

When launching Phase 2 of the Open Portfolio Project, there existed a tremendous amount of interest from educators, especially practitioners, to learn more about facilitating the creation of open portfolios by their students.

They asked about project findings, tensions in the field, tools and platforms, and the project's next steps. The vast majority expressed interest in professional development and support around portfolios. Some were looking to refine their practices and consider new questions or domains, bringing in experiences with fine arts and writing portfolios; others just wanted suggestions and resources to get started and develop practices. They all saw value in how open portfolios could capture learning and youth voice, and they were eager to find ways to situate this form of assessment and learning in their spaces, whether makercentered classrooms, museum drop-in areas, or afterschool clubs.

In light of this interest and opportunity to engage practitioners outside of field site research, our work included numerous practitioner-facing efforts, including multiple workshops, whether standalone or as part of conferences, a published Practical Guide to Open Portfolios, an online course in collaboration with KQED Teach, engagement with Carnegie Mellon University's Learning Media Design course that leverages college student effort around similar project goals, and ongoing conversations with leaders involved in all aspects of performance-based assessment work at the technological, higher education, school district, and policy levels.

These efforts broadened the project work to bring together a wider community of participants, while ensuring that the research-to-practice and practice-to-research pathways remained open and fluid. As the momentum behind this work continues to grow, the involvement of more stakeholders leads to the possibility for greater impact and quicker movement.

### A Practical Guide to Open Portfolios

The published Practical Guide to Open Portfolios is a standalone resource which distills our project's research findings and workshop efforts into an online, freely available guide. It serves as a reference and starting point, whether educators are deepening their practices or just beginning to consider their vision and goals around implementing portfolios. Our educational partners and workshop participants have contributed insights to the guide, as it's been refined, and educators have also utilized it as they formulate and iterate on their own work.

#### Chapters include:

- Getting Started
- Purpose, Motivation, | and Justifications for Portfolio Use
- Integration and Language
- Portfolio Examples
- · Tools for Capturing
- Platforms for Recording, Storing, and Sharing
- Design Workshops

### **KQED Teach Online Course**

In close collaboration with KQED Teach, we launched the Digital Portfolios with Maker Ed online course in summer 2017. This course provides an overview to maker education and how to develop youth-designed digital portfolios, following a similar and shortened format to our workshops and Practical Guide to Open Portfolios.

It's presented on an easy-to-use online platform in connection with KQED Teach's other professional learning offerings related to digital media production and deeper learning. The course is freely available and provides a structured, self-paced series of lessons that may help refine an educator's portfolio practices or support initial interest.

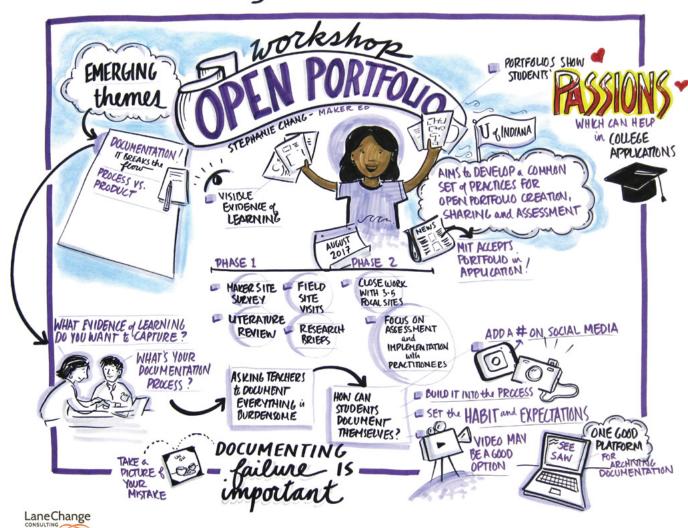
RESEARCH

# **Educator Workshops**

In 2016 and 2017, Maker Ed offered multiple one- or two-day practitioner-facing, in-person workshops on open portfolios. In total, almost 250 educators attended these workshops and dove into discussions, explorations, and development of practices around documentation, open portfolios, and assessment. New elementary school teachers joined museum educators, school librarians, veteran English teacher and science educators, and school principals from all over the country, reaching across subject areas, grade levels, and educational types. From hundreds of applications, the variety and diversity of educators selected for the workshops was intentional, designed to bridge informal and formal learning in a way that we hope open portfolios can, while taking into account the distinct challenges and opportunities of each.

