Professional Development Situation: Meeting

Skill Focus: Preparing STEM Learning Opportunities

Time Required: 35 minutes

Using a Focus Question

Participants will develop a focus question in order to make learning objectives more apparent.

Agenda

Quick Sketch —5 minutes

Creating Focus Questions—10 minutes

- What's the Question?

See the Skill in Action – 10 minutes

- Using a Focus Question

Practice Writing a Question – 10 minutes

Materials

- Ask each participant to bring a lesson plan – can be a past one or one they plan to use
- Paper and pen or pencil – one per person
- Stickers or markers
- Computer with internet connection, speakers

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 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 "Using a Focus*

Question". Please bring a 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 all 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 out the technology and download the video-based learning module if your internet connection

Session Outline

Quick Sketch (5 min)

- Give each participant a piece of paper and a pencil or pen.
- Ask participants to draw a picture of their favorite movie character. They will have 2 minutes to draw it.
- When time is up, have everyone hold up their picture. Go around the room and give a few participants stickers or smiley faces with markers on their drawings. Ask each of the following questions with time for them to respond by show of hand.
    - *How many of you feel like you completed the task I gave you today?*
    - *How many of you feel like you completed the task well?*
    - *How many of you met my objectives?*
    - *How many of you felt like you met my objectives?*
    - *How many of you knew what my objectives were?*
- *Sometimes we get so caught up in the activity or preparation that we forget to talk about the why. Each activity needs to have a focus, a reason.*

Creating Focus Questions (10 min)

- Pass out copies of What's the Question?
    - *With a partner, come up with a simple question you could ask in order to bring focus to the activity or idea that is shared in the scenarios. Write your focus question after each one.*
- When everyone is done, have a few participants share out the focus question they developed of each scenario.

See the Skill in Action (10 min)

- Que up the Using a Focus Question video-based learning module.

- Watch the overview video in Step 1.
- Ask staff to pay attention to the following questions during the skill video:
    - *How does the facilitator keep the focus question at the forefront of the activity?*
- Watch the skill video in Step 3.
- Ask staff to discuss the following questions in small groups of three or four participants:
    - *How do you emphasize your learning goals with youth during STEM activities?*
    - *How does a focus question keep youth working toward the question they are answering or the problem they are solving?*
- If you have time, ask groups to share highlights from their conversations.

Practice Writing a Question (10 min)

- Ask participants to get out their lesson plan. In small groups of three or four, ask participants to find a lesson that they felt was unorganized or not as successful as they had hoped.
- Determine if there was a focus question presented to the youth.
    - *As a group create a focus question together. Complete this with as many lessons within the group as you can until time is up. You will have 5 minutes to brainstorm focus questions.*
- After 5 minutes, bring the large group back together. Have a few groups share some of their focus questions. With each share, ask the following follow-up question.
    - *With your focus question presented to the youth, how do expect this lesson to change?*

After the Session

- Email the participants:
    - *Thank you for your participation in the recent Click2Science training on "Using a Focus Question". I hope you found it useful and applicable to your practice. Consider sharing your learning with a co-worker, supervisor, or friend. Please let me know if you have any questions you can 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

What's the Question?

Within each scenario below, develop one focus question you could ask youth BEFORE starting the activity. This will guide the youth and provide them with a reason as to WHY they are doing the activity.

Scenario 1

An eclipse is about to happen in your area. You plan to have the youth create a model using balls and lights to show how an eclipse is created. They must experiment with the size of the balls and position of the light in order to get the correct model for the type of eclipse they will be viewing in your area.

Possible Focus Question:

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Scenario 2

Youth have been working on a recycling program within their school. Youth continue to ask you what the different signs mean on the various types of plastics. You decide to do a sink/float activity with plastics to help them understand plastic density and the reasons for the signs.

Possible Focus Question:

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Scenario 3

You are planning a week long rocket building experience for youth. They'll explore different types of rockets (water rockets, balloon rockets, and straw rockets) and determine the properties and forces that help rockets fly the farthest. You will be introducing the lesson on Monday and comparing all the rockets on Thursday.

Possible Focus Questions:

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