



*#STEAMtheStreets is an initiative to inspire and activate underrepresented youth to pursue career paths in Science Technology Engineering Math and the Arts.*

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### **Our Approach:**

Based on 21 years of experience in reaching youth through media arts and a culturally responsive programmatic approach, we offer engaging and comprehensive programs around STEM/STEAM as part of a bigger vision to help close the employment and diversity gaps in the technology sector.

### **Our Goals:**

- To spark students' interest in STEAM through culturally responsive and relevant methods.
- To expose youth to various STEAM careers.
- To inspire students by featuring success stories who come from similar backgrounds.
- To activate diverse students on a STEAM career path through innovative programming.
- To make connections to what students are learning in schools to real world employment.
- To shift the culture of how students view these fields from "not for me," to "I can do this."

### **Program Components:**

#### **I. School Assemblies**

Utilizing our proven school assembly formula, we expose students to the STEAM career landscape and instill the belief that they too *CAN* be part of the tech economy. Assemblies are mc'ed by dynamic educator Angel Diaz who uses performance, slides, and interactive lecture to engage students. Key content we have produced including profile videos of engineers at Pandora and Adobe are screened along with our STEAM music videos. This exciting approach connects student interests and identities with careers such as data analytics, software development, and computer animation. The assembly is a memorable event for students and plants a valuable seed for how they approach their education moving forward. With each school that we have programmatic partnerships with, we hold a kick-off assembly, one during the middle of the year, and a final assembly. The final assembly showcases student projects created throughout the year within our after-school programs. Students become the on-stage attraction and are able to reach their peers in the audience. This builds skill and confidence in participants, but also bringing the wider school population closer to the concept that they have a future in STEAM careers.

#### **II. Guest Speaker Series**

We bring in diverse professionals in STEAM fields such as food science, software engineering, 3D modeling, and video game design to speak to students about their careers. We prioritize the recruitment of women and people of color as speakers, to show our student body relatable faces. Guest speakers share their stories, make demonstrations, talk about how they use math and/or science in their jobs, and demystify what their career consists of. Our staff helps curate this presentation by working with speakers to develop engaging presentations, and then facilitating the in-class q and a and discussion aspect. As a result of these sessions, students

gain a better of understanding of careers, see a relatable face behind the job, and realize how academics relate to a professional setting. These sessions occur monthly at each school.

### **III. Creative Arts Workshops (The “A” in S.T.E.A.M.)**

Held after-school over ten week intervals, our creative workshops activate students’ knowledge and inspiration that they receive from the previous two components. We facilitate workshops in songwriting and music video production where students write songs and make music videos about STEAM careers. Students then perform their songs and show their videos to the student body. This peer to peer approach makes students the messengers, empowering their peers to internalize the notion that they can be part of the tech economy.

### **IV. Hands-on Tech**

We conduct a ten week hands-on program that fosters student learning in technology, electronics, and electricity. Students learn how to work with electricity by building their own electrical circuits and electric-powered-devices, from simple LED light circuits to wearable electronics. Students will also learn coding (using the free program Scratch), and engineering (using low-cost materials such as LED’s, sauder-less bread boards, plastic, and cardboard.) Through much needed exposure to these tools that more privileged districts usually have access to, students are able to create and seed a long-lasting relationship to STEAM.

### **V. Production and Distribution of Culturally Relevant Video Content**

Many youth haven’t exposed to professionals who look like them in STEM/STEAM fields. They also aren’t aware of what a software engineer, UX designer or mechanical engineer even does in their respective jobs. We conduct video interviews with diverse professionals to share what they do, and their stories of success in order to demystify tech. jobs and provide exposure to career fields. We also produce music videos from a culturally relevant perspective that we show at school assemblies that work to inspire, and connect students to STEAM careers. These videos include “Nada,” an anthem about LatinX inventors, “Black Made That,” an anthem about African American inventors, and the “STEAM Anthem,” which shows youth of color building, designing, and engineering. Aside from showing these at our main school partner sites, and multiple schools who bring us in for assemblies, this content is also distributed through our Youtube channel, list serve, and social media channels.

### **Video Links**

[Profile video of Pandora Radio’s Director of Engineering](#)

[Anthem about African American Inventors](#)

[Anthem about LatinX Inventors](#)

[Profile video of Adobe Engineering Manager](#)

[Carney Academy students star in music video about STEAM careers](#)

### **Conclusion**

We are honored by the opportunity to educate, empower, inspire and activate underrepresented youth to be a part of the expanding STEAM landscape and economy.

Our philosophy is that if we expose youth to numerous diverse role models, connect careers to things that they’re interested in, and engage them in hands-on technical and artistic programming, then they’ll have a vision of what they can become, and therefore be more invested in their educational journeys going forward.