



My Journal

Throughout the **Facilitating STEAM Professional Learning** module, you will have opportunities to pause and reflect on prompts. Use this journal to complete the reflection activities.

Section 1: Intro to STEAM Professional Learning

Observe: Sharing Lived Experiences of STEAM

Observe [this video of Count Play Explore \(CPE\) partner Aileen](#) sharing her lived experience with math as a young child during a professional learning (PL) session. Consider Aileen's role as a facilitator of this STEAM (science, technology, engineering, arts, and math) PL session. How might her story support participants' engagement in the PL?

Supporting Adult Learners

Adult learners:

- bring their life experiences and knowledge to their learning,
- need to know why they should learn something,
- want learning to be relevant and applicable to their lives or jobs, and
- are internally motivated to learn.

Consider these four characteristics of adult learners. Which one resonates most to you as an adult learner? Why?





Reflect: Participating in a PL Session

Reflect on a time when you attended a PL session. The session topic could be related to early STEAM or another content area.

- How did you engage actively during the session?
- Were you learning alone or with others? How did that affect your learning experience?
- After the session, how did you practice or apply what you learned? Describe any follow-up support you received from facilitators or coaches.

Section 2: Plan STEAM Professional Learning

Elements of Effective PL

Effective PL opportunities for educators often have these seven elements:

- promote active, playful learning
- develop a clear and coherent content focus
- support collaboration
- model effective practices
- offer coaching and individualized support
- encourage feedback and reflection
- consider opportunities for sustained learning

Consider your role as a PL facilitator. What are some of your areas of strength? What are some areas in which you would like to grow?



Adults Learn Through Play Too!

Observe these video examples of educators engaging in playful activities in their PL sessions.

In [the first example](#), educators work in pairs for a role-play activity with puzzles. One educator pretends to be the “child” working on the puzzle, and the other educator practices using math vocabulary and open-ended questions to guide the “child.”

In [the second example](#), educators work in small groups to design and build wind cars. Educators test out their wind car creations by placing them in front of a large fan.

Reflect:

- In what ways was each experience active and playful?
- What STEAM concepts did participants explore in each experience?
- How do you think the active, playful nature of the experience contributed to adults’ learning?

Learn About CPE STEAM PL Resources

Consider your agency’s STEAM goals and educators’ interests, strengths, and opportunities for growth. Which [CPE Facilitator Resources](#) might work well in your context?





Observe: Tailoring STEAM PL: Understanding Children in Your Context

Observe [this video of a facilitator, Mary](#), describing how facilitators might support educators to implement activities based on the children in their respective settings.

Consider the characteristics of the participants and learning settings that your agency serves. How might you support participants to make connections between STEAM PL and their own learning settings?

Section 3: Facilitate STEAM Professional Learning

Build a Sense of Belonging in STEAM

Consider your personal or professional experiences with STEAM. What experiences might you share in a PL session to build community and contribute to participants' sense of belonging in STEAM?





Examples of STEAM PL

Observe the images of STEAM PL sessions held in various early learning settings.



- What do you notice or wonder about how participants engage with the materials and the learning environment?
- What do you notice or wonder about how the participants engage with each other or the facilitator?

Setting Up an Engaging and Inclusive Learning Environment

Review the considerations related to materials and learning environment.

Materials can support participants to ...	Facilitators might consider how to ...
<ul style="list-style-type: none">• Learn new information• Reflect and share ideas• Engage in STEAM explorations• Document the learning experience	<ul style="list-style-type: none">• Set up the space• Invite participants to navigate the space• Activate participants’ senses• Check for accessibility and inclusion

What is one new strategy you hope to try out in your next PL session?



Supporting Collaboration

Review the following vignettes from agencies who provided STEAM PL for educators in their community:

Vignette #1: The STEAM leadership team in a school district chooses a “Lesson Lab” PL format to engage educators in life science learning. Lesson Labs are full-day sessions organized by grade level during which educators learn about a new activity in the morning and implement it in the afternoon with children. The team focuses on ways to explore measurement and spatial thinking in the school community garden. The Lesson Lab promotes collaboration as educators learn about plant growth and gardening alongside colleagues, try out new strategies, and reflect together about their implementation experience. After the Lesson Lab experience, coaches meet with educators to more concretely plan how they can integrate these experiences into their classrooms.

Vignette #2: A COE is part of a P–3 alignment network. The COE’s STEAM leadership team uses this network to plan a series of early math and science PL sessions for P–3 educators. Based on data, the COE team selects 30 educators who teach in each of the P–3 grades to participate in the sessions, during which they engage in playful STEAM explorations and explore P–3 math and science standards. Throughout the sessions, educators from different grade levels meet in small groups to discuss the activities in relation to their respective grade-level standards. These discussions help educators build a shared understanding of children’s math and science development across P–3.

What is similar or different about each agency’s approach to collaborative learning? How might each agency’s approach to collaboration contribute to participants’ learning?





Section 4: Support Ongoing STEAM Professional Learning

Gather Feedback from Participants

Consider the following strategies for gathering feedback from participants:

- Observe participants' reactions.
- Include periodic checks for understanding and reflection questions.
- Plan for flexibility in the session agenda.

What is one strategy you plan to use to gather feedback from participants?

