

The Research behind Maker Education

Interested in learning more about makerspaces? Below is a list of resources to get you started on your maker journey. Download our digital catalog to access links.

Articles

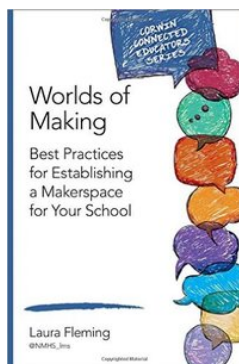
- [Maker Mindset](#) - Dale Dougherty, Founder of Make Magazine
- [Agency by Design](#) – Maker Centered Learning and the Development of Self: Preliminary Findings of the Agency by Design Project, Harvard Graduate School of Education
- [District Administration](#) – Meeting of the Mindsets
- [Meaningful Making: Projects and Inspirations for Fab Labs + Makerspaces](#), Stanford University
- [Seven Makerspace Things You Should Know](#)
- [8 Tips to Taking on Schoolwide Makerspace Leadership](#)
- [Makerspaces and Equal Access to Learning](#) – Laura Fleming and Billy Krakower
- [Novice Guide to 3D Printing](#) – Kim Brand

Books



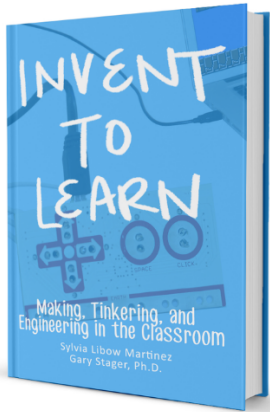
Makerspace Playbook School Edition

Welcome to a community of people who have a passion for making things, and who want to share that with others by making with others by setting up a makerspace. The *Makerspace Playbook* will help you establish a wonderful new resource in your school, neighborhood, or wider local community. We know that the thought of getting a makerspace started can be daunting, whether it's finding a facility, engaging members or students, recruiting mentors, dealing with liability, etc. We want your makerspace to succeed, to expand the maker community and grow the maker movement, to share the maker mindset and DIY mentality, and to engage and stimulate your neighborhood, school, town or region.



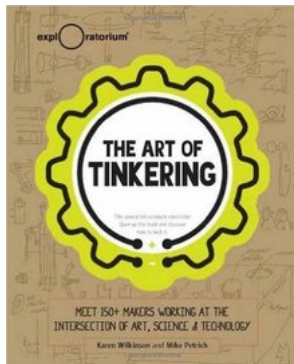
Worlds of Making

Get the nuts and bolts on imagining, planning, creating, and managing a cutting-edge makerspace for your school community. Nationally recognized expert Laura Fleming provides all the answers. From inception through implementation, you'll find invaluable guidance for creating a vibrant makerspace on any budget.



Invent to Learn

Hailed as the "bible of makerspace", *Invent to Learn* is the go to resource for all educators. This book offers pedagogical background for the maker movement, project ideas, and resources to explore. Even if you don't have access to expensive hardware, every classroom can become a makerspace where kids and teachers learn together through direct experience with an assortment of high and low-tech materials. In this practical guide, Sylvia Martinez and Gary Stager provide K-12 educators with the how, why, and cool stuff that supports classroom making.



The Art of Tinkering

Brought to you by the Exploratorium's Tinkering Studio, *The Art of Tinkering* is an unprecedented celebration of what it means to tinker: to take things apart, explore tools and materials, and build wondrous, wild art that's part science and part technology. Join 150+ makers as they share the stories behind their beautiful and bold work and use this book to do some tinkering yourself.

Web Resources and Links

- 1st Maker Space Research Page - <http://www.1stmakerspace.com/research>
- What is a Makerspace? - <https://www.makerspaces.com/what-is-a-makerspace/>
- Make Magazine - <https://makezine.com/>
- MakerEd - <http://makered.org/>
- Instructables: Directions for how to build almost anything! <https://www.instructables.com/>
- Thingiverse – Free files for 3D Printing - <https://www.thingiverse.com/>
- Free web-based modeling software - <https://www.tinkercad.com/>
- Innovators supply house focused on electronics - <https://www.adafruit.com/>
- The BBC Micro:bit - <http://www.microbit.org/>
- Cardboard Challenge - <http://cainesarcade.com/cardboardchallenge/>

“Put a young man in a workshop, his hands will work to the benefit of his brain and he will become a philosopher while thinking himself only a craftsman.” – Jean-Jacques Rousseau