple choice (the cards have A-D on the back), true/false or yes/no questions by using these cards. You can ask the students to hold up a specific color for a specific response. Feel free to get creative here. Most students seem to engage more with these cards than with open-ended questions.
- Videos are excellent tools to break up your slides, however streaming an online video over Zoom can create lots of lag. To avoid this either:
 - Send a link to the video to the teachers ahead of time so they can a) switch tabs and show the video during your presentation or b) show the video before or after you present.
 - Download the video and embed it into your presentation so it is not streaming from the internet.
- Because presenting over Zoom makes it hard to interact directly with students, think outside the box about ways to keep them actively participating. Examples:
 - “Look around the room. What are some things you see that use electricity?”

- “As you watch this video, take note of how many different animals you see using the wildlife overpass.”
- If you are presenting a **pre-recorded presentation** remember that many of the same types of questions can be posed as rhetorical questions or fun tasks for students to do on their own. Examples:
 - “Look at the sky next time you’re outside and see if you can find...”
 - “Take a minute to think about a time when you...”
 - “Wiggle your fingers, what do you notice about how your hand moves?”
 - “I’m going to show you a video, make a mental note of the first 3 birds you see...”).

Scheduling

Another challenge with remote engagement is working with new and changing schedules. It is important to be aware that rescheduling is commonplace as YIC centers are complex environments with many health, security and behavioral considerations that affect STEMCAP’s ability to present to YIC on any given day.