

your guide to the

# Kendall-Whittier Fab Lab



## What is FabLab?

The concept of the Fab Lab (fabrication laboratory) uses innovative **engineering solutions** to solve everyday problems. Started in 2001 as an interdisciplinary initiative between the National Science Foundation and MIT's Center for Bits and atoms, the "fab lab" works to bring proto-typing capabilities to **underserved communities** that don't have **open access** to conventional technology development deployment.

### WHAT DOES THAT MEAN?

Basically, prototyping technology is brought to the community and interested residents of that community can be trained to use and **adapt the technology** into their communities. Successful Fab Labs have been set up India, Norway, Ghana, Boston, San Diego, Afghanistan, and Costa Rica. People of all ages, education levels, and skill sets participate.

### NOT VO-TECH

Fab Lab is not a vocational training school. Traditional formal education requires discipline, meeting enrollment deadlines, attending classroom work, attending 'hands-on' exercises, homework, and tests. Training is at a fixed time, fixed location and on a fixed schedule. FabLab is the opposite and it is completely open access. Some of the best work has come from kids and teenagers .

Look at this as a **technological library** – it gives access to those that might not otherwise have it.

### EXAMPLES

A 13-year-old used a set of computer-controlled manufacturing tools at a community center to make her own simulator — one that lets her "fly" an airplane of her own design.

In India, farmers created measurement tools to ensure a safe milk supply and measure fat content, and women found a way to scan and print carved wooden blocks used for a local kind of embroidery.

A teenage girl in Boston created a diary security system that photographs anyone coming near the owner's private writings — say, a nosey brother.



Check out our recent Tulsa World article *Science Non-Fiction* on [www.tulsaworld.com](http://www.tulsaworld.com) published 9.27.09.



## How can I use it?

As important as it is to **spark great ideas**, it's equally important to understand how you can use them. Fab Labs around the world have different audiences. In Kendall-Whittier, audiences could include residents, students, businesses, inventors, "tinkerers," and artists. For a student who doesn't do well in the classroom, this might be an opportunity for hands-on exposure to science and technology. Given the different types of audiences, it makes for **ideal mentoring** opportunities, **global interaction**, idea to invention, and hands-on technology exposure.

### OUR INTENT

The intent of the **Kendall-Whittier Fab Lab** is to create opportunity to its **community** through open access to Fab Lab technology.

### WHAT'S IN A FAB LAB?

Components of a Fab Lab include computers with easy to use drafting software, laser-cutters, vinyl cutters, soldering iron to build electric circuits, oscilloscope, and voltmeter. You could even put in sewing machines.

### GLOBAL NETWORKING

That's right, every Fab Lab is connected to every other Fab Lab across the globe via a live video network. Users across the globe can innovate together. Picture this – an 8 year old in Tulsa can share their project with an 8 year old in India.

start fabbing

# Kendall-Whittier Fab Lab



## how Can I help?

We believe strongly that the Kendall-Whittier Fab Lab will exist to serve all of the Kendall-Whittier neighborhood and the surrounding community, and one way we try to ensure that is by *sharing* with all of our stakeholders exactly what we're up to. If you're interested, please contact us at [FabLab@kendallwhittierinc.org](mailto:FabLab@kendallwhittierinc.org) or 918.743.9559. We can be found online at [www.kendallwhittierinc.org](http://www.kendallwhittierinc.org). Below are three ways we can work together to achieve **Fab Lab success** in this area.

### ENGAGEMENT AND PROGRAMMING

Simply, how would you like to see this work? How could this benefit you? What are your ideas on getting the rest of the community involved? FabLabs work best when the **community truly owns it**.

### SPACE AND DESIGN

FabLab does not have a home at this time. Please help us brainstorm ideas about where in the KW area this could work. We love the idea of a building in Kendall-Whittier Square such as the old Swinney's Hardware space or something similar. Ideally, we're talking about 1,000 sq. ft of space to accommodate the equipment and computer lab.

### FUNDING AND MARKETING

The cost of the Fab Lab equipment can cost anywhere from \$20,000-\$50,000 depending on what we choose to go into the Fab Lab. Other expenses depend on whether Fab Lab operates out of a rented or donated space. We would be really interested to hear your thoughts on how we might fund this exciting opportunity. Once this gets up and running, it could very easily be **self-sustaining**.

