

What is a makerspace?

A makerspace is a collaborative work space inside a school, library or separate public/private facility for making, learning, exploring and sharing that uses high tech to no tech tools. These spaces are open to kids, adults, and entrepreneurs and have a variety of maker equipment including 3D printers, laser cutters, cnc machines, soldering irons and even sewing machines.

A makerspace however doesn't need to include all of these machines or even any of them to be considered a makerspace. If you have cardboard, legos and art supplies you're in business. If you are interested in finding out more about laser cutters though, you could always take a look at someone like [Boss Laser](#).

They can provide different types of laser from home use to industrial ones. It might be worthwhile having a look at if you want to make your own makerspace at home as well. It's more of the maker mindset of creating something out of nothing and exploring your own interests that's at the core of a makerspace.

These spaces are also helping to prepare those who need the critical 21st century skills in the fields of science, technology, engineering and math (STEM). They provide hands on learning, help with critical thinking skills and even boost self-confidence. Some of the skills that are learned in a makerspace pertain to electronics, 3d printing, 3D modeling, coding, robotics and even woodworking,

Makerspaces are also fostering entrepreneurship and are being utilized as incubators and accelerators for business startups. There have already been some [amazing success stories](#) that have come out of makerspaces to date.

Now that you have the birdseye view of a makerspace, lets dig a little deeper.

Makerspaces have been called everything from a [FabLab](#) to a [Techshop](#) to a [hackerspace](#). Is there a difference between these names? Yes and no. At the core, they are all places for making, collaborating, learning and sharing. Although these spaces have a lot in common, they are also different in a few ways.



K-6 school makerspace in Honolulu, Hawaii sent in by @iolaniLSFabLab (Click to Enlarge)

To start with, a FabLab and Techshop are trademarked names for a particular type of makerspace. They are both generally stocked with similar types of maker equipment like 3D printers, laser cutters, CNC machines, hand tools etc. One is governed by a corporation ([Techshop](#)) and the other a foundation ([Fab Foundation](#)) and each have their own specific [rules](#) and [charters](#) to follow.

[Techshop](#) is a chain of for-profit makerspaces that was started in 2006 in CA. They bill themselves as part prototyping and fabrication studio and part learning center. Their makerspaces are supported by monthly fees from the maker/members who join.

[Fab Labs](#) were started by MIT Professor Neil Gershenfeld at the [Center for Bits and Atoms](#) in [MITs Media Lab](#). A FabLab is a small-scale workshop offering digital fabrication. They define a FabLab in their own words as “a technical prototyping platform for innovation and invention, providing stimulus for local entrepreneurship. It is also a platform for learning and innovation: a place to play, to create, to learn, to mentor, to invent.”