

INVEST IN...

The Future
Learning

Sharing

Innovation Collaboration

TEAM BUILDING

Micro-manufacturing

The Economy

NEW TECHNOLOGY

Kids

I'd like to invite you to support The Brickyard Collaborative, the North Shore's makerspace in Lynn.

Ten years ago, three students graduated from Olin College and wanted only one thing: to continue to build robots. They pooled their resources, put together a small shop and created one of the very first makerspaces, The Artisan's Asylum. They built a whole lot more than robots – they built an economic platform that would change the face of the city of Somerville, and create what is now the city's Innovation District.

We are doing that in Lynn.

Today, makerspaces are no longer an idea “outside of the box”. For every one of the over 75 makerspaces in Massachusetts there's a solution that's tailored to the needs of that community. Business models are tried, evolved and shared. Results are proven and have had profound impacts for their communities.

Makerspaces can:

- Create environments of shared learning and inspiration – talents and ideas from all angles come together to solve conceptual, design, implementation and development problems.
- Teach skills and connect concepts – from traditional tools and skill such as woodworking, letterpress and metalwork to 21st century processes such as CNC machining, rapid prototyping with laser cutters and 3D printers, we learn how to operate systems, and connect concepts and ideas.
- Build a community of “makers” – by creating a place where people come to work, make, learn and share common goals and ideas, a unique community evolves around a shared goal and a community for support and growth.

Read more about makerspaces and The Brickyard Collaborative to learn how you can be a part of this remarkable community.



Ted Dillard

Executive Director
The Brickyard Collaborative, Inc.

What is a Makerspace?

Though every makerspace is unique, and tailored to the interests and needs of the communities it serves, they all share a common structure. Makerspaces are workspaces that offer tools of any and every type for the use of their members. Whether it's sewing, woodworking and metalworking, or computer-based laser cutting and machining, and even photography and filmmaking, the makerspace offers a place to work, tools to work with, and a way to learn new skills and build on new ideas.

Our makerspace, The Brickyard Collaborative, offers complete photo/video/sound editing facilities, electronics and robotics labs, 3D modeling workstations and equipment as well as a complete, traditional letterpress and printmaking studio. We have sewing machines, woodworking and metalworking machines, and members and volunteer staff to help teach members how to use them. ...and so much more – a community of “makers”!

Members pay a monthly fee to use our facilities, and some pay an additional fee to rent studio space – usually 100 sq/ft – to work and store their projects – in some cases, to run their businesses. Our members range from individuals working as hobbyists, to students, to small start-up companies.

We also offer classes in virtually everything we do to the public and to our members. We teach 7 year-old kids to code, we teach artists how to work laser cutters, we teach retired machinists how to run 3D printers and the design software that they run on.

Our space is open to members 24/7 – for early risers to night owls, the space is there for whenever you like to work, or whenever inspiration strikes you.

What are some of the results?

Makerspaces foster innovative thinking, collaborative development and spur economic growth. Here are some of the demonstrated results over the last decade that a city can expect from a makerspace:

- Job skill development through education and experimentation: members and the public not only get to learn new tools and processes, but they're free to experiment and, quite literally, play with ideas.
- Education in current technology: students, kids, unemployed and under-employed, as well as retired members of the workforce get access to the tools and processes of the 21st century – a worldwide network of support and education, micro-manufacturing, mentoring, experimentation.

- Creating a local economy: Even in our earliest stages, The Brickyard has attracted new business to Lynn. By offering small areas to work along with nearly \$100,000 of tools and resources to use, an innovator and entrepreneur can leverage our resources to create their own product and business.

Our Story: The First Two Years

In the Fall of 2017, we quite literally started with an idea, and not much else. Our first step was to build a community around the idea, first with small events at local coffeeshops – “Meet and Greets” – and then to hold a Stakeholder Meeting at the Lynn Museum to present our idea to leaders in city government, the educational, business and arts community, and start a conversation about what Lynn needed and how we could help.

Still operating with very little in the way of resources but a whole lot of community support, we started offering “pop-up” classes and workshops, partnering with several organizations in Lynn – La Vida Scholars, The Haven Project/Land of a Thousand Hills, The Lynn Public Library, Kipp Academy, and others. We were awarded a handful of grants with the help of the Mayor’s Office, LHAND, the Office of Community Development and the EDIC in Lynn City Hall. By 2019 we had won nearly \$60,000 in grants – mostly for fit-out and equipment, with a small amount available for operations. Our largest award was for \$38,000 from the Mass Development’s Collaborative Workspace program.