Figure 1: Artist Nevada Lane sketched a graphical snapshot of an Open Portfolios workshop in 2017.

# \*MakerEdConvening



The workshops all followed a similar format (more details below), though each subsequent workshop was iteratively refined to be more focused and address topics that resonated most deeply. Intentionally, the workshop sessions asked participants to step back and forth between learner and facilitator to emulate and better understand the experiences we're collectively creating for youth. This purposeful workshop design was based on comments from educators at our research field sites from Phases 1 and 2: that educators themselves found it challenging to pause and capture their learning and processes, that documentation often felt like an afterthought if not intentionally integrated into the work from the very beginning, and that it was surprisingly hard to create a personal portfolio of work to use as an example!

In a similar manner to shifting between the roles of learner and facilitator, during the workshops, opportunities were also provided to work individually and collaboratively. In most learning environments, there's a need to do both, and one of the most significant tensions that we've uncovered through the Open Portfolio Project is how to effectively and adequately capture and share learning that's individually based or group-based (or a hybrid of both). Rich discussions transpired throughout the workshop sessions. Because participants represented both formal and informal educational environments, at a variety of levels and roles, the connections made between the content and skill development that occurred at each site were also conducive to overall portfolio thinking and planning.

### WORKSHOP FORMAT AND FLOW

Generally, all workshops followed a similar agenda, each made up of numerous sessions that were centered around a specific activity or focus, followed by time for small- and large-group discussion and reflection. Sessions addressed making and documentation, online platforms and documentation tools, sample portfolios and assessment of learning, language and integration, and finally, action planning and site-specific discussion around their unique audiences and framing.

Making and documentation: Elaborated upon in Chapter 7, "Design Workshops," of the Practical Guide to Open Portfolios, our first session of every workshop consisted of a maker-centered design challenge and hands-on engagement. The twist, of course, was that the learning and making inherent in the design challenge needed to be captured in some way. It was important to ensure that documentation of work and learning were innately embedded into the overall making that occurred. Participants were asked to not only create tangible prototypes and solutions to a presented challenge but also to capture their process and show off their documented artifacts and project portfolios.

After a mere hour or two, groups of educators presented their carefully designed, beautifully crafted, and often functional creations—with supporting images, videos, animations, and written reflections to accompany the product. Much was articulated in the reflections and discussions that followed, whether related to the difficulty of documenting while making or to the realization that so much learning occurred around a relatively simple project.





Figure 2: Educators at the workshop work together to create a solution to the presented maker-centered design challenge, capturing their efforts as they go.

Online platforms and documentation tools: Following an experience where participants engaged as learners, the next sessions allowed participants to shift between learner and facilitator. To explore online platforms and documentation tools, participants gathered in small groups to journey through a self-paced investigation of technological, browser- or app-based, online platforms, as well as new and old tools for documentation.

They considered cost, accessibility, ease of use, convenience in porting data in or out, how well the platform interfaced with other established learning management systems, and other aspects of use. Questions also arose to the stability of platforms: Will the companies creating these exist in 5–20 years? And what happens to the data? Platforms included common website-creation ones such as Weebly, alongside portfolio-specific ones such as Seesaw or Portfolium and commonly used systems like Google Classroom.

Rich discussions that ensued from these periods of exploration tackled the possibility of mixing and matching platforms, including popular social media tools. Documentation tools, whether time-lapse video, egg carton stations, or others (see "Research Brief 3: DIY Documentation Tools for Makers" were also tinkered with. Overall, the sessions revealed a long list of key factors that were important to educators, in and out of the classroom, as they considered their audiences and purposes.



Figure 3: Educators explore the online portfolio platform, Seesaw, jotting notes on ease of use, functionality, and integration with their own systems.

Sample portfolios and assessment of learning: Subsequent sessions of the workshop included additional time to investigate, reflect upon, and discuss reactions to actual youth portfolio examples. A number of online portfolios, ranging from those created by 2nd graders to those created by high school seniors, were explored in small groups, guided by both simple and complex questions, such as "Is this a portfolio?" and "Does the aesthetic of the portfolio affect your reaction to the content?"

