

Prince George's County Public Schools
William S. Schmidt Outdoor Education Center

Environmental Literacy and Outdoor Education



*Where Learning
Takes Root*





Table of Contents

Environmental Literacy Goals..... 3

Mission Statement 3

Introduction..... 4

Vision Statement..... 4

Environmental Literacy Grade-Level Programs 5

Supportive Environmental Programs 8

Community Partners 10



Environmental Literacy Goals

Each goal will promote greater student achievement through meaningful outdoor experiences.

Goal 1: *Every Student Outdoors Every Year*

Goal 2: *Authentic Inquiry-Based Learning for All Students*

Goal 3: *Professional Development of Environmental Literacy for All Teachers*

Goal 4: *Every School Will Be a Green School*

Goal 5: *Curriculum Alignment of Environmental Literacy Standards*

Mission Statement

Environmental literacy will increase the capacity of the school community through:

- Meaningful outdoor experiences
- Program development
- Curriculum development
- Professional development
- Green school support
- Partnership opportunities





Introduction

The William S. Schmidt Outdoor Education Center (Camp Schmidt) is an academic center that provides students with a meaningful outdoor experience which enhances as well as reinforces skills learned in the classroom. As a result, participants have a greater comfort level in being outdoors as well as a greater awareness of the environment and their responsibility as citizens in making informed decisions that preserve and protect natural resources.

The Schmidt Center offers opportunities for students across many grades to participate in Environmental Literacy programming. On-site instruction includes the first-grade program, fifth-grade residential program, Envirothon, and team building opportunities for students and staff. Outreach programming includes kindergarten, third grade, middle school, and high school.

Our 450-acre campus is the centerpiece for environmental education for Prince George's County Public Schools. Staff work to fulfill the mission by offering high-quality, multidisciplinary, environmental education programs that result in students making decisions and taking action to solve environmental problems.

Vision Statement

The Environmental Literacy Team envisions a connected school community of environmentally literate leaders who possess the knowledge, intellectual skills, experience, and motivation to make and act upon responsible environmental decisions.

Environmental Literacy Grade Level Programs



Kindergarten Growing Up Green (GUG)

Growing Up Green (GUG) is an ongoing collaboration between the kindergarten classroom teacher, the physical education teacher (and possibly art teacher), the Arts Integration Office, and the William S. Schmidt Outdoor Education Center. It consists of five dynamic, hands-on, inquiry-rich experiences that explore and answer the question, "How can we make sure plants have what they need to survive?" For more information, contact

jhanna.levin@pgcps.org.



First Grade Forest Friends

The first-grade program is a great introduction to outdoor education, providing young students hands-on opportunities to learn about the environment. Students go on a day trip and rotate in small groups through a variety of activities in outdoor classroom spaces as well as a native garden. Lessons are taught by trained teachers and parents with staff support.

Lesson topics include tree age and identification, soils and decomposition, native birds and their adaptations, animal tracks, and insects and pollinations. For more information, contact leslie.marcus@pgcps.org.



Third Grade Sunfish and Students

The Sunfish and Students program provides students and teachers with the experience of raising bluegill sunfish in their classroom from November to May or June. One third-grade teacher from each participating school will receive training in bluegill information, aquarium set-up, maintenance, and curriculum connections.

During the classroom experience, students will perform aquarium water quality tests, feed and observe fish, study fish adaptations, utilize mapping skills, and participate in inquiry activities and discussions.

In May or June, participants will release their bluegill sunfish into a local body of water during a free, full-day field trip of enrichment activities compliments of the Schmidt Center! For more information, contact

linda.armwood@pgcps.org.



Fifth Grade Camp Schmidt Overnight Environmental Trip

All schools with a fifth-grade program are provided with the opportunity to visit either the Schmidt Center or Hard Bargain Farm (Alice Ferguson Foundation). The lessons that the students receive on campus include Stream Ecology, Deer Detectives, Orienteering Challenge, Woodland Ecology, Team Building, Problem Solving, and the Confidence Course. Evening activities include a wagon ride and campfire. This overnight program also supports the elementary grade band for the outdoor component of the Meaningful Watershed Educational Experience (MWEE). For more information, contact travis.long@pgcps.org.



