Professional Development Situation: Training

Skill Focus: Creating STEM Learning Environments

Time Required: 60 minutes

LOOKING FOR STEM IN ALL THE RIGHT SPACES

Participants will plan four off-site learning opportunities to learn to prepare and plan safe STEM learning opportunities and environments.

Agenda

Welcome & Introduction—15 minutes

See the Skill in Action— 10 minutes

- Is Everyone Ready to Go Outside video-based learning module

Hands-on Learning— 20 minutes

- Off-Site STEM Learning

Conclusion—15 minutes

Materials

- Computer with Internet connection
- Projector and speakers
- Flip chart paper and markers
- Pens for participants
- Is Everyone Ready to Go Outside video-based learning module
- One copy of Off-Site STEM Learning for each participant

Before the Session

- **Read this training 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 training. 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 "Creating STEM Learning Environments". 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 training.
- Develop a list of possible questions participants might have during the training. Create potential responses to be explored through informal conversation. Review any key terms or ideas that may be unclear.
- On the day of the training, test the audio and video equipment.

Training Outline

Welcome

- Greet participants as they arrive. Make sure everyone feels welcome and comfortable.
- Introduce yourself and the focus of the session: "Creating STEM Learning Environments".
- Ensure participants are aware of the locations of restrooms facilities, refreshments, etc.

Introduction (15 min)

- Pass out blank pieces of paper and tell participants to make a table tent.
    - *Write your name on one side. On the other side of your table tent, write one safety concern you have had in the past about your STEM program.*
- Have participants share their ideas with at least three other people.
- Summarize.
    - *Safety concerns are often about tripping, dangerous substances, or sharp objects. Keeping youth safe can be tough enough when the youth are inside your own program and environment. Today we're going to be talking about how to keep youth safe when they aren't in your setting.*

See the Skill in Action (10 min)

- Cue up the Is Everyone Ready to Go Outside video-based learning module.
    - *Let's take a few minutes and watch a facilitation of a STEM activity with youth. Watch for the strategies they use to get youth engaged in STEM in an outdoor space.*
- Show the video.

  - *What is the STEM learning objective?*
  - *How do they guide the youth on safety in this habitat?*
  - *What kinds of features do the staff ask youth to think about?*
- Re-watch the video if necessary.

Hands-on Learning (20 min)

- Group participants into pairs and have them introduce each other.
- Pass out the Off-Site STEM Learning handout.
  - *You're going to spend about 15 minutes thinking about local places you could take youth to study things in line with your program's mission.*
  - *In the left-hand column of the table on this paper, you'll identify one place that you might take youth. In the center column, write one STEM learning goal you could meet at that setting, and in the right column, write what you would do for safety. Do this for four settings.*
- Help participants identify local resources they could use if they are stuck.
- After about 10 minutes, ask if more time is needed.
- Ask participants to share their plans with others.
- Allow time to re-design their plans or write down additional ideas.

Conclusion (15 min)

- Remind participants what they've done as part of this training.
  - *As part of this session, we talked briefly about what kinds of dangers can be mitigated, and we also mapped the ways that we might be able to connect youth with our natural surroundings or local resources.*
- Ask participants to share one thing they're going to try in their setting.
  - *Thanks for sharing your ideas and participation today. Keep in touch if you have questions about what kinds of things are helpful in getting youth involved in off-site activities.*

After the Session

- Within 2-3 weeks of the training, email to all participants.
  - *Thank you for your participation in the recent Click2Science training on creating meaningful environments for STEM learning. I hope you found it useful. Consider meeting with a co-worker, supervisor, or friend to share what you learned. I look forward to continuing our learning at the next session on SKILL/FOCUS on DATE at TIME at LOCATION. Please let me know if you have any questions. I can be reached 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

Off-Site STEM Learning

Choose 4 place from the list below and write about what STEM can be learned in those places and how to manage safety in those places

- Zoo
- Aquarium
- 3-D printing shop
- Children's museum
- History museum
- Park
- Body of water
- Power plant
- Fire station
- Construction company
- The outdoor area near your site

Place	STEM Content to Learn	Guidelines for Managing Safety