

## A Library Where Kids Learn to Tinker by Chris Peak

Walk into a North Philadelphia library, and you'll be greeted by an unusual sight. While adult patrons surf the Web and whisper in hushed voices, adolescents giddily piece together sticks and balls to make structures that snake across the room. Grownups leave with books under their arms; kids carry out hand-sewn wallets, colorful birdhouses and wands tipped with glowing LED lights.

Maker Jawn, a year-round Free Library of Philadelphia initiative funded by an NBCUniversal 21st Century Solutions grant, opens branches' underutilized spaces to middle school students to experiment with hands-on creation. The program began in 2011 as a way to fill a gap in the city's public school education. Noticing that arts and music classes were being slashed in favor of test-prep memorization, the library stepped in to supplement project-based creative arts learning. The term maker jawn comes from the learning environments known as Makerspaces, in which participants experiment with creative technology, and from the slang word jawn, which originated in Philly's hip-hop scene and can take on the meaning of any noun in a sentence. The Free Library of Philadelphia chose it for the program's title to suggest the range of work that youngsters could create, where nothing is off-limits.

Supplied with iPads, power tools, a 3-D printer, hot-glue guns, paint and buckets of marbles, buttons and other knick-knacks, the preteen participants are given free rein to build what they please. To an outsider, it might seem the kids are just messing around, making arts and crafts from leftover junk. But for many of its young devotees, the program is a welcome change from the confines of a school day shaped by strict, rote learning and a respite from some of the hardships of life in an impoverished neighborhood. The mentors who run Maker Jawn's daily lessons see that the kids are tapping into their creativity, maybe for the first time, and building up diminished self-confidence.

"People who are always told what to do can be overwhelmed at first when you say, 'Here's the material. Go for it,'" says Sarah Winchowsky, the project coordinator, of working with the kids. "But by giving them avenues to branch out, they flourish."

A student works on a creative project at Philadelphia's Widener Library as part of the Maker Jawn program.Courtesy of Maker Jawn

Case in point: Musa Andrews, who wanted to make a sci-fi gangster film in the library's back room. Andrews was just 13 years old when he began scripting "Godbrothers, Part I," a time-warped flick with scenes set in prison, space, heaven and hell. Two years later, after crafting props and costumes, recording an original song, shooting in front of a green

screen and a belabored editing process, Andrews presented a 22-minute film. Sixty people gathered for the premiere. Andrews has since taken video-production classes and gotten involved with filmmaking groups downtown.

"This is a place to assert some agency over the physical world," says Goda Trakumaite, a Lithuanian artist who's been a Maker Mentor for nearly three years. "Self-esteem comes with that. 'I never used a hammer before, and today I built a bird-house. Tomorrow I want to learn more.' That feeling of being capable and powerful is the coolest thing that I think kids gain over time in the program."

To that end, all ideas are encouraged, says Trakumaite. "It's rare for these kids to be in a place where they're in charge, and where an adult functions more as support rather than an authority figure," she says, adding that in the library, you rarely hear a "no" or "don't do that."

The freedom to tinker with new materials, to try things out and to fail, is particularly important in low-income neighborhoods. For the primarily black and Hispanic population in North Philadelphia, students who don't perform well in school often believe they've been written off. "There is a cycle that perpetuates itself, of violence and poverty, that leads to self-deprecation," says Winchowsky. "The kids will say, 'I'm a failure,' and then they're then unlikely to try again." Every child has inherent talent, she adds, and it would be a shame if a kid never discovered it simply because he or she was too scared to try.

For Maker Jawn's Future Fashion project, participants designed and sewed futuristic outfits and participated in a photo shoot. Courtesy of Maker Jawn

Beyond personal development, Maker Jawn also squeezes in academic enrichment. "Our goal is to have them learning without realizing it," explains Winchowsky. That can happen when a mentor, for example, subtly schools the kids in thermodynamics while demonstrating how to make a lava lamp from old soda bottles, water, oil and dye. Or when building a self-moving robot — in one instance, a rudimentary, solar-powered motor attached to four wheels became a lesson in circuitry and photovoltaic cells.

And sometimes the education is behavioral too. One 10-year-old troublemaker who poked her classmates and cursed under her breath for her first 18 months of visits did an about-face when one library branch put on a fashion show. "She was in her element," Winchowsky recalls. "She was engaged and had a purpose." Mentors stopped reprimanding her; instead, they applauded her suggestions during the four months of prep for the big night.

On the whole, the program offers a different vision for what role libraries might serve in the future. Upending its traditional role as warehouses for printed books, the Free Library of Philadelphia is pushing a broader definition of knowledge that includes artistic experimentation and digital literacy. To some adults, "the library is supposed to be a quiet place for studying or reading a book. But that's not just what it is about anymore," notes Winchowsky. While physical pages might be disappearing into the cloud, the library's physical space is more important than ever as the site for interactions, making it akin to a community center. "I feel that Maker Jawn has a place in this new library model because it's a space to share ideas," she says. "That's what I see libraries moving toward: They're becoming less about the books and more about hands-on information sharing."

Maker Jawn is transforming libraries into more freewheeling, open spaces. The kids leaving with kites, cereal-box castles and solar-powered robots aren't just walking away with cool new toys. Over the course of a couple hours, they've been tinkering with a new, stronger sense of self.

Maker Jawn is a recipient of the 21st Century Solutions grant powered by the NBCUniversal Foundation, in partnership with the NBCUniversal Owned Television Stations. The grant celebrates nonprofits that are embracing innovative solutions to advance community-based programs in the areas of civic engagement, education, environment, jobs and economic empowerment, media, and technology for good.