Maker Corps Case Study



MILLVALE COMMUNITY LIBRARY

By Alice Anderson, Science Museum of Minnesota

On the main street of Millvale, PA, the Millvale Community Library is impossible to miss. Painted bright yellow and red, this two-story building is sunnier than any other building on the block, and probably sees more activity, too. Opened in September 2013 after nearly seven years in development, it is the town's only library. But its founders see it as more than that; its mission reads: "More than a Library – an agent for positive change." In addition to books, the library hosts programming for all ages, a tool lending library, and a small makerspace. The space is meant to be a resource for the community in all the ways residents need.

Brian Wolovich, the library's President and founder, is a Millvale resident and teacher at a nearby school. Brian was first introduced to Maker Ed though his job as a teacher, at a making and technology conference held at the Pittsburgh Children's Museum. The Maker Corps program seemed like a good fit for the library; it would provide more staff during the busy summer months, continue the maker programming it had previously received from the Children's Museum's Mobile MAKESHOP, and hopefully provide momentum for establishing programs like the tool lending library. By being a part of the Maker Corps community, he would stay connected to other organizations in the city that also had Maker programming and they and their Maker Corps Members could share resources and collaborate locally. The Maker Movement as a whole was attractive to him because it aligned with his philosophy that all people deserve opportunities for empowerment through education.

"I look forward to somebody being able to walk in and check out a DVD, maybe a children's book for their kids, and a circular saw. That to me is success, people utilizing, sharing, connecting through the barter board system, having our lending library established, set up, organized, would certainly be an outcome that I'm looking for." – Brian

MAKER CORPS MEMBERS

Working together with the Children's Museum and Assemble, an arts and technology non-profit, the three institutions held an interview day for prospective Maker Corps Members. He hired Anna and Nora, both recent college graduates with previous ties to Pittsburgh (Anna as a college student, Nora as a native). Their backgrounds prepared them well for Maker Corps; both had experience working with children and had studied the arts (Anna majored in architecture and Nora in fine arts).

Their summer was spent developing and offering Maker-related programming to local youth who visited the library. Although both women designed daily programming, certain days of the week became devoted to specific interests kids had. Tuesdays became Bike Tuesdays and Fridays hosted



Nora talks with a girl about what she found when taking apart a broken digital camera using a routine called "Parts, Purpose and Complexities."

an all-girl sewing club. Anna and Nora used materials from the Possibility Box to seed ideas for projects.

Both said they gained a tremendous amount from their time at Millvale as Maker Corps Members. For Anna, it solidified a desire to become a teacher and work in schools that support maker-like activities. Working in Maker Corps "kept me playful," she said, and stretched her to think about small-scale projects and interactions versus more involved projects she had done with students in the past. Nora also wanted to pursue other opportunities to work with children, and appreciated all she had learned from Brian and Anna about how to scaffold kids' learning through questions or thinking routines.

Brian was impressed by the impact they had on their visitors. At the end of the summer he said, "The one thing that struck me was really their willingness and happiness to make with whoever shows up. Beyond the sort of openness in their talent the ladies definitely have their areas of talent. But, I also noticed there were a few kids that would come and go and that would just turn this into, I mean every time they're there, the kids are there and it's like, one of the things I hope we provide...for our program and the size of our community, we're not going to say we serve 1,000 kids or whatever larger organizations might have, but, what we hope for is that the depth of the experience can actually change its trajectory of a kids life and we really hope that that is an outcome and seeing the way that these kids are engaged and the pride that they're taking in the work that's being developed is really, gives me a lot of hope that we are living out the mission. Seeing that with Ana and Nora and their relationship with the kids that was something that really struck me."

Although they had the support network of other Pittsburgh Maker Corps programs, Anna and Nora both felt like connecting with other Maker Corps Members wasn't so useful since each institution and context was so different. Where Assemble was hosting camps and would see the same students for five days straight, the Children's Museum saw hundreds of visitors a day of children of all ages. The

Maker Corps Members from the three institutions met a few times but Anna and Nora agreed it wasn't all that helpful to them.

