Professional Development Situation: Meeting

Skill Focus: Enabling Active STEM Learning

Time Required: 35 minutes

WHAT ABOUT CHALLENGES?

Participants will reflect on programmatic challenges in order to add more active learning opportunities to their program.

Agenda

Introduction—5 minutes

See the Skill in Action—10 minutes

- Active Engagement by Youth video-based learning module

Improving Our Program—20 minutes

- Active STEM Learning: Improving Our Program

Materials

- Computer with internet connection
- Projector and speakers
- Pens for participants
- Active Engagement by Youth video-based learning module
- One copy of Active STEM Learning: Improving Our Program handout for each participant
- Optional: whiteboard or chart paper

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 participants.*
- Send reminder email about the meeting. Determine if any participants require accommodations (sight; hearing; etc).

- o *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 supporting "Active STEM Learning". 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
- 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.
- On the day of the session, test the audio and video equipment.

Session Outline

Introduction (5 min)

- Greet participants as they arrive. Make sure everyone feels welcome and comfortable.
- Introduce yourself and the focus of the meeting: "Enabling Active STEM Learning"
  - o *Today we are working on making our learning environments more active. This means getting youths' <u>minds</u> and <u>hands</u> engaged in the learning.*

See the Skill in Action (10 min)

- Participants will now review active approaches to learning while watching a video and actively shouting out "stop".
- Cue up the [Active Engagement by Youth](#) video-based learning module.
  - o *We are going to watch a video of a facilitation of the Glurch and Oobleck activity. This is a video of real practice, not necessarily perfect practice.*
  - o *You will shout out "stop" when you see youth actively engaged in science learning. Everyone ready?*
- Watch the activity overview video. Stop when participants say stop and allow them to share their thinking. Watch the video in step 3 as well and stop when participants see active learning.
  - o Possible stop points: When youth have their hands in the materials, when youth are responding to the materials ("It's so gooey!")
- Debrief.
  - o *What did the staff member do well?*
  - o *What could be done better next time?*

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- Note: The Glurch & Oobleck activity is still fairly teacher-directed; youth are just touching what the teacher makes. How could this activity better encourage youth to act like scientists or design an investigation?
    - *What do you think about watching a video? Is that an active or passive strategy? (Pretty passive)*
    - *What if you call out "stop" during the video so we can discuss something of interest? (Active)*
    - *Could you use this "stop" protocol to watch a video with your youth?*

Improving Our Program (20 min)

- **Pass out** the [Active STEM Learning: Improving Our Program](#) handout. Ask participants to think of ways they successfully incorporate active learning in their facilitation.
- Give participants **time to write** in elements of active learning that they do well and areas that they feel need more support.
    - *Think about the ways your program provides support for active learning and what we can do better.*
    - *Think about the ways you have made use of the support.*
    - *The goal of this activity is not to be harsh or judgmental, but to identify ways we can move forward.*
- **Pair and share.** Encourage pairs of participants to share their thinking with each other.
- As a whole room, have a debrief conversation. Encourage people to **give a thumbs-up** with statements they agree with (a more "active" strategy than simply listening.)
    - *What are our positives?*
    - *What are our barriers?*
    - *What are some of the trends in how our program does?*

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. Making changes is never easy! You can reach me at CONTACT INFO.*
    - *Include a personalized note about how you are supporting participants to improve their local program quality.*

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

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Active STEM Learning: Improving Our Program

Think about the ways your program supports active learning. Complete the grid below with things you do well in your program (positives) and things you could improve (barriers).

	Space for Active Learning	Materials for Active Learning	Time for Active Learning
Positives			
Barriers			
Solutions For each barrier give a possible solution.			

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