

# FabNewport: “Make Your Life”

Education comes in many different forms and not every student learns best in a classroom setting, according to Steven Heath, executive director of FabNewport, a private non-profit organization that seeks to bring the “maker culture” to youth.

“We are born to learn. If you put a 2-year-old on the floor you don’t have to teach them how to play,” Heath said. It usually doesn’t work to “tell kids to sit down and be quiet for 13 years” as the conventional school system does. “By ‘making,’ we empower them.”

“Maker culture” is a loosely defined ethos that promotes the application of technology to “do-it-yourself (DIY) culture,” usually with 3D printing, laser cutting, CNC machining, microcontrollers (such as the Arduino and Raspberry Pi low-powered computers), electronics and motorized robotics. The movement comprises individual and commercial interests, such as *Make: Magazine*, but its core within the educational community is the “FabLab” concept pioneered at the Massachusetts Institute of Technology (MIT) and copied widely, including at AS220 in Providence and at FabNewport on Aquidneck Island.

“FabLab prescribes a set of tools, and you can make anything with those tools,” Heath said. The program encourages students to choose their own direction and figure out how to make what motivates them, rather than direct them into narrow channels with predefined assignments. “We teach kids to code, design in 3D and make decisions about social situations,” he said. The goal is to “develop agency within kids, and we just happen to use technology to do it.”

This is an educational concept with significant predecessors, Heath acknowledges, such as John Holt, Sugata Mitra, and Sergio Juárez Correa. “Not a day goes by that I don’t think about John Holt,” he said. (Ed. John Holt was an educator disillusioned with the school system who believed children did not need to be coerced to learn, but would do so naturally if given the right tools and environment)

Unlike most FabLab instances that cater to the adult or even to the artist community, FabNewport concentrates specifically on education, conducting training for youths and for school teachers. “Imagine if you are a young person and you see ‘learning available’ signs where you can get specific skills,” he said. “Some kids struggle with the basics of math and reading,” but they can “cultivate their jagged edges.” Heath said, “I’ve worked in education for 25 years, and I’ve never met a kid [who] doesn’t want to learn. Maybe they just don’t want to learn what you’re trying to shove down their throat at 3:15pm on a Tuesday.”

Heath said that he “wants to nibble away at the silos of education,” meaning the traditional model where each subject is compartmentalized and taught in separate classrooms. “Teachers working together can multiply their time and cut away boundaries that divide topic areas.”

In one example of the kind of thinking he is trying to teach, Heath described “a kid came in needing plywood, to help his cousin move, so he could build his own trailer.” An 18 or even 17 year-old, he said, “can go to work, hopefully in a job [they] like, and acquire skills here.” After graduation, Heath said, “There’s no job out there just waiting for a kid. They have to go and advocate for themselves: make their life.” Not every high school graduate is ready for college, at least not immediately, he said. “Agency,” as he defines it, means “Kids who come out of school are not just dropping into some stupid job, but acquire even one skill that lets them connect to the world and gives them a sense of purpose so

they want to share that with the world.” He predicts “in future years, families will be making decisions about their children’s learning that are less school-centric and more focused on their interests.”

FabNewport needs facilitators, Heath said. “I’d really like for people to come down and spend even one afternoon a month as adult volunteers.” He said that the organization is funded by grants, contracts with schools and gifts, with an annual budget of about \$320,000 that funds two full-time and a number of part-time staff.

The second annual East Bay Edition of the Rhode Island Mini-Maker Faire will be coordinated by FabNewport on Saturday, October 15, Noon - 5pm, in an 1,800 square-foot space at the Florence Gray Center, 1 York Street, Newport. There were 1,200 attendees and 36 exhibitors and vendors at last year’s inaugural event, Heath said. Anyone interested in exhibiting or vending - “Makers, Manufacturers, Performers, STEAM Centered Organizations, Vendors, and Crafters” - can fill out a response by October 3 using the “call to makers” form; non-commercial exhibitions are free of charge. The public is invited, and admission is free.

*FabNewport: [fabnewport.org](http://fabnewport.org); Facebook: [facebook.com/FabNewport](https://facebook.com/FabNewport); Newport Mini-Maker Faire, Oct 15: [makerfaireri.com/2016/09/ri-mini-maker-faire-returns-to-newport-october-15](http://makerfaireri.com/2016/09/ri-mini-maker-faire-returns-to-newport-october-15); Worldwide list of FabLabs: [fablabs.io/labs](http://fablabs.io/labs)*