

Creative Doers Summer Academy - WayFinders, connecting 2 the I.E. (innovation economy)

Program Type: ***Design plus STEM exposure***

Innovation in the 21st Century requires people who are as creative as designers, as tech savvy as scientists and engineers and as driven as entrepreneurs. WayFinders, connecting 2 the I.E. (innovation economy) is designed to help students begin developing these skills in an integrated manner.

Grades: Rising 7th-10th
Dates: M-F, July 10 - August 11
Hours: 10am - 4pm

Morning Session: 10am - 12:00pm, Math, Science & Creativity Skills Building.

Afternoon Session: 12:45pm - 4pm, Project Studio



Project: WayFinders, connecting 2 the I.E. (innovation economy)

Students will work in conjunction with Designers, Engineers and Business people to design a digital media library and signage system that will connect **youth** with the Cambridge's rich history and its booming innovation economy.

Skills Learned include: Ethnographic Research, Oral Histories, Video production, Audio production, Graphic Design, Web Design, App Design, Mapping and more.

Cost: FREE, contingent on funding.

Location: Cambridge Public Library (Main Library) 449 Broadway Cambridge, MA

InnovatorsforPurpose is an educational nonprofit organization based in Cambridge. We believe tomorrow's innovators must be as creative as designers, as tech savvy as scientists and engineers and as driven as entrepreneurs. Our mission is to inspire youth, *especially those in underserved communities*, to develop the skills and drive to participate in the innovation economy.

Project Background: WayFinders, connecting 2 the I.E. (innovation economy)

In response to call for proposals from the Cambridge Redevelopment Authority's Forward Fund, InnovatorsforPurpose (non-profit) in collaboration with Harvard GSD alum, Daniel Solomon Koff (MDesS '15, Adjunct at Olin College of Engineering) and local youth will design a wayfinding signage and multi-media tour system that will connect local youth to the City of Cambridge's rich history and its booming innovation economy.

While the building-boom that is ongoing in Cambridge may be improving the city's landscape, we have found that the local youth feel invisible and disconnected to that progress. By engaging local students, *especially those residing in The Port (Area 4)*, in a wayfinding design project, we intend to connect them to the stories that are developing around them and to showcase their own talents, hopes, and dreams.

Upon completion of project, signs will be installed at strategic locations throughout the City (3 in phase I, a total of 12 by the end of phase III). Signs will be connected to a digital media library including text-based descriptions, as well as images, podcasts, videos, and maps.

Backstory

In the Spring of 2015, InnovatorsforPurpose led 90 3rd, 4th and 5th graders from Fletcher Maynard Academy through the human-centered design process to address the question "How Might We stay a part of a changing neighborhood?" Students had an opportunity to ask questions to nearly 30 adults vested in this problem including the Mayor, City Manager, Business professionals and Community leaders.

Students with the assistance of adults synthesized the information, explored various solutions and ultimately shared back early stage prototypes representing ways to address the problem. Four themes emerged:

- How Might We have a voice in our community?
- How might we keep learning about and following the paths of professionals working in the innovation economy?
- How Might We lead the process of showing off our neighborhood to preserve its culture?
- How might we help drive the changes we want in our neighborhood?

WayFinders addresses all of their most pressing themes. Mostly importantly it will showcase the talents of this untapped source of future designers, scientists, technologists and entrepreneurs and connect the City to their hopes, dreams and aspirations.

Program Details:

As we learned last year, energizing students about robotics, coding and other technologies is only the beginning. Our surveys revealed that most have very little confidence in their Math & Science skills. We believe the gains made through exposure will diminish over time if fundamentals are not addressed. We have structured our Summer program to address this.

Morning sessions will be devoted to building Math & Science skills in interesting ways. Lessons and activities are designed to help explain the Math & Science incorporated in the Wayfinding project. Modules may include topic matter from geometry, physics, material science, chemistry, structural engineering and psychology.

iFp students in grades 7 & 8 attending school in the Cambridge Public School District will participate in the Cambridge Public Schools Summer Morning Math BRIDGE program and then join us in the afternoon. Other students attending Cambridge Charter Schools, Cambridge Rindge grades 9-10 or Boston Schools will participate in our Math & Science modules.

Afternoons will be devoted to the WayFinder project. Wayfinding refers to an information system that guides people through the physical environment. Our system will be enriched with multi-media content which will connect each signage location along a self-guided walking tour. The signs will be able to be read by passers-by as well as by mobile devices which can read QR codes and/or location-based triggers directing them to additional online content.

Program Mentors will engage students in a research process, helping them get to know their neighborhood through observation, interviews with local people, and walking the streets. Students will be given the tools needed to design wayfinding signs that propose an alternative perspective on everyday spaces. Stories will be told from the youth's perspective, reflecting their perception of their neighborhood. Students will develop an understanding that their neighborhood extends beyond where they live to include all of Cambridge including Kendall Square the "most innovative square mile on the planet."

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Program Instructors / Curriculum Developers:

Daniel S. Koff (Principal of Solomon Office, Adjunct Professor at Olin College of Engineering, and alumni of Harvard Graduate School of Design, MDesS '15) - Lead Designer / Instructor.

Joe Diaz, MIT B.S, Music - Curriculum Developer Math & Science modules.