

Professional Development Situation: Coaching

Skill Focus: Preparing STEM Learning Opportunities

Time Required: 20 minutes

Developing Focus Questions

Participants will watch the “Using a Focus Question” video-based learning module and develop a focus question for an activity they plan to facilitate.

Agenda

See the Skill in Action—10 minutes

- [Using a Focus Question](#) video-based learning module

Developing a Focus Question—10 minutes

Materials

- Computer with internet connection and speakers
 - [Using a Focus Question](#) video-based learning module
- Pen or pencil
- Copy of the STEM activity staff are planning to facilitate (or bring 2 copies of a STEM activity)

Before the Session

- **Read this coaching guide** to become familiar with the content and allow time to personalize the activities to best suit your presentation style.
 - *Italics indicate text that can be read aloud or emailed to the participant.*
- Send an email to the participant being coached:
 - *Our coaching session is scheduled for DATE at TIME. We will focus on “Preparing STEM Learning Opportunities”. **Please bring a copy of a STEM activity you are planning to facilitate to the session. Also, please email it to me prior to the session, if possible.** Feel free to contact me with your questions or concerns at CONTACT INFORMATION.*
- Note: If possible, try to figure out what STEM activities are coming up in your program so you can gear this session toward using a focus question with that particular activity.

- Gather all materials needed for the coaching session.

During the Session

See the Skill in Action (10 min)

- Watch the overview video (step 1) for the [Using a Focus Question](#) video-based learning module. Ask the participant to think about the following questions as they watch the skill video:
 - *How does Jimmy keep the focus question at the forefront of the activity?*
 - *What other process questions does he use to reinforce what youth are learning?*
- Watch the skill video (step 3).
- Discuss how the facilitator uses the focus question to remind youth what the learning goal is for that activity. Discuss ideas for emphasizing learning goals with youth.
 - Ideas to get started: writing the focus question on a whiteboard, using a focus question that grabs the youth's attention, reiterate learning goals as youth accomplish them during the activity, keep asking the focus question throughout the activity, and ask youth to write the focus question at the top of their science journal as they record their process and findings.

Develop a Focus Question (10 min)

- Ask the participant to get out the STEM activity they are planning to facilitate soon. If they did not bring a copy, use the two copies of STEM activities you prepared as a backup.
- Discuss what youth are doing in the activity. Ask the participant to outline the learning goal for the activity.
 - *What is your learning goal for this activity? Try to think of a specific goal that is observable and/or measurable. Here are a few examples:*
 - *Youth will be able to describe how a strato volcano is formed.*
 - *Youth will practice using the science process to extract fruit DNA.*
 - *Youth will collect information about how strato volcanos are formed. Then, youth will build a model of a strato volcano.*
 - *Youth will be able to use the engineering design process to design a table that meets the following criteria: is made of recycled materials, is aesthetically pleasing, and can support 5 textbooks.*
- Ask the participant to think of what the focus question should be to keep youth working towards the learning goal they just identified. Draft a few different questions and select the question that will:

- Grab the youth's attention
- Keep them focused on the learning goal
- Help them achieve the learning goal
- Keep them engaged in the activity
- Ask the participant to identify how to use the focus question during the activity.
 - *When are you going to present the focus question?*
 - *How are you going to present the focus question?*
 - *How many times will you ask the focus question?*
- Thank the participant for attending the coaching session. Answer any final questions they have about using focus questions to help youth accomplish the learning goal.

After the Session

- Follow up with your participant to see how they are progressing on the skills they learned during the coaching session. Try to be supportive and helpful, not evaluative.

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>