Sixth Grade Fats, Oils, and Grease (FOG)

Can the Grease: Fats, Oils, and Grease (FOG) is a partnership between PGCPs and WSSC Water. This embedded lesson in the science curriculum provides students with an understanding of the environmental impacts of fats, oils, and grease and how solutions used at home and school will keep the Maryland waterways cleaner, sewer pipes free of these products, and reduce wastewater overflows. For more information, contact rhonda.scott@pgcps.org.



Seventh Grade Wild Rice and the Changing Landscape of the Chesapeake Bay

Wild rice is a native aquatic plant that has been in decline due to non-migratory waterfowl, invasive plants, and water pollution. Students are part of the solution by growing wild rice in their classrooms and planting it once it has matured, thus restoring habitat and helping to remove pollutants from our waterways. Funding is provided through a grant from the Maryland Department of Natural Resources.

Students will define issues affecting the Chesapeake Bay and their local community, have hands-on, outdoor field experiences, analyze data, and implement actions to better their schoolyard.

Participating schools receive a free field trip to plant wild rice in the late spring. All necessary equipment and materials are provided for participating schools. For more information, contact rhonda.scott@pgcps.org.



Eighth Grade Terrapin Education and Research (TERP)

The Schmidt Center has partnered with the Maryland Environmental Service (MES) who work on behalf of the Maryland Department of Transportation Maryland Port Administration (MDOT MPA) to manage the Terrapin Education and Research Partnership (TERP) program. This program brings hatchling terrapins into eighth-grade classrooms. *"Students provide all care to the terrapins. They collect growth data, observe behavior, learn care and husbandry protocol, and research the natural history of our state reptile. Head starting allows the hatchlings to grow to the size of a two- to three-year-old wild juvenile terrapin in just nine months."* For more information, contact rhonda.scott@pgcps.org.



High School Mussel Power

The Mussel Power program is a comprehensive three-part program that engages high school students throughout the watershed in freshwater mussel restoration. During the course of the program, students investigate the life cycle of freshwater mussels, learn about the benefits that freshwater mussels provide, and explore the unique role of mussels in the Anacostia River ecosystem.

Through this program, students are actively engaged in the restoration of two species of freshwater mussel in the Anacostia River. Students care for juvenile mussels in their classrooms using mussels, tanks, and other materials provided by the Anacostia Watershed Society. High school students participate in real world, hands-on data collection and analysis. For more information, contact donald.belle@pgcps.org.



High School Envirothon

The Envirothon is a fun and exciting way for high school students to learn about the natural world around us. Envirothon teams are made up of five students who work together to study Maryland's natural resources over the course of the school year. All lessons are hands-on and allow students to develop practical skills.

Envirothon topics include wildlife, forestry, soil science, aquatics, and a current environmental issue. Envirothon teams are supported through after-school clubs, the William S. Schmidt Outdoor Education Center, Prince George's Soil Conservation District, and the Maryland-National Capital Park and Planning Commission (M-NCPPC). For more information, contact donald.belle@pgcps.org.

Supporting Environmental Programs

Bridging the Watershed



Bridging the Watershed (BTW) is an outreach program of the Alice Ferguson Foundation, in partnership with the National Park Service (NPS) and area schools, designed to promote student academic achievement, personal connections with the natural world, lifelong civic engagement, and environmental stewardship through hands-on curriculum-based outdoor studies in national parks and public lands. The Schmidt Center is the liaison that provides assistance with scheduling field studies for students and professional development for teachers. The field studies are designed for middle and high school students. For more information, contact rhonda.scott@pgcps.org.

Climate Change Challenge

The Schmidt Center is committed to providing resources, experiences, and professional development on the issue of climate change that will cover sources, mitigation, adaptation, and actions that students can take in their schools and communities. The Schmidt Center will work with the PGCPs Climate Change Action Plan (CCAP) Focus Work Group and the Prince George's County Climate Action Plan Commission to develop a systemic approach to integrate climate change education. For more information, contact donald.belle@pgcps.org.



