

MAKERS



EDUCATORS



LEADERS



Four stories of building confidence, community,
and leadership through maker learning





Maybe you're just beginning to explore maker-centered learning.

Maybe you've been doing this work since before it was called "maker learning."

Maybe making has always been part of who you are.

No matter where you're starting, you've seen what can happen when learners are given the opportunity to explore, create, reflect, collaborate, and solve problems in meaningful ways.

Now you're ready to deepen your practice, strengthen your voice, and grow as a leader in maker learning.

MAKER EDUCATOR LEADERSHIP CERTIFICATE



The Maker Educator Leadership Certificate Program

helps educators design, implement, and lead meaningful learning experiences grounded in making, reflection, and research.

Through a year-long online cohort experience, participants build their understanding of maker-centered learning while applying new ideas directly within their own schools, libraries, museums, and communities.

Along the way, educators develop the confidence, language, and leadership skills to advocate for meaningful learning experiences and support others in doing the same.

The program welcomes educators across disciplines, settings, and career stages, from classroom teachers and librarians to museum educators, entrepreneurs, and community-based learning leaders.

Stories of Impact

The stories in this booklet follow four educators working in different settings, from classrooms and museums to community makerspaces.

Their paths are different, but each story reflects what can happen when educators step more fully into their role, not just as facilitators of learning, but as leaders capable of shaping how learning happens.



Learn More & Apply

Explore the full program and join the next cohort:

MakerEducatorLeadership.org



A teacher looking to put theory into practice discovered a new way to make learning visible in her classroom.

Melissa Unger

- Elementary School Teacher
- South Fayette Township School District
- Pittsburgh, PA



A Search for Something More Hands-On

After completing a doctorate grounded heavily in theory and research, K-2 teacher Melissa Unger was looking for ways to bridge academic ideas with the everyday realities of her classroom.

“I wanted to take some of my research and apply it in a more hands-on way with students,” she says.

Finding Community and Confidence

Melissa joined the Maker Educator Leadership Certificate Program looking for both practical tools and a community of educators who shared her interests. Although she was initially hesitant about online learning, she quickly found meaningful connection through the program’s collaborative structure and conversations with educators from different settings and disciplines.

The experience helped her strengthen not only her classroom practice, but also her confidence in advocating for maker-centered learning within a traditional school environment.



“In my STEAM classroom, it’s my thing, I see the power of it,” Melissa says. “But sometimes I really struggle to be heard when there are other competing demands.”

Through the program’s research readings, reflection activities, and discussions, she gained new language and frameworks for explaining the value of the work she was already doing.

“A lot of the readings were things I could take back to my classroom or text to my teacher friends,” she says.

A Storybook Ending

For her practicum project, Melissa created original children’s books inspired by real experiences in her classroom.

“I wanted books that model the kinds of conversations we were having,” she says.

The books captured student thinking, persistence, creativity, and reflection, helping make invisible learning visible for both students and teachers. The process also changed how Melissa observed her classroom.

“It gave me the opportunity to step back and listen,” she says, “and see not only where they struggled, but how they were solving problems.”



Making Learning Visible

Now, reflection is a core component of Melissa’s teaching practice and how she helps students move beyond surface-level responses and explain the reasoning behind their choices, ideas, and designs.

Melissa entered the program looking for a way to put theory into practice. She left with new tools, stronger confidence in her work, and stories that help make learning visible for others.



What began as a search for a master's in making became the blueprint for launching a community makerspace.

Gerjuan O'Neal

- Makerspace Founder
- STEAM Studio3
- Houston, TX



Looking Beyond the Classroom

Gerjuan O'Neal has spent her career learning new skills and finding ways to share them with others. She began as a technology teacher before becoming a coach for both students and colleagues.

As she and her colleagues began imagining a makerspace at their school, Gerjuan found herself asking a bigger question: How do you build meaningful maker-centered learning experiences that last?

"I was doing all this research about maker learning and makerspaces," she says, "and I wondered, 'Could I get a master's in makerspaces?'"

Learning Through Community

Gerjuan entered the program eager to deepen her understanding and to connect with educators doing similar work in different settings.

"It wasn't like an online class," she says. "Every monthly meeting, we made something. We had chances to collaborate, ask questions, and see what others were doing."



Hearing stories from educators in schools, museums, and community spaces also expanded Gerjuan's sense of what was possible. The experience helped her begin thinking beyond a single classroom or school and toward a broader vision for community learning.

"It led me to where I am now with my business," she says. "'Oh, I can do this.'"

Helping Other Teachers Get Started

For her practicum project, Gerjuan focused on helping other teachers feel more confident using maker-centered learning in their classrooms.

