

ABOUT US

Program Overview

Parts and Crafts is a family hackerspace and community workshop based in Somerville MA. In all our programs we encourage kids to think and make and learn and do through the exploration of the arts, science, computer programming, and engineering — a cluster of disciplines we refer to as "the creative application of technical skills."

Quick Background

This is our fifth year running in Somerville; we are currently based at 577 Somerville Avenue, directly across the street from Conway Park. Combined programs serve roughly 350 kids each year, the majority of whom live locally here in Somerville. Likewise, many of the staff we work with are local artists, tinkerers, and creative technologists who live and work in the area.

Hours and Location

Parts and Crafts 577 Somerville Ave Somerville MA 02143 M-F, 9-5:30 pm Saturday 12-2 pm

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How It Works

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HOW IT WORKS: THE SHORT VERSION



How Parts and Crafts works: We give kids water bottle rockets, craft materials, and ways to make video games. We ask kids to keep to a minimum of basic rules, but for the most part we let them do what they want do.

All of this sounds great: but, well, why do we do things this way? Why have we have evolved our program to run the way it does — what are the connections between each of these powerful but seemingly disparate pieces?

"giving kids the inspiration to find what they love and the room to take off with it"

This quote was the initial pitch that we developed when describing our work. It was refined through hundreds of conversations with prospective parents. Let's unpack what it means here...

We were initially moved by the free schooling movement. Free schooling's fundamental principle is that children will be drawn to what is most engaging for them, and that this is also the best opportunity for them at the moment. This skill of identifying and asking after what you are interested seemed to us the first step of learning: how can you learn what you don't know you want to learn?

We had some reservations though. Free schooling hadn't taken off the world over. Free schools we visited still seemed to use traditional methods for teaching math and science — drill-and-practice methods that we knew there were far better ways to do (for example, the hands-on work of Maria Montessori.) Some schools we visited seem to have a void where'd you'd expect creative expression to be happening ... a mass aimlessness that got philosophically explained away as children finding their way, but still didn't quite settle.

After working in an afterschool program, showing kids how to take printers apart and put simple circuits together, we knew we were on to something. The kids were electrified, parents came to tell us how happy they we were working in their school, and excitement and learning abounded. This was the beginning of our work — to take the inspiring materials and methods of hands-on learning and combine them with the free schooling attitude.

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FOUNDING PRINCIPLES

As I entered CSCL it was as if I were seeing it for the first time.

Someone outside playing baseball, a few kids at the big table with Kelly and Bryce engaged in some game, a few kids upstairs finishing up on their computer projects with Will, and a general good warm vibe transcending the whole place. I know it is not always as calm as this scene, but the more impressive characteristic was the aura of happy kids and an underlying base feeling that everyone is connected, comfortable and cared for. — CSCL parent

Making things and making things happen!

We believe that building, playing, and experimenting are the best ways to learn, but, beyond that, we believe that they are also the best ways to live. If you have an active body and a curious mind than you can go into any situation, look at any object, with the mindset of "what can I do with this? How can I make this better, more fun, more just, wackier, more like how I think it should be?"

Freedom in Community

Parts and Crafts is an open and open-minded community. This means, first of all, that everyone who wants to be involved in our community should be, and, second, that everyone who is involved is treated fairly and respectfully. The first means, quite simply, that we're committed to finding a way for anyone who wants to come to our programs to do so. It means that we work with parents who can't afford our tuition to find a way to make something work, and it means that we don't turn anyone away based on their lack of ability to pay.

The second entails a couple of things — it means taking kids and their interests seriously, It means that everyone who is with us every day should have a say in what the community is and how it's run. It means that in the morning we ask all of the kids and adults if there's anything that they want to put on the day's schedule, and that we don't make anyone be a part of an activity that they don't want to be a part of.

Supervision, not Surveillance

All of us at Parts and Crafts had different experiences of childhood, of course, but all of us have fond and important memories of being allowed to explore the world around us, on our own time, at our own pace, and to deal with our own consequences for success or failure.

