Makerspace Playbook Site Survey:
Maker Jawn at the Free Library of Philadelphia

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CONTACT INFORMATION

Name: Sarah Winchowky

Title: Project Coordinator

Personal social media: N/A

ORGANIZATION

Organization Name: Maker Jawn at the Free Library of Philadelphia

How would you describe your organization type (library, museum, school, community organization, etc.)? Library

Organization website:
makerjawn.org
freelibrary.org

Organization social media links:
plus.google.com/+MakerJawn
twitter.com/makerjawn

Blog and/or site most related to programming, making:
http://makerjawn.org/blog/

Organization news/publicity links:
Links to articles can be found on Makerjawn.org

Location (city, state): Philadelphia, Penn.

Is your organization rural, urban, or suburban? Urban

Is your space and/or elements of your programming mobile? Elaborate, if necessary. Our program happens in five different neighborhood libraries in Philadelphia. While we believe that having consistent mentors at each site is important for building meaningful and constructive relationships with program patrons, we have some mentors who float across sites, bringing different skills and activities to different audiences.

We also share programming ideas through staff meetings and professional development and collaborate on activities across locations. Most recently, some of the program participants at different libraries have been communicating with one another via Morse code video messages! We are also currently collaborating across sites to submit a participant-made entry to the Kensington Kinetic Sculpture Derby, an annual event that takes place in a neighborhood where one of our sites is located.

Target audience(s): Underserved populations of youth and adult patrons at neighborhood libraries in North Philadelphia

Annual budget (indicate if public or not public): We have a three-year grant-funded program from the Institute of Museum and Library Services with additional support from the City of Philadelphia.

Percentage free and reduced lunch served (if known): 95%

Access: Is your organization open to public, age restricted (elaborate below), membership-based, free, and/or admission required? Are there specific groups that you serve? Our program is free and is open to all individuals ages 6 and up, and younger children if they are accompanied by an adult. No registration is necessary; anyone in the library is welcome to drop in and participate.

Tell us about your organization. What distinguishes you from others?
While we strive to provide educational programming in STEAM fields, our program also places great emphasis on creativity, literacy, collaboration, and community-building.

All our mentors are also practicing artists of different kinds. We are writers, video makers, comedians, musicians, visual artists, and designers. We work to create a learning environment that fosters imagination and most all of our projects end up including some artistic elements, whether we're working with traditional art materials like paint, building squishy circuits, or doing chromatography experiments.

The population we work with typically comes from under-resourced schools. This means that for both youth and adults, literacy levels are generally below average for a given age. We noticed that many of our youth program participants struggle with reading and writing and have worked to encourage projects that help develop these skills. Since our program is in libraries, this focus on literacy also matches up with the mission and goals of our larger institution. Some literacy-related projects we have done include recording audio books (also see Maker Jawn's audio book lesson plan), making movies based on adapted versions of story books, and making our own books and zines or electrifying our note booking with copper tape.

We have also noticed that many of our youth and adult program participants lack digital literacy skills. Again, this is the result of a lack of resources. These skills are necessary in all aspects of life but are particularly needed when applying for jobs, internships, and other opportunities. Our mentors have worked with both youth and adults on things like creating and using an e-mail account, developing a résumé, submitting various applications, building a website for a business, creating an e-newsletter for a substance abuse program, and developing a social media brand or identity to help market oneself to employers. While these may not seem like traditional "maker" activities, we think it is essential to be responsive to program participants' needs when providing mentorship and instruction and therefore view these tasks and skills as a part of our work. Of course we also introduce program participants to educational tools about programming like Scratch and Gamestar Mechanic, as well as free digital media software like Gimp, iMovie, GarageBand, iStopMotion, and more.

