Want to Know the Best Makerspace Tools for Your Money?

by Liz Bowie

If you've been thinking about starting a makerspace in your library, you've probably spent some time trying to figure out the best way to spend your money. What tools and activities can you stock your space with that will be the most effective and the most engaging for your users?

Or maybe you already have an established space and you're looking for new ideas — if so, you've come to the right place!

Read on to see what your colleagues and makerspace mavens have to say about the best resources for creating a space that library users will flock to! From advanced robotics to old favorites like LEGOs®, you'll find recommendations for collaborative, creative and inspiring tools that students and patrons can't live without.

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Shawna Ford

Coordinator of Future Ready Learning, Raymond E. Curtis Elementary, Weatherford, TX

Our students love LEGOs and will use them with other makerspace items like littleBits, Sphero robotics balls are also very popular since students can use them at all levels, thanks to a variety of apps. Younger students can use Tickle or Sphero Draw N' Drive and also Macroblab and OrbBasic.

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>
> ANDY PLEMMONS

Andy Plemmons

School Library Media Specialist, David C. Barrow Elementary, Athens, GA

Robotics in some form or another — our students go crazy over programming robots. They challenge one another, work together and inspire one another. Not every robot is made equally, and it really depends on what you are looking for.

I love that some robotics allow students to jump right into programming without spending a lot of time building a robot. Sphero and Finch are great examples of this. Some students really get into the building of the robot, such as LEGO robotics, but those robots are time consuming and the kit is tied up with one student until the robot is done.

Amy Koester

Youth & Family Program Coordinator, Skokie (IL) Public Library

Right now, the most-used tools in our makerspace (which is currently in a textiles-themed rotation) are the sewing machines. Elementary and middle schoolers cannot get enough of simple sewing projects, like little pillows and zipper pencil cases. In general, some of our most popular items, regardless of when we bring them out, are the Makey Makeys, littleBits kits and LEGOs (both free-building and following specific instructions).

Holly Storck-Post

Youth Services Coordinator, Monroe (WI) Public Library

In terms of tech tools, my kids LOVE our snap circuits and Spheros. I like seeing the experimentation, challenges, problem solving and collaboration. The kids like the freedom to go at their own pace, try out new things for fun and share what they are doing with other kids.

That said, the best tool I've found for my maker programs is saying, "Yes" or "Try it and see." I love giving kids the sense of ownership over their projects and the library and the freedom to try, fail, problem-solve, learn from each other and me and figure stuff out. Regardless of the activity, from no-tech making on up, the best tool is letting kids do their own self-guided learning.

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Amanda Struckmeyer

Youth Services Librarian, Middleton (WI) Public Library

For maker programs, I use Instructables a lot. This is a great place to find a huge range of ideas; it's a searchable database of projects with step-by-step instructions. Instructables is especially helpful if I have a topic in mind, such as robots; after a quick search on the site and a browse through the results, I've got a bunch of potential projects at my fingertips!

Colleen Graves

Teacher Librarian, Ryan High School, Denton, TX

My middle schoolers love Makey Makey because of its versatility. We use them to control self-made video games and create interactive spaces around the library. It's so simple to use but has a great wow factor, which really helps build creative confidence.

My high schoolers love littleBits for similar reasons; it's easy to snap pieces together and make something cool. littleBits take the mystery out of electronics, which is a great way for students to realize they can create just about anything!

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> Colleen Graves

Diana Rendina

Media Specialist, Stewart Middle Magnet School, Tampa, FL

The tools that my makerspace couldn't live without might surprise some people. They were largely donated or received through DonorsChoose projects, there's absolutely no tech involved (aside from some battery-powered motors), and I leave them out in bins in the library 24/7. They're our K'nex and LEGO collections.

My students LOVE to build projects with our LEGOs and K'nex. Sometimes they might just have a few minutes to add a few bricks to our LEGO wall. Sometimes they'll spend days painstakingly putting together a K'nex roller coaster. What I love about these tools is that the threshold for starting is low — most students have seen and used LEGOs and K'nex before, so they don't need to be taught what to do. These tools allow for rapid prototyping — in minutes students can see their creations come to life. But even though they're easy to start with, they have so much potential for in-depth, complex projects as well. Our makerspace wouldn't be the same without them.

Kristi Taylor

Library Media Specialist, Lamar Middle School, Flower Mound, Texas

Our kiddos couldn't live without Sphero. Whether they are programming them to move through our student-made obstacle course with Tickle or driving them around the library before school starts, they love them. They are super-accessible and one of our most popular makerspace tools. Sphero can be complicated, like tying it to angles and geometry, or it can be pure fun by simply racing your friend over a ramp. Sphero is cost-effective and it gets kids excited about learning programming languages and electrical engineering.

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>
> KRISTI TAYLOR

Collette J.

Elementary Teacher-Librarian, Pennsylvania

LittleBits are by far the most popular makerspace tool among students. I introduce this center after the fourth-graders learn about electricity in their science class, and students love building huge blocks of littleBits that I fondly call "monster circuits." I also love them because they won't connect the wrong way, so there's no danger of shorting out a circuit.

Copper tape with conductive adhesive is so versatile, forgiving of mistakes and relatively cheap. I introduce it with paper circuit nursery rhymes; for instance, Jack Be Nimble's candle lights up. It's great for combining low-tech crafts with high-tech electronic circuits: just tear and stick!

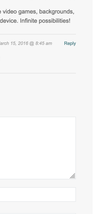
Trent Miller

Head Bubblerarian, Madison (WI) Public Library

We really focus on people over tools in our space. We try to have our experts bring in their tools to keep things changing and fresh. That said, if we had to pick two tools I would say our screen-printing setup and our stop-motion animation stations. These are both really popular programs for us. They both provide unique experiences that are not readily available at home.

Do you have a favorite makerspace tool or two that you'd like to share with your colleagues? What do your students and patrons love to tinker with the most? Comment below or tell us on Twitter @Demco and we'll add them to this list.

For more inspiration, watch on-demand webinars and find informational blog posts about makerspaces on Demco's Ideas + Inspiration blog.



Additional Resources

- Makerspace Materials from Demco
- Demco's Makerspace and STEM Pinterest Boards
- Upstart's STEAM Activity Guide
- The Show Me Librarian Blog by Amy Koester
- Expect the Miraculous Blog by Andy Plemmons
- A Wrinkle in Tech Blog by Collette J.
- Renovated Learning Blog by Diana Rendina
- Future Ready Reflections Blog by Shawna Ford
- Let the Wild Rumpus Start Blog by Holly Storck-Post
- Create + Collaborate + Innovate Blog by Colleen Graves
- The Bubbler at Madison (WI) Public Library

Author

Liz Bowie

Liz is the former Marketing Content Manager for Demco. In her role she helped develop classroom games, learning centers, and professional development resources that garnered 46 industry awards for excellence in education.

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2 Comments

Kristina Holzweiss — March 14, 2016 @ 5:53 pm — Reply

I love Bloxels! They are the perfect combination of low tech and high tech. Students can create video games, backgrounds, and characters by simple arranging colored cubes on a tray, and scanning them with a mobile device. Infinite possibilities!

Liz Bowie — March 15, 2016 @ 8:45 am — Reply

Awesome, Kristina! Thanks for the helpful comments—I'll add them to the chart!

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