We think that these opportunities for exploration and self-discovery are becoming harder and harder for children to come by. Our goal is not to keep children from making mistakes; we're here to mediate the consequences of these mistakes and to make sure that everyone stays as happy, healthy, relaxed, and creative as possible.



FOUNDING PRINCIPLES

Void Your Warranties

"I've waited all my life to take apart a computer!" We hear this sort of thing a lot when we're working with kids. "It's so amazing that you started your own summer camp!" The community that we're lucky to be a part of is disproportionately populated by tinkerers, artists, entrepeneurs, dreamers and self-starters, but to most people, the intricacies of small business organization seem just as out-of-reach as the intricacies of circuit design.

Computers are complicated, government is abstract, the tax code is torturous, engineering is hard. All of these things are true, to a certain extent, but there's a lot of valuable and delicious low-hanging fruit. It's all too easy to let the specter of dire consequences, of breaking things, or otherwise messing up in some irrevocable way prevent us from exploring our world.

There are warranties in life, sources of useful but limiting security, and, just like you'll never really know how your mp3 player works until you pop it open, install Linux on it, and write some custom code to interface it with your hacked Tivo, you'll never really know what you can do until you try to do something that you're pretty sure you can't.



2014 PROGRAMS AT A GLANCE

SUMMER CAMP

Camp is our longest-running program and the inspiration for pretty much everything else we do. We run for 9 weeks in the summer, and serves 275 kids.

AFTERSCHOOL

This year saw tremendous growth in our afterschool program as we phased in a voluntary membership model.

SCHOOL ALTERNATIVE

Center for Semiconducted Learning (CSCL) is our year-round homeschooling program currently serving 30 kids 5 days a week.

COMMUNITY PROGRAMS

Saturday Open Shop, game night and movie night, classes, workshops, and wider events.

HIGHLIGHTS

- 9 weeks, 65 kids per week
- Full cost is \$300/week. Average paid is \$183-225
- 51% of attendees use sliding scale last summer, with 61 kids coming for under \$10/day. Average amount paid for sliding scale was \$111 per week.
- 51 kids currently attending each week
- 4 days a week workshops in electronics, computer programming, open shop, and games
- Free program supported by voluntary memberships (currently about half supporting)
- Highest percentage of first-time kids
- Rates tiered by use, \$1900-9000/year sliding scale. Average paid is \$4582/year.
- Kids come 1-5 days/week; typically we have 15-20 kids a day with most kids coming 4x/week
- -- Mix of individual tutorials, structured classes, and open time for play and exploration
- Saturday Open Shop free weekly program
- MUSCRAT Bus @ the Mystic, Clarendon Hill, and Capuano school 2014 SAC collaboration
- Somerville Tool Library lending library for tools starting Spring 2015
- Board Game / Movie Night \$5/day, twice monthly







3,887
2014 Community
Event Revenue

TOOLS AND SAFETY

"So kids get to use the tools?"

One of the most frequent questions we get is about tool use and safety. Many of our kids have never held a drill or sawed a piece of wood before — like many of us, they've been told to let the adults do it. We believe that giving kids the freedom to invent means providing the tools to do so, and creating a safe and productive space in which to use them. This means keeping a low kid/adult ratio (6:1), using convivial tools, and providing the support structure for kids to learn how to use them appropriately.

Tool rules

- Most of our tools with the exception of certain power tools — are available for kid use. Kids are expected to be aware of their surroundings and to use basic common sense when they are using these tools.
- Anyone using tools must wear safety goggles at all times. Goggles are additionally required in any scenario where an object is pressurized, launched, or pried open, where there are chemicals involved, and while soldering.
- Close-toed shoes are required at all times in the tool area. Long hair must be tied back. If you are doing anything that involves producing sawdust, you must wear a dust mask to protect your face while in the shop area.
- If you have never used a tool before, you must have an adult from Parts and Crafts show you how to use it before starting your project.

Lots of our tools (for instance, soldering irons and saws) require a few extra steps (for instance, clamping) that are not immediately evident at first glance.

