

Do you know of place-based learning programs that monitor air quality? If so, we want to hear from you!



Photo: Patrick Makhrout

WANTED: Air Quality Education Programs

The Story

Kimberly Hagen is a biology teacher with a commitment to environmental action. Her work has demonstrated the way in which a series of problems can become an opportunity for improving education, citizenship and health. Ms. Hagen created a program in which **students monitored the quality of the air** they breathed at school. When they discovered some of the criteria pollutants were above EPA standards, the students took action to clean up their local environment and improve their health, all while increasing science literacy.

Research suggests that poor air quality can directly affect student and teacher health and performance. In the past decade, schools have begun to monitor the quality of the air that students and teachers breathe. The U.S. Environmen-

tal Protection Agency's "Tools for Schools" program has been a pioneer in this area. Today, a growing number of schools are realizing that putting air quality monitoring in the hands of students can create educational opportunities and **improve environmental quality**.

In Vermont, Kimberly Hagen did just that. Using state agency grant funds generated by fines levied against industries that had polluted the air, Ms. Hagen worked with more than a dozen schools to deliver an environmental science curriculum that monitored local air quality. At one school, students discovered that **school bus idling** was having a drastic effect on the school's outdoor and indoor air quality. The students presented their findings to local school board officials, who **enacted a no-idling policy** on all school grounds.

What You Can Do

Do you know of placed-based learning programs with similar strategies or success stories? Do these programs have data about environmental quality or environmental health? If so, **we want to hear from you!** Help us embed your results in a larger meta-analysis.

This two-year project, "Quantifying a Relationship Between Place-based Learning and Environmental Quality," aims to establish a direct connection between PBL and environmental quality by gathering data from existing PBL projects that have **measured changes in air quality**. School-based programs as well as PBL programs at non-formal education sites are of interest, as are programs of this type that may have targeted land, water or other environmental quality areas.

Project Partners

The partner organizations for this EPA-funded project are the National Park Service's Conservation Study Institute and its Center for Place-based Learning and Community Engagement; Shelburne Farms; PEER Associates, Inc.; Massachusetts General Hospital; and Antioch University New England.

To get in touch with us about your program or a program you know, send an email to:
brian_johnson@antiochne.edu