MAKER PROGRAMMING: THE MAKESHOP

The Makeshop is overflowing with handmade creations, various tools, circuit boards, and, of course, books. During the summer, when students were out of school and looking for things to do, the Makeshop hosted daily Maker programming that evolved from programming designed by the MCMs to a few days being devoted to kids' own interests; Tuesdays became Bike Tuesday and Fridays was focused on sewing. During the summer a core group of about a dozen kids showed up almost daily. Many other people from the community of all ages, and even people visiting the area who had heard about the library, also came by to check it out. For a library that had only been open for nine months when the summer began, the community response and participation was a strong indicator of the need for its resources.

They both expressed the rewarding feeling of seeing a kid's developing skills and independence in making things over the summer. Their goals in supporting these kids were to foster independence and self-sustainability; the ability to start a project and see it through all by themselves.

"I guess it gets the point across to them that they can do this themselves, that they don't necessarily need my help. A lot of times it's like sewing and sometimes woodworking, it's always like the adult does this part. You have to do the other parts and the adult finished it for you. I want them to figure out that they are able to do all of this stuff themselves and that they don't necessarily need to have me there to do it." -- Anna

IMPACT ON AUDIENCE

The summer of 2014 was the first summer the library was open, and as word spread about the Makeshop kids and sometimes their parents would regularly show up. Over the summer Nora and Anna reported they had developed close relationships with about a dozen kids as well as familiarity with many more. At the end of the summer we asked kids to respond to a short online survey about what they liked about visiting the Millvale Community Library. Of the 12 that responded, 9 said their favorite thing to do



Two regular Makeshop visitors disassemble a broken printer, saving small pieces for circuit blocks.

was something "maker" related, like sewing, building stuff or doing the activities. Most kids also rated hanging out with Anna, Nora and the other staff as one of the things they like about coming, and most came at least once a week. When asked what they learned how to do this summer, all but one kid

mentioned either how to use a tool (a soldering iron, sewing machine) or make something ("hook up circuits and stuff", "disassemble a bike").

"I kind of realized that we were being successful when I came into work five minutes late and there were already a ton of kids waiting for me. The library had been open for five minutes and it was 10:05 in the morning and I got there and they were like, "Nora, you are late! Where were you?" – Nora

Brian recognized their skill in fostering this independence and resourcefulness in kids, and anticipates it to have a lasting impact, as kids come back through the school year and are able to jump into using materials and making whatever they want. At the end of the summer he said, "We've got to continue to focus on building this independence and building these kids who are comfortable being mini-facilitators because even at our best we're not going to have folks there every day so we really need to get them comfortable to use the materials without an adult supervisor, it's ok that's what this stuff is here for. I think continuing to build that culture and that understanding and that openness among everybody that comes in is something I think we need to continue to work on."

BUILDING ON THE MAKER CORPS MOMENTUM

The Maker movement is very active in Pittsburgh; three organizations hosted MCMs in the summer of 2014. The Maker programming at Millvale Community Library was initially provided by the Mobile MAKESHOP, an initiative of the Children's Museum of Pittsburgh. Brian found the support from the other organizations tremendously helpful as he started to develop new programming, much due to the spirit of the community. "It's a tight network, here we support each other and we try to think to strengthen, understand that will strengthen all of our work. Our work depends on our cooperation as opposed to some sense of competition or isolationism," he said.

With Maker Corps ending, Brian's next challenge is to find ways to sustain maker programming at the Library. He is seeking funding and continues to collaborate with the other Pittsburgh organizations to find creative ways to make connections among programs. As a result of the summer, he is even more committed to its continued success. He said, "As we envisioned opening a library I don't think I really knew the extent to which the making activities were going to no only become a part of but a central part of what we do and that's been really surprising to me, in a very pleasant way. And having additional staff has been crucial to growing that mission."



A close up of the foosball table made using repurposed action figures.