I Have $1000 to Start a Makerspace: What Should I Buy?

ideas.demco.com/blog/start-a-makerspace/

by Diana Rendina

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It's getting close to the end of the school year and your principal finds $1,000 that she has to spend ASAP. Or maybe you find out that you got that $1,000 community grant and need to spend the funds by a deadline. It could be that a generous local business gave you $1,000 to improve your school. There are all sorts of scenarios where you could end up with money that you have to spend quickly for your school. Oftentimes, you have to get your purchase orders in by a certain time or you lose the money. Situations like these can be a great opportunity to start a makerspace.

One of the questions I hear most often is "What should I buy first to start a makerspace?" There is no right answer to this question. Every school is different, every student population is different, and every makerspace will be different. The first things I would run out and buy for my school might be the last things your school would need. As with all purchases for your school, you want to make sure that you are

intentional and have a plan for your makerspace. What experiences do you want students to have? What activities do you want to encourage? Is the makerspace supporting existing curriculum or filling a gap? Thinking through all of these things can help you get a better idea of what your makerspace needs are.

While there is no one-size-fits-all shopping list to start a makerspace, here are a few items I can recommend that can help you find a way to spend that money and start your space.

Makedo™ Tool Set

All ages

My favorite makerspace supply (and the favorite of many of my students) is something that you can get for free: cardboard. In both of the makerspaces I've created, we keep tons of cardboard in all shapes and sizes available for prototyping. Often, we'll use hot glue guns or packing tape to secure pieces together, but that can get messy and the tape doesn't always hold up to use. Enter Makedo.

Makedo is a set of plastic screws, screwdrivers, and other tools made specifically to use with cardboard. They're friendly and safe for little hands, but the big kids love using them too. Give kids a pile of cardboard and a Makedo Tool Set and watch some prototyping magic happen.

K’NEX Maker Kit

Upper elementary and up

When I started my first makerspace in January 2014, I started it with K’NEX, which my school happened to already have on hand, and they quickly became a favorite. Using K’NEX pieces is a very fast way to prototype ideas, which is great for maker clubs, classroom collaboration, or any other situation where you want students to build quickly.

Strictly Briks®

All ages

Plastic building bricks are a universal style of toy, and most students have had experience with them at some point in their lives. While circuits and robotics and 3D printing might be intimidating to some students, these same students will happily tackle a bin full of building bricks. They are a great gateway into making.

KEVA® Planks

All ages

These flat, wooden planks are kind of like grown-up wooden blocks. While they can't be used to make permanent or moveable structures, they are great for thinking kinesthetically. You could have them set up as an open maker station or use them in instruction.

Paper Circuits

Upper elementary and up

While paper circuits might sound complicated, they are actually easy to learn and fun to make, and they are the perfect way for students to get their first experience with circuits. That feeling of making the LED light up for the first time is priceless.

Snap Circuits®

Upper elementary and middle school

Snap Circuits were an early part of my first makerspace, and my students loved them. They are a great introduction to different types of circuits and properties of electricity, and they're easy for younger students to grasp. Students can learn how to create various circuits and experience a sense of accomplishment when they make a bulb light up or a fan blow.

Robot Petting Zoo

Ages Vary

While $1,000 won't get you a class set of robots, it could allow you to buy a few single robots to create a Robot Petting Zoo. Robots like Sphero®, Dash, and Ozobot® can all fit within this budget and can give your students exposure to robotics and coding. Plus, many robots can be steered like remote-control cars, giving your students the opportunity to use their spatial reasoning and coding skills to create obstacle courses for their robots.


#BEYONDCODE
edu
SPHERO EDU APP
SPHERO EDU ACTIVITIES
PROGRAM WITH SWIFT PLAYGROUNDS
sphero edu
SPRK+
schools + parents + robots + kids