- Glue guns and soldering irons get hot!
 Minor burns are the number one injury that we see in the space. Please be sure that your project is DRY and COOL before you pick it up and show it to your friends.
- No one is permitted in the shop without a supervising adult and safety goggles.
- No running, biking, roller-skating, kid-launching, go-karting, or otherwise being chaotic and noisy in the tool area.
- Tools are not weapons. Anything in the space that is used as a weapon — even in play — will be immediately taken away (and in the case of projects, discarded).



SELF-DIRECTED LEARNING

Choice-based model

All of our programming is completely optional – classes are not mandated, and kids have wide berth over how they spend their time on any given day. Many people wind up spending their week building / design / tinkering / programming / making cool stuff out of stuff / and so forth. Others will spend the week hanging out with each other and playing!

Transition + decompression

For kids who are just coming out of school, our school alternative program provides a friendly place where they can work at their own pace, or alternatively, where they can take a break for a little while, decompress, and get their feet under them. For parents who are new to homeschooling, we provide a semi-structured space where kids can have access to academic resources in a social space where they can work and learn in company.

Self-directed learning

Above all, we try to create a space where kids can follow their own interests – where they have plenty of space to play, explore, run around, and investigate the world around them. Whether it's running a giant game of capture the flag or running an independent science experiment, we're excited to help kids pursue their interests and passions, wherever they might lead.



SLIDING SCALE

Everything we do is offered on a sliding scale.

We want to make sure that any kid, no matter what their circumstances, can be part of Parts and Crafts if they decide that they'd like to.

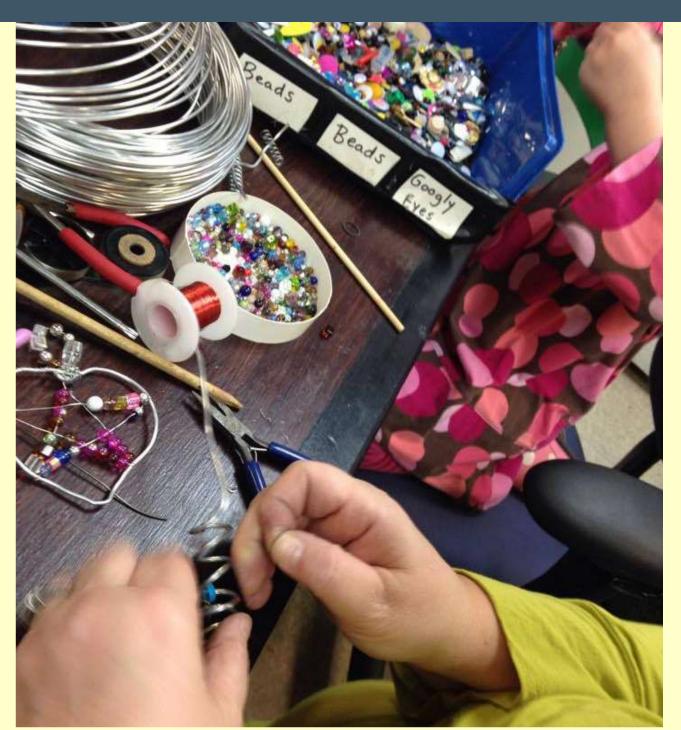
Our afterschool programs are supported by voluntary membership, with suggested rates based on usage and income. Summer camp runs on a sliding scale from free to expensive.

Suggested camp rates

Family Income	Proposed Rate	% Total
\$60K and up	\$300/week	100%
\$50,000 - 60,000	\$225/week	75%
\$40,000 - 50,000	\$175/week	60%
\$30,000 - 40,000	\$125/week	40%
\$23,000 - 30,000	\$75/week	25%
\$15,000 - 23,000	Free	0%

Afterschool membership

Level	Proposed Rate	Best for
Tinkerer	\$335/month	Occasional use
Basic	\$75/month	1-2 days/week
Shop Guru	\$150/month	2-3 days/week
Super User	\$300/month	Family level