Although our program is drop-in and the participants are not the same each day, each program site has developed a core group of committed regulars. These participants have worked on collaborative projects that give back to the library and surrounding community. Last spring, the youth at one of our sites built and maintained a hay bale garden in the library's parking lot. They grew sunflowers and pumpkins, and some even took extra seeds home to plant with their families. This year we hope to expand the garden to grow some food. At another site, a 9-year-old participant who is very passionate about animal rights created a video and held a bake sale to raise funds to adopt a wild cat at a nature preserve. She then went on to work with a mentor on writing a grant to raise awareness about animal rights issues in her own neighborhood.

Some adult participants at a third site have been learning about 3D printing. Being inspired by the capability to print self-designed shapes they decided to print cookie cutters to use with their children and grandchildren at home. Out of this idea came another to create a cookie cutter lending library, so that the unique shapes can be shared with others! All of these activities provide multiple opportunities for participants to develop hard skills (in the above examples these include gardening, writing, and 3D printing), while also fostering collaboration and a sense of community.

MAKING AND CORE VALUES

What is your mission statement?
Maker Jawn nurtures interest-based learning and creative exploration with a wide range of materials. The supplies we work with include everything from 3D printers to glue sticks and recycled cardboard. The program works to spark a do-it-yourself spirit and encourages participants to become critical creators and innovators, instead of passive consumers. While working to reinforce STEAM concepts and provide access to and training with technology tools, Maker Jawn also places emphasis on relationship and community building. The program is staffed by Maker Mentors who support youth and adults as they create self-directed projects and develop key 21st-century skills such as resilience, problem solving, and collaboration.

What does it mean to "make" in your space/organization?
Maker Jawn has a broad definition of making. Generally we use the word to refer to working on self-designed, interest-driven, usually creative projects. The focus is on the process rather than product, however, which means that when we say making we also mean planning, thinking, discussing, messing up, failing, and starting over again.

How does the above relate (or not relate) to your core values?
Our broad definition of making is related to our core value of being responsive to the needs and interests of program participants. If someone wants to do something, mentors work to be as supportive as possible, whether or not the project fits into some prescribed idea of what a "maker project" ought to be. Since our program intends to foster soft 21st-century skills alongside hard STEAM skills, we also tend to include community-building projects in our definition of what it is to make.

What forms of making (all creative endeavors) occur?
Video production and editing; 3D printing; cardboard construction; gardening; drawing and painting with various media; printmaking; animation; music making (with software and instruments); sewing (machine and hand); building projects with Little Bits, MaKey MaKey, and PicoCricket kits; copper tape circuitry projects; squishy circuits; science experiments; game making (physical, board, and video games with Scratch and Gamestar Mechanic); digital image editing (Gimp); audio book and poetry recording; paper maché; artbot building using toothbrush motors; book and zine making; soldering; various challenges (wind powered cars, cardboard challenge, balance challenge, sculpture challenge); e-textiles; design; grant-writing; blogging; GIF making; weaving; long-exposure photography with LEDs; origami; and more!

Are you influenced by any particular pedagogies (approaches to learning)?
We believe that people learn best when they are working on something that has personal relevance and meaning and therefore structure our program around interest-driven, self-initiated projects. We also want participants to feel ownership over the space and don't discourage hanging out and being present without directly working on a project, believing that this is a part of the learning process.

What are some good examples of especially powerful/ ambitious/ successful making experiences?
Working with a group of teens to develop a digital badging system and related promotional materials.

Working with a 9-year-old program participant to write a grant that would fund an awareness-raising poster campaign about animals in Philadelphia.

When 22-year old Ronnell first started coming to one of our library sites, he needed help with digital resources to guide him to take practice ASVAB tests so he could prepare and join the Marine Corps. Ronnell learned how to use some of the testing apps on the iPad like MathPrep and used a smartphone to sync the stopwatch so he can practice his timing for the math section which he needed the most help with. After a couple of days of test prep, Ronnell expressed his passion for poetry and wanting to do something special for his girlfriend, who lives long distance. Through our programming, Ronnell, along with other patrons in the program, learned how to shoot and upload his own content to be in the position to send his girlfriend weekly video testimonials on his poems and other topics leading up to his boot camp and basic training.