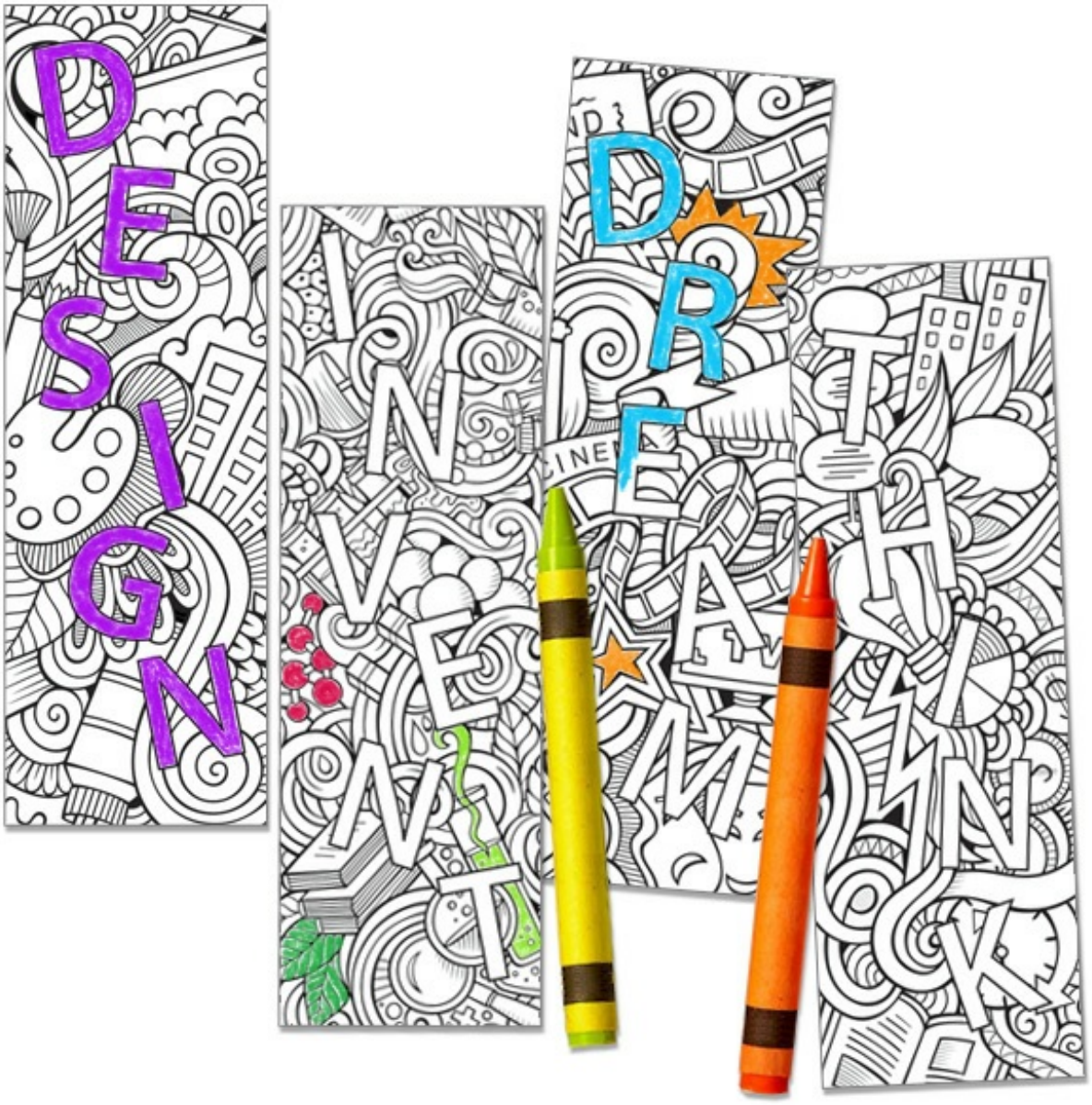
Sphero

Dash

Ozobot

Maker Stations that Build Maker Culture

Maker stations are a great way to start a makerspace and add creative activities that don't fit into the design-and-prototype model. Stations might include bookmarks that students can color and take home, a StickTogether® mosaic poster made up of stickers that each student has a chance to contribute to, or a DIY duct tape wallet station (just make sure to set some limits — duct tape can run out fast!). All of these can be fun ways to continue to build maker culture in your space and show your students that this is a place for creativity.



Color Craze Bookmarks

StickTogether Mosaic Poster

Duct Tape

Storage

There are all kinds of storage solutions to help you start a makerspace. If you have the budget, a makerspace cart can be a huge help in keeping things organized. The Seville Bin Racks are an affordable option for keeping all your supplies organized and accessible, and they could easily fit within a $1,000 budget. You could also make use of some library shelves and get bins or totes to store things in. You could even hack an existing cart or piece of furniture that you already have — get your students to help!

Of course, these are just some suggestions to help you start a makerspace, not an exhaustive list. Ultimately, you need to choose the tools and supplies that will work best for you and your students. Every makerspace is different, so try different things, experiment, and ask your students what they'd like to make. The important thing is to get started and keep making.

Seville Bin Rack

Author

Diana is the media specialist at a 6–12 independent school in Tampa, FL. She is the creator of the blog Renovated Learning, where she documented the creation of her makerpsace at her previous school, a public magnet middle school. Diana is the winner of the 2016 ISTE Outstanding Young Educator Award, the 2015 AASL Frances Henne Award and the 2015 SLJ Build Something Bold Award. She is an international speaker on the maker movement and has presented at many conferences, including AASL, FETC and ISTE. Diana co-authored *Challenge-Based Learning in the School Library Makerspace* with Colleen and Aaron Graves, and is the author of *Reimagining Library Spaces: Transform Your Space on Any Budget*.