Bolstered by this support, in January of 2019 we signed a lease for 3600 sq/ft in the Linden Industrial building on Linden Street, and started moving in on February 1st. We opened our doors by February 15th, and by March 1st we had full studio membership – members who signed for studio space along with use of the facilities. We have continued to sign new members, and are currently at 35 – well on our way, in 6 months – to our target break-even point of 50 memberships.

Financial Benchmarks

Our operating expenses are relatively low, at just over \$2500/month for our bare-bones structure. Fully developed, we anticipate that will go up to \$3500/month for our current footprint. Last month with memberships alone, we are able to meet a little over half our monthly obligations. As of September 1st, with some increase in membership, we are anticipating that to increase to nearly 2/3 our overhead.

Revenue comes from member fees as well as class fees – workshops and classes (which we are only now launching at 100%) accounting for nearly 60% of most

makerspace's revenue streams. Makerspaces also garner slightly more than incidental revenue from offering services – use of the facility for short-run jobs to contract work, with fees going directly to the makerspace.

Currently our staff is 100% volunteer, utilizing both our Board and general members for operations. Our goal is to, within a fairly short time, hire a small full-time operations staff with a few part-time roles. This would allow more focused development, streamline support and help take advantage of many opportunities to grow the resource.

Based on our projections, and business plans shared by a host of other makerspaces, our business plan suggests a break-even point after only one year – we are, even now, surpassing that goal. We'd be happy to provide those documents – our business plan, our financial projections, and our actual balance sheet to date on request.

Be Part of The Brickyard Collaborative's Success

We feel that we've made a significant series of steps. We've proven our concept – that Lynn wants, needs and can support a makerspace for the North Shore. Within the constraints of a very limited budget, we've demonstrated that we can become viable within a remarkably short period of time. We do, still, need help, however.

Here's what your donation could do:

\$5000 – This would cover our rent and overhead for a couple of months, and allow us to use our existing revenue stream to invest in some additional tooling and services that would, in turn, help us to bring in more members. (Example: A PBC kit for our CNC router allows members to cut their own prototype circuit board designs on-site and test them. We have, currently, two groups interested in the space who would sign up if we had this tooling – it costs \$120.)

\$20,000 – This amount would help us explore expansion of our space, attracting more members and activating some commercial-grade equipment we currently own, but don't have the space to operate – for example, a 5' x 10' CNC router, capable of handling full sheets of 4x8 plywood, which is currently in storage.

\$120,000 - \$250,000 - Our most pressing goal is to hire a core full-time staff with some part-time help in bookkeeping and maintenance, to allow them to fully maximize the potential we see for growth. Our goals – fully establish our class and workshop structure, maximize our community outreach by integrating partners who are interested in collaborating, and provide a more seamless experience for both members and class/workshop attendees.

In Conclusion...

One of the most compelling stories to come out of the makerspace concept involves a small group of students continuing work on their capstone project from school, after their graduation. It involves what is, essentially, a sleeping bag for premature infants – usually around the 2-3 week preemie range, which helps them maintain their body temperature with the use of heated polymers. Maintaining body temperature in infants at this stage is critical, and an inability to get the child into some sort of a stable environment, usually an incubator, will result in the child's death.

The team was working in a makerspace in California, quite literally standing around the coffee counter talking about their work. Another member happened to walk by, and asked about what they were doing. He asked, "How much do you know about polymers?" "Nearly nothing", was the response. "We just got out of college."

As Mark Hatch, Founder of TechShops in San Francisco said, "Then magic happened."

This member had 30 years' experience in the field of polymer development. He joined their team, rolled up his sleeves, and contributed their core technology, all in the spirit of collaboration. His contribution yielded a nine-fold increase in the performance of the product.

This product, this sleeping-bag incubator powered by this improved polymer-heating system was the core of a new business. This product has currently been instrumental in saving the lives of over 87 thousand premature babies.

We want to see that magic happen in Lynn, and you can be part of it.

Learn More

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Learn more on our website, www.thebrickyard.org.