

How a Long Island Nonprofit is Expanding Environmental Health Literacy by Empowering Youth



Awardee: Huntington Breast Cancer Action Coalition (HBCAC)

Outcome: A new environmental health (EH) curriculum toolkit for use in high schools

Why: Expand EH education to school districts within potential environmental justice areas (PEJAs) in order to develop young community leaders

Where: Huntington, New York

Award Amount: \$20,000

Impact at a Glance

10

high school ambassadors recruited to create EH literacy curriculum and educational materials. 150

students in Long Island high schools participated in training. 2000

students will engage with the materials annually as the program continues to grow.



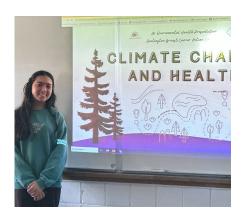
In 2022, Huntington Breast Cancer Action Coalition (HBCAC) was awarded \$20,000 through the New York State Pollution Prevention Institute (NYSP2I) Community Grants Program to fund "Nurturing the Seeds of Prevention Education: Expanding Environmental Health Literacy in Youth." This outreach project aimed to give high school students in Long Island the knowledge and skills needed to make informed decisions about environmental exposures that could negatively affect health in their communities, a concept known as environmental health (EH) literacy.

"The project developed a pilot environmental health literacy program created by students for students."

The goal of the project was to introduce a set of EH-learning materials that were developed by students for students. As a means for providing access to environmental health education, particularly within underserved communities, the project focused on disseminating the materials in school districts in potential environmental justice areas (PEJAs) in and around Huntington, New York. According to a 2003 guidance document from the New York State Department of Environmental Conservation, a PEJA is defined by New York State as "a minority or low-income community that may bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies."

HBCAC began the outreach and education project by interviewing high school students in the Huntington area. Ten students were selected to become EH ambassadors. They received six weeks of EH-science training from HBCAC educators. Once the training period was complete, the HBCAC educators guided the ambassadors in developing a curriculum toolkit for use in high school classrooms.

The curriculum toolkit that the student ambassadors created included five 45-minute lesson plans and a prototype for a mobile application. Karen Miller, HBCAC's founder and director, explained, "We combined design and tech teams of motivated youth together to use their new knowledge and skills to devise lesson plans and a correlating app that makes the absorption and adoption of healthy and environmentally friendly behaviors fun and gamified for youth audiences."





Mobile Application Prototype

HBCAC connected with youth leaders and audiences from seven diverse districts on Long Island, focusing on reaching PEJA pockets within those communities. Student Ambassadors connected with their teachers in these districts to deliver the educational materials. With support from EH educators, Karen Miller and Melanie Gabrell, a total of 150 students received instruction through the lesson plans and mobile application that they developed. Feedback from the classrooms was an important element of the project: All the high school students who participated in the educational course were surveyed. Approximately 90% of high school students were able to retain the knowledge about the relationship between environmental exposures and health. Also, a focus group of 10 students provided a more detailed evaluation of the materials' efficacy to identify areas for improvement.

"A large majority of participants agreed that the lessons were informative, that changes in their lifestyles are doable, and [that they] see benefits for their health and their environment," explained Miller.

"The working prototype of a 'gamified' healthy habits mobile application encourages personal action and continuous learning."

For over 30 years, HBCAC has assisted women diagnosed with breast cancer through prevention education and awareness on Long Island. The nonprofit also focuses on outreach and education among youth to encourage environmental health literacy, advocacy, and leadership. Each year, HBCAC conducts 50 prevention-education programming sessions for various facilities across Long Island. These include middle and high schools, summer camps, faith-based groups, women's shelters, scouting troops, senior centers, community centers, and more.

"Providing youth with an opportunity to become environmental stewards and involving them in every aspect of HBCAC's project is such a great way to empower our young adults," observed Ambika Walker, the program manager of outreach and education at NYSP2I. "Supporting projects like this through funding truly makes a difference and helps NYSP2I grow our impact on environmental justice initiatives."

Partners











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