

Maker Ed

Facilitator Guide: Workshops

The 2019 Maker Ed Convening

**October 12th & 13th
Pittsburgh, PA**

Workshops (1 hour and 15 minutes)

Workshops are a learning space where participants can learn by doing. Often participants are asked to put themselves in the place of the learner so they can better think from this perspective when reflecting on the experience and possibly designing experiences of their own. For this reason at least three-quarters of workshop time actively engages participants in hands-on and minds-on experiences.

Maker-centered learning is learner-driven and hands-on, and Maker Ed designs our workshops to model to this style of learning. We request that, as much as possible, our partners design workshops similarly for the convening! We have broken down the workshop session into core elements. Please use this guide as a starting place. In addition, we will offer support for facilitators during our Open Sessions with Maker Ed.

Session Planning

Start by thinking about the objectives of your session. What do you want participants to walk away understanding? Is it a specific concept, a process, or a new perspective you would like them to try on? Take a look at your proposal and think about all the things you would like participants to learn; then boil it down to 1-2 big ideas that you want to design towards. What is the core objective of your workshop?

Core Element – Make/Do

Participants should engage in a hands-on and minds-on thinking process.

How are you setting up the activity so that participants can:

- engage in a learning experience parallel to that which youth engage in?
- experience the learning objectives for themselves?
- examine context for reflection around the learning objectives?

Core Element – Reflect

Participants understand, articulate, and make meaning out of their experience.

How are you setting up the activity so participants can reflect on the learning objectives?

- What will participants reflect on? Will the reflection focus on pure introspection, sharing their learning and/or applying their learning to their own context?
- How will you structure participants reflection? Will you ask a 1-2 questions, use a thinking routine, or leave space for open reflection?
- Will you give them time to reflect individually, in small groups, in the whole group?
- How will you make their reflections visible to the group?
- Will you project questions or create a handout?

Core Element – Intro & Closing

Participants feel welcome, understand what to expect from the session, and have an opportunity to synthesize the experience at the end.

- Intro – How will you welcome and orient participants? What information do you need to share at the beginning? What information can wait until after participants have experienced parts of the session?
- Closing – How will you support participants to synthesize learning and come back to the learning objectives?

Optional Elements + Other Design Considerations

These components can happen as part of the make/do and reflect components or independently, but may not be included due to limited time.

- Document – Participants record their process and make it visible.
- Share – Participants share with each other and/or facilitator shares experience with group to inspire others and connect with people and ideas.
- Apply – Participants discover the relevance of their experience to their own practice and/or envision what making can look like in their own learning environments.

These are other considerations and resources for you as you prepare for your session at the convening.

- Timing – How do you offer ample time for the core elements of making and reflection? We suggest spending $\frac{3}{4}$ of your time on these hands-on and minds-on elements. Plan your workshop so it doesn't feel rushed.
- Getting Started – Diving into making quickly sets the tone. What do participants really need to know before starting?
- Participation – It is important to vary participation to maximize individual participation. One way to accomplish this is to shift between individual, small group, and whole group during your workshop.

Facilitation

How the workshop is facilitated is as important as the design of the session.

How do you plan to facilitate the session? How are you creating a space where participants are able to figure out key learnings for themselves, where participants are learning from each other, where community is being built while learning, or where the tools and materials themselves are teachers? What role will you play in this space?

Facilitation Resources: We often draw from the following resources when planning for our workshops:

- [Setting up and Facilitating Tinkering Workshops with Educators](#) (pgs 14-18)
- [Thinking Routines](#)
- [Agency by Design Thinking Routines + Tools + Practices](#)
- [Liberating Structures](#)
- [National School Reform Faculty](#)