Program participants at Kensington library have created a couple different movies (you can see Plan 19 from Outer Space and Where the Spooky Things Are). These long-term movie projects have been positive experiences in collaboration and have encouraged youth to learn and experiment with a wide range of skills, including narrative development, set and prop building, costuming, acting and improv, and of course filmmaking. Read more about the movie making process at this library in this blog post by Maker Mentor Hannah.

GOALS

What are the goals of the programming and experiences provided?
Our goal is to expose program participants to STEAM fields based on their interests and needs, and to provide a positive, free, stimulating and supportive environment for participants to explore and create in. We also strive to stay up-to-date with programming available through other institutions and groups in the city, and guide our participants to these other enrichment opportunities.

How do your environment, tools, and materials reflect these goals?
Although the makerspace at each of our library sites is different, at all of them, we strive to create a supportive, engaging, and welcoming environment. We display participant work alongside our tools and materials to celebrate achievements and inspire new projects. We work with a wide range of tools and materials and generally tend to set up a couple different project types for people to engage in if they are not

already working on a self-initiated project because we understand that starting this type of project can sometimes feel intimidating.

On a typical day, we might set out a laptop and MaKey MaKey for computer-based projects, a papier-mâché station for working on a solar system model, and a couple examples of cut paper projects to interest participants. Someone might engage with one or all three activities, work on an unrelated self-initiated project, or just sit, chat, or draw. We provide a range of possible activities, with different access points, while also making space for more open-ended engagement. We are always happy to have participants take our ideas or suggestions and inventively flip them upside down.

For more details about our various spaces, see this blog post about creating a makerspace at Rodriguez library and this one about making simple spatial changes at Marrero Library to better manage behavior and participation.

How do you know when you've met your goals? What are your metrics of success?
We maintain daily sign-in logs at each site that list participants' names, ages, amount of time of participation, projects worked on, and any additional notes. This helps us keep track of returning participants, and participants' commitment to our spaces and programs is an important way in which we measure success. If people keep coming back, we believe that we've successfully engaged them with our programming.

All mentors also compile monthly reports, which track progress made by various participants working on projects. Project completion and sharing is a way to measure success, but we believe that learning happens even if a project gets abandoned somewhere along the way. Another way we gage success is by paying attention to whether participants feel ownership of the space and are working well with one another. When someone comes up to us and excitedly suggests an idea or a project, we know we've succeeded in creating a space for exploration, creativity, and learning.

What are your plans and hopes for the future of your space and programming?
For the first couple years of Maker Jawn, we offered programming specifically targeted to youth. With a recent IMLS grant, we have expanded our programming and are also offering it to adults and intergenerational audiences. We are currently working on this transition and having many positive experiences. At Rodriguez library, a septuagenarian local artist has been showing kids how to make coat-hanger silhouette sculptures; at Cecil B. Moore library adults and youth are collaborating on a documentary about one of the program participants and her experiences with homelessness; at Widener library some of our youth participants have been showing adults how to work with the sewing machine. The plan for the future is to expand this intergenerational programming and provide even more opportunities for collaboration and creation.

TOOLS

What are your most frequently used and commonly available tools?
Hot glue guns, cardboard cutters, laptops, and iPads (although we have at most one of each per site), cameras, paper and markers/pencils/pens, sewing machines as well as hand sewing supplies.

List any special tools that require supervision, training, and/or certification.
Maker Jawn has several pieces of equipment that are kept in our office and are brought out to various program sites for specific projects. This equipment includes two 3D printers, a vinyl cutter, two video cameras (a DSLR and a simpler HD camcorder), a MIDI keyboard, a couple microphones (shotgun, studio, and handheld), Zoom audio recorder, and a light kit. Mentors who have experience using these pieces of equipment have run professional development sessions overviewing their use and have created written guides that can be used by other mentors and program participants. Mentors are also working with a few interns and work-study students to create video tutorials about using some of this equipment.

