



## Education and Career Pathways for Youth

### ***Project-Based Learning***

The EEB Hub is a founding sponsor of The Sustainability Workshop, a project-based learning school for 30 high school seniors selected from high schools throughout the City of Philadelphia and located at the Navy Yard. The school is led by Simon Hauger, a certified educator who previously ran the automotive-focused EVX Team at West Philadelphia High School. The Philadelphia EVX team successfully competed with teams of high school students from across the country in a national hybrid car competition and was recently invited to the White House.

### ***Application to EEB Hub***

Students at the Navy Yard Sustainability Workshop have been learning about and contributing to the Hub's work of making buildings more energy efficient during their school year.

Two teams of students are in the semi-finals for the Conrad Foundation's Spirit of Innovation Awards, an international competition that challenges high school students to use science, technology and entrepreneurship to solve real-world 21<sup>st</sup> Century problems. One team, La Casa Verde, has proposed recycling shipping containers to build energy-efficient housing to solve the related Philadelphia problems of homelessness, abandoned lots, poverty and high utility costs. The students will build a workshop from shipping containers- with the support of the Philadelphia Business Trades- as a prototype to test insulation, lighting, solar energy and more.



The second team, Bright Lights, is developing a lighting assessment tool to use in private homes as they switch incandescent bulbs to CFLs or LEDs. They have designed a business plan, with help from the Wharton Small Business Development Center, to partner with light bulb manufacturers and alternative energy providers, to incentivize making the switch. The students piloted the assessment and bulb swap on the Martin Luther King Day of Service, changing bulbs for senior citizens and low-income community members. In addition, the students have built a composer, an electric bike generator, and a solar stove, among other projects.

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### ***Educational Impact***

Students have a 94 percent daily attendance, which is significantly higher than the district's average. The college admittance data is still in process as most students are still waiting to hear back from schools to which they have applied. At this point almost all of the students have completed and submitted at least one college application.

The Drexel University Community Scholars Program allows students to attend college classes at Drexel, for credit, at no charge. About half the Sustainability Workshop students are enrolled in a college course this trimester; in the spring it is anticipated that every student will take a Drexel course.

### ***Regional Engagement***

The Sustainability Workshop has invited a number of experts to visit and give short presentations to the students. The schools' ribbon-cutting ceremony included remarks from Philadelphia Mayor Michael Nutter, District Attorney Seth Williams, Acting Superintendent of the Philadelphia School District Leroy Nunery and EEB Hub Director for Management and Administration Paul Hallacher. Since then, students have heard from a variety of professionals, including environmental engineers on conducting home energy audits, and architects on LEED building and zero energy designs. They have also hosted various entrepreneurs and political leaders, such as Congressman Chaka Fattah. Increasingly, students have engaged speakers to get their feedback on a project idea. Laurie Actman and Christine Knapp of the Penn State EEB Hub management team have presented, as has Will Agate of PIDC.