



District of Columbia
Office of the State Superintendent of Education

ENVIRONMENTAL LITERACY LEADERSHIP CADRE SNAPSHOTS

September 2016



ABOUT THE ENVIRONMENTAL LITERACY LEADERSHIP CADRE

In February 2016, the Office of the State Superintendent of Education (OSSE) selected elementary teachers and educator leaders from 16 schools across the District to participate in the Environmental Literacy Leadership Cadre pilot program. Educators were responsible for the development and implementation of a plan to integrate environmental literacy programs at every grade level within their school. The cadre members were supported by mentors and environmental literacy fellows, who provided guidance, feedback, and technical assistance. The snapshots in this booklet describe the efforts of the cadre members, in addition to their plans for the 2016-17 school year and lessons learned.

2016 ENVIRONMENTAL LITERACY LEADERSHIP CADRE MEMBERS:

- Bridges Public Charter School, Kimberly Reddick
- Capital City Public Charter School, Elizabeth McNamee
- HD Cooke Elementary, Allison Hyman*
- Kimball Elementary, Peter Bailey
- KIPP DC: Heights Academy, Jennifer Ramsey
- Langdon Elementary, Lola Odukoya
- Ludlow-Taylor Elementary, Alecia Francis
- Malcolm X Elementary, Anna Davis
- Maury Elementary, Vanessa Ford
- Mundo Verde Public Charter School, Tara McNerney
- Peabody Elementary, Katherine Howard
- School Within School @ Goding, Alysia Scofield
- Seaton Elementary, Sarah McLaughlin
- Tyler Elementary, Marta Jimenez and Victoria Willis
- Van Ness Elementary, Alva Braxton
- Watkins Elementary, Sashaum Deprez

MENTORS:

- Rebecca Davis, Environmental Education Consultant
- Amy Quinn, Washington Yu Ying Public Charter School
- Ariel Trahan, Anacostia Watershed Society
- Laurie Young, Janney Elementary

FELLOWS:

- Ambika Anand Prokop, Audubon Naturalist Society
- Margi Fineran, FreshFarm
- Joe Ludes, REAL School Gardens
- Mara Moran, Anacostia Watershed Society
- Rosa Ramirez-Lopez, FreshFarm
- Jessica Walters, FreshFarm

For questions about the Environmental Literacy Leadership Cadre, please contact Grace Manubay, environmental literacy coordinator at Grace.Manubay@dc.gov.



For more information, visit
<http://osse.dc.gov/service/environmental-literacy-leadership-cadre>

* school snapshot not available



BRIDGES PUBLIC CHARTER SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Inclusive field trips that complement curriculum for all learners.
- Hands-on adventures in learning.
- Community partnerships formed that will support future environmental endeavors.

ABOUT THE SCHOOL

The mission of Bridges Public Charter School is to provide an exemplary educational program that includes all students. The school's developmentally appropriate, student- and family-centered educational approach nurtures students to expand their developmental skills, in order to build a foundation for life-long learning. Bridges, the name of the school, symbolizes an inclusive learning community that builds bridges of understanding, awareness, and support by connecting children and families who have a variety of different needs, cultures, and backgrounds. Bridges believes that inclusive education is beneficial to all students. Inclusion builds compassionate relationships among students, develops self-esteem in individuals, and develops the awareness that everyone has strengths and challenges.



"The task of organizing environmental learning experiences for an entire pre-K to third grade elementary school seemed nearly impossible to me at first. So much to do with virtually no time, and a snow storm to further delay efforts! The uniquely special program offered at Bridges added to my challenge. The student population, spread out between three buildings, is all-inclusive, with a wide range of varying abilities, special needs, and accommodations. However, collaborating with coworkers and paying close attention to detail made the effort a success! I was very impressed with the Washington Youth Garden's ability to differentiate the experiences for our students. We were even able to split our groups so that all students were exposed to a developmentally appropriate, hands-on learning experience that reinforced classroom lessons."