FINANCIAL STATEMENT

Parts and Crafts Yearly Income Statement	2013	2014	2015*
REVENUE			
CSCL Revenue	\$ 90,313.69	\$ 128,526.35	\$ 137,250.00
Camp Revenue	97,095.00	159,006.00	161,000.00
Afterschool Revenue	10,291.39	18,762.09	27,000.00
Community Event Revenue	3,900	3,887.00	
Other Revenue	3,514.52	2,377.00	
Total Revenue	205,114.60	312,588.44	325,250.00
EXPENSES			
Materials	26,434.07	31,548.22	32,000.00
Salary and Wages	145,365.96	189,939.94	189,000.00
Rent	26,200.00	42,800 .00	45,800.00
Overhead	7,476.77	18,240.01	9,000.00
Field Trips		4,436.02	3,000.00
Community Events	419.41	141.09	
Staff Meetings	1,089.56	1,212.86	
Taxes		1,141.00	5,400.00
Miscellaneous	12,114.47	18,788.18	15,600.00
Total Expenses	219,100.24	308,247.32	299,800.00
NET REVENUE	13,985.64	4,311.12	25,450.00
*projected			

ONGOING CHALLENGES

Fiscal Stability

Our programs just barely pay for themselves at whatever size we happen to be running. This is by design; we are a non-profit, and have always been fine with breaking even.

Full-time year-round staff currently makes \$25,500 for 5-6 days a week. A primary goal this year is to raise that rate and begin to look at the possibility of offering health benefits to year-round full-time staff.

Socioeconomic Equity

Put very simply, most of our programs cost money. Very little of our income comes from grants or outside funds and our funding is almost 100% derived from tuition payments.

Our sliding scale model has helped tremendously to balance out our summer camp programs. We are hopeful that voluntary membership will help build inclusion in our year-round programs.

Gender Balance

Our programs are overwhelmingly populated by little boys. Less true for programs that have been around for awhile (camp); more true for newer programs (CSCL + afterschool)

Our experience is that gender diversity leads to broader inclusion - racial, economic, and otherwise - so this is a high priority for us. Girls Invention Week has been a huge success, as was Hacker Girl Scouts, and we hope to replicate it with year-round programs

NOTABLE SUCCESSES!

Licensing and Compliance

As of Fall 2014, we are now officially licensed for all programs we can possibly be licensed for. This is a huge relief and means we can direct staff energy towards making awesome things happen rather than filing paperwork.

It is a great relief to finally be done. Summer camp programs are licensed by the City of Somerville. CSCL is a childcare program, licensed through the Department of Early Education and Care. All is in order.

Non-profit conversion

We are very grateful to the Somerville Children's Network for facilitating this process, and to all of you for agreeing to serve on the first-ever P&C Board.

Our hope is that being a 501c3 organization will both reduce our filing obligations and improve our tax situation, both of which will help tremendously in making the bottom line work.

Afterschool growth

At the moment we have 51 kids a week attending our afterschool programs, which is growth of something like 300%. This is awesome and fantastic and great!

Even more encouraging is the fact that afterschool is becoming a first point of contact for many new kids. We are continuing to tinker with the membership model as we move forward this year, but this initial growth is very encouraging.

GOALS FOR 2015

Kesher Conversion

We have recently learned that Kesher — a partner space that we sublet from for summer camp — is facing a financial crisis and possibly moving by the end of this year.

This is a big deal for us, as losing that space will dramatically reduce our revenue for summer camp programs. We are currently looking at a number of proposals – ranging from subletting to shared rental to broader program conversion — that would enable us to use this space for the foreseeable future.

Community Partnerships

This is the first year we've had the bandwidth for collaboration with outside groups. So far it's been a huge success!

- Somerville Tool Library
- MUSCRAT Bus and Beautiful Stuff
- Somerville Public Library
- Franklin I/O Summer Programs

We are excited to build on these partnerships for the upcoming year!

Starting new projects!

Bright ideas for 2015:

- Starting a teen program
- Kits initiative second time around
- Dedicated fundraising drives
- Revisiting afterschool memberships
- Organizational sustainability
- Staff raise + benefits?
- Growing all programs!

