

Professional Development Situation: Meeting

Skill Focus: Encouraging Collaborative STEM Work

Time Required: 30 minutes

WATCHING FOR BEST PRACTICE

Participants will compare a fact sheet with videos in the "Keep Youth Interacting" video-based learning module to see how facilitators encourage youth to collaborate.

Agenda

Access and Collaboration—10 minutes

- [Girls in STEM Infographic](#)

See the Skill in Action — 10 minutes

- [Keep Youth Interacting](#) video-based learning module

Conclusion — 5 minutes

Materials

- Computer with internet connection
- Projector and speakers
- Blank paper
- Pens for participants
- One copy of [Girls in STEM Infographic](#) for each participant
- Chart paper and markers
- [Keep Youth Interacting](#) video-based learning module

Before the Session

- **Read this meeting guide** to become familiar with the content and allow time to personalize the activities to best suit your presentation style. Watch all videos and read informational materials.
 - *Italics indicate text that can be read aloud or emailed to the participants.*

- Send a reminder email about the meeting. Determine if any participants require accommodations (sight; hearing; etc.).
 - *The next professional development opportunity to enhance our STEM skills will be on DATE at TIME at LOCATION. Our focus for this session will be “Encouraging Collaborative STEM Work.” Let me know if you require any accommodations to participate in the training. I am happy to answer any questions you have and look forward to seeing you at the workshop. I can be reached at CONTACT INFO.*
- Gather all materials needed for the session.
- Make copies of handouts for the session.
- Think about 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.
- On the day of the meeting, test the audio and video equipment.

Session Outline

Access and Collaboration (10 min)

- **Welcome participants** to the meeting.
- Have participants find an “elbow partner” – someone at their elbow who they will work with during the meeting.
- Pass out the [Girls in STEM Infographic](#). (Option: You can project it if you prefer not to print copies or don’t have color printing capacity.)
 - *Look at this infographic and talk with your partner. What is it trying to say? What’s the point of this infographic?*
 - Girls gain a lot of confidence from STEM, but they don’t feel confident being the “only girl”; girls can be really successful in STEM but as a group they tend to stay away from the fields of physics and computer science.
 - *What manifestations of this can we see in our program?*
 - Girls sometimes participate “on the margins” by keeping notes instead of using the science materials, girls might be given fewer opportunities to feel frustrated.
 - *How can we respond when we see that not everyone is participating equally?*
 - Use structures that balance everyone’s participation; if one person is “Materials Manager” for 10 minutes, then it has to switch so everyone gets to participate in that role.
 - Talk directly to kids about our social tendencies to slip girls into roles on the sidelines of STEM.

- Highlight women in STEM and encourage everyone to be bold and take chances.

See the Skill in Action (10 min)

- Introduce the goals for the session: to support youth to collaborate with each other in STEM.
- Watch the overview and skill videos in the [Keeping Youth Interacting](#) video-based learning module. (You will watch the skill video twice).
 - *What did you notice?*
- Tell participants: *When we watch the video again, watch for specific things you would like to highlight as good strategies in the educator’s practice. Specifically, look for things that helped youth collaborate or stay included.*
- Watch the skill video again (step 3). Discuss as a group.
 - *This facilitator tells youth to interact by saying “everyone needs to contribute”, but what specifically do the youth do in response? (*
 - It doesn’t show it; the facilitator walks away; the youth may not know what to do to collaborate
 - *What can you do to support youth to work together so everyone gets access to the activity?*
 - Use table tents and rotating roles so that everyone gets a turn
 - Encourage youth to trade materials and ask each other questions

Conclusion (10 min)

- Explain the **Three Stars and a Wish** practice - Three stars and a wish is a formative assessment practice that solicits participants to give feedback in the form of three stars – three things the facilitator did well – and one wish – an area where there can be some level of improvement. This practice helps to elicit positive, constructive feedback that can be used to provide peer feedback or self-assessment.
- Have participants work with their elbow partner to find three stars and wish for the facilitator in the video.
- Have partners share with the room, noting that there are two rules to encourage collaboration.
 - *First, you can’t say anything that was your own idea. You have to say a partner’s idea.*
 - *Second, you have to listen for what we have in common across the groups.*
- After all groups have shared, ask the room what they noticed all of the groups had in common.

- *What did you hear across groups? What did other groups say that you might like to remember?*
- Highlight the strategies you used to encourage the participants to work with their partners.
 - Examples:
 - Worked with the same elbow partner throughout the meeting.
 - Gave specific tasks for partners to complete together.
 - Asked participants to listen for common threads from other groups.
- (If time allows) Invite participants to share one strategy they want to try to encourage youth to collaborate.

After the Session

- Email the participants:

Thank you for your participation in the recent Click2Science training. I hope you found it useful and applicable to your practice. We learned several strategies to support youth collaboration, including:

 - *Listening for a partner's ideas*
 - *Using Three Stars and a Wish to give positive, constructive feedback*
 - *Listening for common ideas*
 - *Other ideas from the [Keep Youth Interacting](#) video-based learning module*

Consider sharing your thoughts with a co-worker, supervisor, or friend. Please let me know if you have any questions. You reach me at CONTACT INFO.

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>

Girls in STEM Infographic

Reproduced from <https://blog.nccoastalpines.org/2013/11/12/girl-scouts-bridge-the-gender-gap-with-stem/>
Created by Girls Scouts of America.

