

SYEP Summer Bridge 2020

Solar One's Green Design Lab works with schools and community-based organizations to promote student design and innovation in applying STEM skills to solve environmental challenges. Traditionally we would accomplish this through our hands-on curriculum and in-person programming. Given the new changes in response to Covid-19, we as an organization have had to transition our teaching model to be compatible with remote learning. Beyond developing new digital resources, in response to the wave of social and racial justice movements across the country we are reminded of the inextricable link between climate justice and racial justice. Solar One has developed new digital content with the intention of creating a culturally responsive program that centers Black, Indigenous, and People of Color voices in environmentalism.

Our new digital content has six different modules, all outlined below. Each module is designed for one week of instruction during the Summer Bridge program, but can be customized to fit an individual provider's program schedule.

Six Modules of Content

1. Environmental Justice

Students will be introduced to environmental justice and complete projects that challenge them to critically think about the intersectionality between the environment and racial justice, especially during Covid-19 in New York City.

2. Energy Conservation

After learning about how electricity is produced, students will complete their own energy audits to have a better understanding of their personal energy consumption and the benefits of reducing their carbon footprint.

3. Renewable Energy

By transitioning to renewable energy we can produce our electricity in a sustainable way. Students will learn about the different types of renewable energy with focus on solar energy here in NYC and the greater global challenge posed by nuclear energy.

4. Sustainable Food & Water Systems

Students will explore how community gardens act as agents of change to promote food and social justice. In addition, students will strengthen their design thinking skills as they analyze the combined sewer overflow (CSO) issue in NYC to create a more sustainable water management system.

5. Climate Resiliency & Action

Students understand NYC's climate risks and develop different strategies to increase community adaptation and build resistance to the effects of climate change.

6. Service Learning

Different activities to have students organize their ideas to develop a relevant service learning project of their choice to build skills such as critical-thinking, problem-solving, collaboration, and communication.



Modules Include (*except service learning):

- Module Outline providing background information, a summary of each student activity, and suggested time for completion
- **Student Activities** that are project-based and written to be self-guided so students may complete them at their own pace. All activities can be completed either individually or in groups at the discretion of the SYEP provider.
- **Resource Library** with additional readings, books, and videos related to each theme that can aid students in completing their project based activities or provide inspiration for individual learning beyond this summer
- Leading Organizations Highlight that identifies different organizations and individuals that are leaders within each module. Emphasis on amplifying the networks of passionate BIPOC environmental leaders
- Career Research opportunities for students to explore different career paths in each module of study and learn the diverse possibilities that exist within sustainability

Service Learning

Our Service Learning module is designed to be integrated throughout the entire summer program as the culminating project to boost civic engagement. Students may be able to apply what they have learned throughout the different modules to their community based service learning project. The provided activities in this module guide students in selecting their project topic/question and offers structured support in outlining their steps to complete the project by the end of the summer program.

Additional Webinars

In addition to the provided digital resources, Solar One will also be having weekly live webinar sessions to supplement student learning. These live webinars give students the opportunity to interact with industry professionals, ask questions, and make connections between the learned content to real life applications here in New York City. The topic and schedule of these webinars can be found on the Webinar Series overview page.

<u>Webinar topics</u>: Climate Change in NYC, Green Energy Career Panel, Energia Solar en NYC (presentado en Español), Youth Climate Activists Panel, Food Justice & Composting