Garden Tool Check Out



Utilizing the Schmidt Center's garden tools is a great way to conduct student-centered environmental actions on the school grounds. Students can construct raised-bed gardens, plant trees, create native habitats, build stormwater runoff buffers, or other schoolyard projects. This is a free resource provided by the Schmidt Center for PGCPs staff members. For more information, contact stephen.biller@pgcps.org.

High School Internship

The internship program gives students an opportunity to excel in a leadership role while teaching in the outdoors. Students in the internship program assist teachers in various areas of instruction, provide leadership and guidance for small groups of students, and serve as facilitators to accomplish the goals of the participating elementary school. Students receive service-learning hours for their participation. For more information, contact steven.hartling@pgcps.org.



Homegrown Heroes Project



The Homegrown Heroes project encourages students to grow food at home and provides teachers with materials to facilitate student gardens. During this project, students and staff receive gardening best practices, resources, and support from Homegrown Heroes partners. This project will play a small part in the alleviation of the food security problems for our students and will foster lifelong skills in agriculture. For more information, contact donald.belle@pgcps.org.

Leadership and Team Building Low Ropes Course



The low ropes course is an ideal environment for developing leadership, critical thinking, problem solving, communication, and other high-level skills. It also serves as a way to foster connections between students in an atmosphere of respect, inclusivity, and support for individuals in Grades 6 -12. Activities focus on leadership, communication, problem solving, risk taking, goal setting and enhancing self-esteem. For more information, contact james.roberson@pgcps.org.

Maryland Green School Program

Nationally recognized, the Maryland Green Schools Program (MDGS) allows schools (Pre-K through Grade 12) and their communities to evaluate their efforts in environmental sustainability. Participating schools empower youth to make changes to reduce environmental impact, encourage sustainability, and foster environmental literacy. Maryland Green Schools benefit from the instructional support and partnership of Green Centers and Green Leaders. The program is aligned with the 2014 goals of the Chesapeake Bay Watershed Agreement and supports Maryland State Department of Education graduation requirements and standards. The Schmidt Center coordinates the MD Green Schools program for PGCPs. More than 60% of schools have been awarded MD Green Schools certification in PGCPs. The goal is to have 100% of schools certified. For more information, contact james.roberson@pgcps.org.



Storm Drain Stenciling Check Out



Storm drains were designed to be the fastest and most efficient way of getting rainwater off streets and parking lots. Unfortunately, the water that flows into storm drains also carries trash, nutrient pollution, sediment, and toxic chemicals. The water in our storm drains ends up in our local streams or rivers. Storm drain stenciling is a school-based service-learning activity that is a great way to build awareness, increase community involvement, and discourage people from putting harmful materials and liquids down the drains. The Schmidt Center will provide the necessary resources and assist you with your project. For more information, contact sconyers@pgcps.org.

Summer Kickback Program

Summer Kickback is the M-NCPPC summer camp designed for students with special needs ages 14 - 21. The Schmidt Center provides the programming and location for the environmental education-themed week. Campers will take field trips to county sites to better understand the closed waste cycle. Students will have opportunities to learn to fish, kayak, sample a stream, participate in team-building activities and overcome personal challenges. In the culminating activity, campers will create a 3D mural that represents their learning. For more information, contact jhanna.levin@pgcps.org.



Tower Garden Program



Through a partnership with Farming 4 Hunger and PGCPs, the Schmidt Center has facilitated the use of Tower Gardens to support second and fourth graders science and environmental literacy skills. Tower Gardens are aeroponic, self-contained planters where students and teachers, have the ability to grow vegetables all year long. Students will have the ability to learn, firsthand, about the growing cycle, how to take care of plants, and the concept of aeroponics. For more information, contact stephen.biller@pgcps.org.

Treating & Teaching

Treating and Teaching promotes stewardship of our local waterways and environmental literacy in Prince George's County Public Schools in conjunction with the Clean Water Partnership. This partnership creates a collaboration between teachers, building supervisors, and landscape designers. It provides school staff with entry-level stormwater knowledge, resources to effectively maintain the stormwater management facilities, and activities to support student learning. For more information, contact james.roberson@pgcps.org.



Thanks to all of Our Partners for Supporting Environmental Literacy in Prince George's County