– Kimberly Reddick, English Language Learner teacher K-3, Bridges PCS





ENVIRONMENTAL LITERACY PROGRAM

The Bridges environmental literacy program is closely aligned with Next Generation Science Standards life science content. In kindergarten, students study food origins and how animals and plants need food, water, and air to survive. Grade 1 students explore light and sound in nature by designing solutions to human problems by mimicking how plants use external parts for survival. In grades 2-3, students develop models that mimic the function of animals pollinating plants or a habitat where some organisms can survive. These classroom lessons are complemented with experiences at the Washington Youth Garden, where students learn about food and nutrition, plant parts, and honeybees and pollination.

NEXT STEPS

In summer 2016, the curriculum team will work to implement more of the Next Generation Science Standards into the Bridges curriculum. The school will expand to include grade 4 in the 2016-17 school year, and the hope is for the older students to steward the recycling program by creating banners and posters to make the program more visible and fun. Bridges also plans to incorporate classroom jobs and environmental clubs to motivate students. Finally, partnership with REAL School Gardens will assist our new garden coordinator with organizing pre-K through grade 4 class schedules to work in the garden by creating new spaces and bolstering science lessons with environmental learning experiences in the fall.

LESSONS LEARNED

- The most important step is getting the team onboard.
- When overwhelmed, three big words: Utilize Your Team! Big problems become much smaller when we ask for help.



CAPITAL CITY PUBLIC CHARTER SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Collaboration with Audubon Naturalist Society for weekly Salad Science lessons integrated with the pre-K expedition on gardening. In addition to strong lessons related to plants and animals, students created journals to document the growth of lettuce in the garden – work that is often a significant lift for this age group. Cerissa Brown, pre-K lead teacher stated, “We HAVE to have this again next year. This is amazing.”
- Strengthened recycling and started composting programs. Waste audit was completed in June 2016, and helped provide clear next steps for the school in terms of improving how waste is managed.
- Taking a close look at Next Generation Science Standards (NGSS) through the lens of environmental literacy has been instrumental as Capital City goes through the process of transitioning to NGSS in the 2016-17 school year.

ABOUT THE SCHOOL

Capital City Public Charter School (CCPCS) is located in the Manor Park neighborhood of Ward 4. It is in a large open building, surrounded by gardens, that became LEED Gold certified in October 2015, and was named a US Green Ribbon School in 2016. There are already robust environmental programs in place, including regular adventure and gardening activities. The Lower School (grades pre-K 3 through 4) is considered to be one of the most racially diverse in the District. The population of the school is 35 percent black, 35 percent Hispanic, 19 percent white, 2 percent Asian, and 8 percent multiracial. Thirty-three percent of students are English language learners, and 7 percent of students receive special education services.

CCPCS is an Expeditionary Learning school, and students in grades pre-K 3 through 12 participate in two semester-long expeditions in which students participate in fieldwork, meet with experts, and create authentic high-quality products. Topics range from gardening to birds, from markets to geology. Students may produce products such as books, art installations and short films, sharing these products with a larger audience through in-person and technological outreach.



“The Environmental Literacy Leadership Cadre has helped to facilitate deeper work around not only curriculum, but best practices in our school. It has been amazing to work with educators in multiple grade levels, as well as our Environmental Literacy Fellow, to help bring lasting change to Capital City.”

– Elizabeth McNamee, grade 4 teacher, Capital City PCS

ENVIRONMENTAL LITERACY PROGRAM

During the 2015-16 school year, CCPCS expeditions began to be guided by NGSS that focus on the environment. That will continue to be the case moving forward. For example, pre-K students learn about the purpose of markets, food preservation, and composting in the school garden. Kindergarten students conduct fieldwork in Rock Creek Park and study birds living in the District. Lessons include crafting scientific drawings of birds, creating a public service announcement on how to protect birds from windows, and distributing bird seed packets to families and staff. Grade 1 students investigate bees and create beeswax candles to sell at local farmer's markets, while grade 2 students conduct an investigation in Rock Creek Park to conduct experiments around the properties of water, study water pollution, and create large-scale installations about water made from waste materials. In grade 3, students study ecosystems and animal adaptations, and grade 4 students learn about the geology of Rock Creek Park, visit the National Museum of Natural History, and create stop-motion films on geological processes and human impacts on these processes.