What are the favorite tools (most popular/most desired, even if you don't have many, or just one)?
Hot glue guns, cardboard cutters, laptops and iPads (although we have at most one of each per site), cameras, paper and markers/pencils/pens, sewing machines as well as hand sewing supplies.

MATERIALS

What are some of the most popular and frequently used materials?
We encourage participants to use recycled materials whenever possible. Therefore we often work with cardboard boxes, scrap paper, and other mysterious objects that we accumulate from the rest of the library staff, who know that we'll turn their trash into something more exciting.

What are some of your most interesting/unexpected materials?
One thing that has been huge across sites is sheets of stickers that used to function as security stickers in library materials. They were given to us by a thoughtful librarian, and they have become a useful tool for kids learning about drawing. They make drawings on the sheets and then trade stickers with one another.

Maker Mentor Lauren at Rodriguez has come up with The Sculpture Challenge, a creative activity that uses up various knick-knacks and scraps that tend to accumulate in our spaces. She places these random items in envelopes and hands them to program participants who then have to use all the pieces to create a sculpture. You can read more about this activity in this blog post that Lauren wrote about it.

What are the most continually re-used materials? Most consumed?
Hot glue sticks, LEDs.

Share any specific or general sources for materials.
SparkFun, Adafruit, Blick, Discount School Supply, Staples

COLLABORATION

What are some of the institutions and organizations that are sources of inspiration, support and influence?
We collaborate with local universities (UPenn, Temple, and University of the Arts) through work-study programs, internships, and other special workshops and projects. We have also worked to develop projects with the Franklin Institute and are a part of the Philadelphia Youth Media Collaborative, a group that connects people working with youth and media across the city to provide enrichment and showcase opportunities for the youth.

Describe any local, national, and global partnerships and collaborations.
Maker Jawn is a part of the YOUmedia Network and maintains contact with other YOUmedia sites through a Community of Practice site. We have also participated in Maker Ed's MakerCorps programs in the past.

SPACES AND ENVIRONMENT

In what physical places does making happen in your organization? A single dedicated space, multiple dedicated spaces, general use areas, a workshop (metal, wood, sewing, etc.), outdoors, a theater, a music studio, an art studio? Everywhere? Somewhere else?
Our programming happens across five different neighborhood libraries. The space in each library is different. In some libraries, our materials share space with library books on the shelves and programming happens directly on the library floor. In others, programming occurs in a separate room of the library.

At Kensington library, the makers have a designated space that is all theirs. They use it to work, store supplies, and display their work. At Widener library, the makers also have a designated room, but share it with other library programs and meetings. The librarians there have given us access to a closet where we store all our materials and supplies that we pull out for each programming session. That library also has a fenced in, little-used parking lot with a grass section where we go to garden and work on messier projects when it is warm.

At Rodriguez library, the programming happens at a couple tables located directly in the children's section of the library. At Marrero library, programming takes place in the same room as the public computer lab. This library also has a fenced in outdoor space where participants can sometimes go for activities such as plain air sketching.

Our intergenerational programming tends to take place on the library floor as well. Mentors will set up shop at a table, sometimes with something engaging like the 3D printer going to draw in potential participants. Once participants are involved and working on projects, they can do so in whatever library space makes most sense for what it is that they are working on! In this sense, our programming is very flexible space-wise and changes to fit the needs of library staff, mentors, and participants.

How are the spaces, tools, and materials organized?
Materials are organized by mentors' discretion at different sites. We generally use a lot of boxes and bins since designated shelving is often not available. At some sites we have worked with program participants to organize and label the storage of tools and materials. This is helpful in getting everyone familiar with where things are located as well as in giving people a sense of ownership and pride of the space.

We also have an office in the basement of one of our library sites where we store all larger equipment that is shared among sites (projector, 3D printers, vinyl cutter, video camera, etc.) and extra materials. We maintain an inventory of our tools and supplies, have a checkout system for shared equipment, and collaboratively create order lists of supplies we need on an ongoing basis.