Many focused on debating the context needed to understand a portfolio; the affordances of open portfolios in showing process versus product; and the utilization of portfolios as a vehicle for reflection and sharing, assessment by numerous audiences or stakeholders, and access toward college and career pathways. Much was deliberated as participants talked through the purpose, process, and audience of youth portfolio creation, each being unique to the youth they're engaging. We explore more around youth motivations for creating portfolios, outside of and within the context of adult-driven structures in "Research Brief 13: Youth Motivations for Open Portfolios."

Language and integration: Closely tied with conversations around the purpose, motivation, and audience for youth-created portfolios were the language and prompts that adults can design to ensure that portfolios—and the process to collect documentation, curate artifacts, and share—are relevant to the interests and motivations of youth themselves.

Workshop participants spent a significant amount of time thinking about the frameworks, language, and facilitation needed to scaffold the development of portfolio practices in their classrooms and educational environments. Some linked portfolio creation and implementation directly to college and career pathways and thought about how to frame it as such; others considered it important to situate portfolio development as a tool for lifelong learning. Still others articulated the value of portfolios as distinctly linked to formative and performance-based assessment of learning.

Action planning: Throughout the workshops and especially near the end, participants were encouraged to lay out concrete next steps. A flurry of activities and energy within professional development opportunities don't always carry through when participants return back to their respective environments, so any opportunity to thoughtfully plot out steps, however big or small, was built in. Some educators thought more about language and purpose, while others carefully dove into opportunities for integration, whether within curricula and lesson plans or with existing technological tools; others wanted to lead similar workshop for fellow educators or administrators to build buy-in, collaborate, and show the value behind the work.

Figure 4: A small group of workshop participants mapped out the goals for how they envisioned open portfolios being utilized and integrated in their settings.

Maker Ed asked participants to share their action planning via photos and social media, as a way to better understand what their takeaways were but also to help them stay accountable to thoughtful and feasible next steps. Two samples are shown below, in response to the prompt, "When I return to my institution, I'd be crazy if I didn't \_\_\_\_\_."





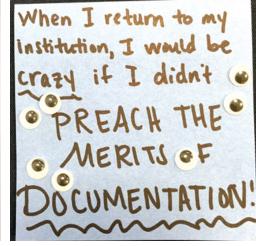


Figure 5: Participants laid out concrete and actionable steps related to the Open Portfolio workshop.

Figure 6: Some participants focused on specific parts of the portfolio process, such as documentation—and building buy-in for it.

## **Insights**

Overall, the workshops provided a structured space for exploring some of the emerging tensions uncovered in the research, offered opportunities for thoughtfully connecting research and practice, and allowed for insight into the motivations of education for implementing open portfolios in their educational settings. In recognizing the challenges inherent in documentation and assessment of maker-based learning experiences, many of the sessions within the workshops were designed explicitly to facilitate exploration of the topic, discussion of it, and consideration of how the topic would be addressed within each educator's own environments and contexts. All topics were aspects necessary to consider when implementing portfolios with youth.

Engaging with such a strong and diverse group of educators was in no way a one-way street: Throughout the workshop and in the months that followed, the discussions and questions raised pushed on our understandings and brought important perspectives to light. The project was able to leverage the educators' deep well of classroom experiences, familiarity with fields like art and architecture, scaffolded assessment practices, and personal portfolios to ensure that the work was balanced between big-picture theory and on-the-ground applications.

### **Acknowledgements**

The work of the Open Portfolio Project is made possible by generous support from the Gordon and Betty Moore Foundation. The consistent conversations with and insightful feedback from our actively involved National Working Group members generated a momentum that propelled our arguments forward in ways that would not have been possible without their critical commentary. In alphabetical order, we thank Leigh Abts, Jon-Paul Ales-Barnicoat, Daragh Byrne, Christina Cantrill, Barry Fishman, Larry Gallagher, Shelley Goldman, Jay Melican, Vera Michalchik, Chris Peterson, and Jessica Ross.