



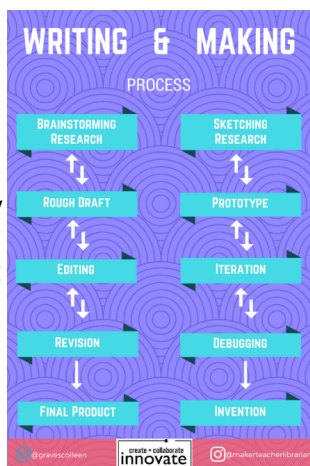
LOW HANGING FRUIT

Making in the Library

By Tammy Hawley-House

Have you been hearing about makerspaces? They are popping up in school libraries throughout Idaho. If you wonder how a school library makerspace can benefit your classroom, here are a few examples:

- Making is About Learning:** “Making,” the stuff happening in makerspaces, embraces a constructivism approach to education—one where learning happens by doing. School libraries offering maker opportunities create an environment and culture where student-driven learning, problem solving and entrepreneurial skills are naturally fostered. Students share ideas and help each other learn new skills. Makerspaces allow students to become facilitators and teach other students in a cooperative atmosphere.
- Making nurtures necessary STEM job skills:** The making process is largely the same process used by persons in most STEM related jobs. Design Thinking is synonymous with making, in that a student starts with a problem and implements a solution, frequently testing and retrying until a refined solution emerges. STEM professionals of all sorts, like engineers, doctors, and computer programmers, practice these skills every day. By allowing the school library to be a place where students gain hands-on, practical experience through maker activities, we are better preparing our next generation for the future.
- Making and writing - a marriage made in a parallel universe or...classroom:** A recent [blog post](#) by Colleen Graves shared the parallels of making and writing. Teaching in a making environment emphasizes the importance of iteration, where students systematically identify changes needed to improve what’s being designed or made. Writing teachers use a similar strategy with drafts and editing. If you look at the accompanying chart, you can see how both making and writing are about teaching students a series of skills in a deliberate order, to produce an end product. The charge of the educator is to stress the process in order to produce a quality product. Now... imagine a teacher/librarian collaboration with students making in the library, writing about their hands-on experience, and each step of the making/writing processes aligning beautifully.



These are just a few examples of how makerspaces are not only relevant in today’s school libraries, but fast becoming essential. More than 3D printing or high tech gadgetry, making is all about learning! In the end, we are all working toward the same goal: ensuring 21st century skills for ALL Idaho students. Making is a powerful step in getting us there.

LINKS TO MORE LEARNING



[Make It At The Library](#)

A project from ICfL to support the creation of Makerspaces in Idaho libraries and encourage the delivery of library services to digital users “where they live.” 2017 cohort application window is open from December 5, 2016 to January 6, 2017. Training dates will be throughout March in locations around Idaho.

[STEM Action Center](#)

Part of the Governor’s office, the STEM Action Center provides support to K-12 STEM projects and opportunities. Learn about current opportunities at STEM.idaho.gov.

[Fun With Math & Science Gameboard](#)

This online gameboard is a quest designed to introduce preK learners and their grown-ups to the wealth of STEAM resources to be found online. With tips and screen time guidelines for parents, it makes for some great winter break entertainment.

PRACTICAL APPLICATIONS



[Low Tech Making](#)

No 3D printer handy? No worries! There are great making projects that do not require computers, much less 3D printing. The Global Cardboard Challenge through the Imagination Foundation happens in September, but cardboard happens all year—especially around the holidays! Gather tape, scissors, and any other supplies to make a cardboard creation, then watch [Caine’s Arcade](#) for inspiration.

DIGITAL TOOLS



[Access these eBooks using GVRL at \[www.LiLi.org\]\(http://www.LiLi.org\):](#)

The Gale Virtual Reference Library (GVRL) has ebooks on STEM topics useful for the classroom.

- Encyclopedia of Weather and Natural Disasters
- Everyday Math
- Exploring Science Through Science Fiction
- The Maker Cookbook
- Makers At Work
- Scratch™ Programming for Teens