How large is the space(s) where making happens?
Programming generally takes place in shared meeting room or tech lab space or on the floor of the library. Typically less than 600 sq. ft.

Please describe how your site and makerspace(s) are staffed, including numbers of full and part-time staff and volunteers.
Our team is made up of 14 part-time Maker Mentors and is managed by a part-time project coordinator. We also typically are working with 3-5 work-study students and interns from local universities. Alongside planning and facilitating programs, Maker Mentors have divided up administrative tasks among themselves and actively participate in various aspects of running the program. The mentors manage curriculum and inventory, run professional development sessions for each other, work on various proposals and texts related to the program, participate in meetings with community partners and are otherwise engaged with the functioning of the program.

First impressions of space(s):
Ideally, when participants first enter _____, they see _____. They hear _____. They feel _____. They experience _____. They leave with_____.
Ideally, when participants first enter one of our maker spaces, they see people actively engaged in a wide variety of creative projects. They hear people communicating respectfully and collaborating on projects. They feel welcome, stimulated, and excited. They leave with an idea and wanting to come back and work on a project!

Describe your approaches and priorities in creating environments for making/learning.
Along with space-related concerns discussed above, we work hard to actively welcome and engage potential new participants. When someone new shows up, we give them an overview of our space and program, introduce them to the regular participants, show them and let them explore our various tools and materials and try to give them a sense of the possibilities available in our space. I like to also have regular program participants give new ones this "tour" and ask the regulars to show off their projects to hopefully inspire the newcomer.

PROGRAMMING

Describe the kinds of programming offered.
The Maker Jawn Initiative at the Free Library of Philadelphia is a team of artists, engineers, designers, thinkers, tinkerers and makers who run drop-in spaces at 6 different libraries in underserved neighborhoods of North and West Philadelphia. The program runs 2-5 days a week, for 2-3 hours a day. Programming at each site is designed to fit available space and to be responsive to the needs and interests of each library's patrons. Although originally the target audience for Maker Jawn was youth, the program has recently expanded to include learning and making opportunities for adults and intergenerational audiences.

How did your space and programming get started?
Maker Jawn got started when a Digital Resource Specialist at the library started bringing her interest in Maker activities to the computer lab where she worked. The program grew out of one dedicated employee engaging patrons in non-traditional library activities and noticing the high level of engagement and interest in such programming. We then applied for and received private, city, state and federal funding which has enabled us to further develop and expand maker programming at the Free Library.

How do you decide on/design/make possible the space and components of the program?
Maker Jawn is all about working with what we've got! The flexibility of our space can sometimes be frustrating, but overall it lends the programming a certain lightness, which helps to foster an open, creative working environment and allows us to build on the sense of community already being created by the library.

How has your environment and programming evolved? What has worked well, and why? What has changed? What could still be improved?
Initially we were looking to design a dedicated learning lab at the Central Library. When that construction project was delayed, we began offering maker programs on the floors of neighborhood libraries, with a primary audience of middle school students. Programming has evolved to include more cross-generational programming. We hope to improve collaboration with other library programming.

EQUITY AND ACCESSIBILITY

Are there segments of the population that you hope to serve better?
We hope to provide more cross-generational programming.

What strategies do you employ to help increase the accessibility of your space/program to all learners?
Getting to know our participants, talking to them, listening to their stories, asking questions about their interests and needs and then working to create programming that is responsive to these needs is our main strategy for making our programs accessible to a wide range of audiences. Especially with our intergenerational programs, we work with people who are dealing with a wide range of mental health, addiction, and related issues, and we strive to create a space where all feel welcomed, respected, included and engaged no matter where they are coming from.

What has worked well? What has been the greatest challenge?
Recruiting local artists as mentors has been one of our biggest successes. Our biggest challenge is responding to libraries across Philadelphia who also want maker programming and figuring out how to sustain the program once our IMLS grant is over. To accomplish this, maker programming must be considered a core service of the Library.