Using her classroom as a demonstration space, Gerjuan created activities that teachers could adapt, moving maker-centered learning from a separate, specialized subject to an embedded part of the school's culture.

The message she wanted colleagues to hear was simple: "You can do this too."



Building Something Bigger

Today, Gerjuan is the founder of STEAM Studio3, a community makerspace in Houston designed for learners of all ages.

"I wanted to create a makerspace with an afterschool program and summer camp," she says.

Now operating at the intersection of educator and entrepreneur, Gerjuan continues to build opportunities for people to learn through making, both inside and outside the classroom.



A museum educator seeking professional advancement anchored her practice in joy, research, mentoring.

Sarah Wiley

- Museum Educator
- Scott Family Amazeum
- Bentonville, AR



Leading With Joy

For more than a decade, Sarah Wiley has helped educators rethink what hands-on learning can look like by unpacking ideas around making, tinkering, STEAM, and project-based learning.

After years of leading professional learning experiences at the Scott Family Amazeum in Arkansas, she started exploring whether postgraduate study could help deepen her impact as an educator and mentor.

“It was a great opportunity and good timing for where I was professionally,” she says. “It was also helpful that I could earn some grad school credits.”

Getting Grounded

Sarah entered the Maker Educator Leadership Certificate Program with extensive experience facilitating learning...and a healthy dose of skepticism for online learning.

“But I was surprised every week wanting to do this and keep doing it,” she says.



What stood out most was the sense of connection built through the program’s virtual format. Through conversations, collaborative sessions, and shared reflection, Sarah found a community of educators who challenged and energized one another.

Academic readings and frameworks helped Sarah better articulate ideas she had long practiced intuitively in her own work.

“The research helped validate why we do what we do,” she says. “Some of those articles are now my anchors for the professional development I design.”

Mentoring Maker Educators

For her practicum project, Sarah focused on mentorship. After identifying “joy” as a core leadership value through an exercise in the program, she designed a structured mentoring experience for another educator she had been supporting for several years.

Together, they explored readings, reflection practices, and leadership strategies grounded in relationship-building and shared learning.

“If we can have good relationships,” Sarah says, “we can support each other and get better.”

The Power of Thoughtful Community

Today, Sarah continues supporting educators while exploring future postgraduate study and research opportunities of her own. Through the program, joy became part of how she thinks about leadership itself.

“So much is possible,” she says, “when you are a thoughtful educator in a group with other thoughtful educators.”



A veteran teacher translated gut instinct into a framework that reshaped her district's approach to learning.

Sara Milewski

- STEAM Teacher
- Henderson Elementary School
- Madison, WI



Blazing a Path into Maker Learning

Long before “maker education” had a name, Sara Milewski rooted her teaching in hands-on, inquiry-driven learning. When her school introduced a new exploratory program called REACH, she saw an opportunity to build something bigger: a makerspace.

“I felt like I was a pioneer,” Sara says, “not knowing what I was going to come across.”

Even without a roadmap, she could see the impact. Students were more engaged, attendance improved, and problem-solving skills began transferring into other areas of learning.

Putting Language to Instinct

Sara joined the inaugural Maker Educator Leadership Certificate cohort looking for ways to deepen and strengthen work she had already been doing for years.

“What the research shows matches what I was seeing in my classroom,” she says.



The program helped her do something important: translate years of instinct and experience into a clear, research-informed vision she could share with others.

Through a values-identification exercise, Sara uncovered the motivating purpose behind her work: problem-solving.

“If a student has problem-solving skills,” she says, “they can do everything else.”

Sara later brought this process back to her colleagues, helping develop a shared set of learning pillars centered on collaboration, creativity, perseverance, student voice, and problem-solving.

Shaping Her District's Approach to Learning

For her practicum project, Sara partnered with teachers across grade levels to identify ways students could demonstrate learning through hands-on, creative experiences connected directly to curriculum goals.

“We started finding ways for kids to demonstrate their learning using maker skills,” she says.

Today, Sara is helping shape not just how students learn, but how her entire school community defines learning itself.

“It stopped being just my program and started becoming part of the school culture.”





MAKER EDUCATOR Leadership Certificate Program

The Maker Educator Leadership Certificate Program is a year-long experience that helps educators design, implement, and lead learning transformations grounded in making, reflection, and research.

Program at a Glance

The program runs January through November, with a summer break.

Four sequential online modules:

- Foundations of Maker-based Education
- Assessment, Instructional Design, and Routines
- Culture Building with Colleagues
- Hands-on Practicum

You'll experience:

- Weekly asynchronous learning and discussion
- Live online cohort sessions
- Reflection and documentation exercises
- Collaborative learning in community
- Optional graduate credit opportunities

Ready to Take the Next Step?

Explore the full program and join the next cohort:

MakerEducatorLeadership.org