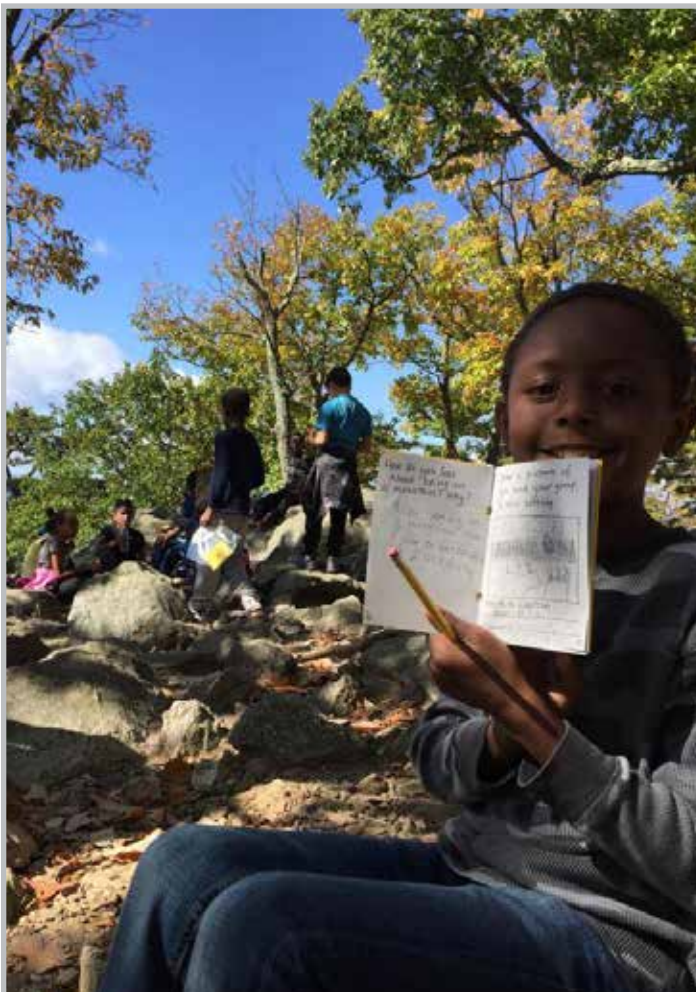


NEXT STEPS

- During summer 2016, teachers will continue to work on shifting science-based expeditions to meet NGSS in the 2016-17 school year, particularly in standards related to environmental literacy (Earth and Life Science). Staff members are working together across grade levels in all three campuses (Lower, Middle, and High School) to make sure there is vertical alignment between expeditions. NGSS is being used as a tool to help ensure this alignment. In the Lower School, the environmental literacy plan will be used to determine where there are NGSS holes in existing curriculum so that those gaps can be closed.
- During summer 2016, teachers will work with the operations team to improve existing recycling infrastructure at CCPCS on all three campuses. The Audubon Naturalist Society is working with a teacher at each campus to assist with recycling training for students and staff.
- In fall 2016, students in higher grades will help educate peers on proper recycling practices and put labels on recycling bins. Grade 5 Food Waste Expedition will be utilized as a vehicle for implementing a composting program at CCPCS.
- Vertical alignment of expeditions, with particular regard to how CCPCS uses Rock Creek Park as a classroom.

LESSONS LEARNED

- Open goal-oriented discussions with the operations team and other administrators before starting an environmental literacy program.
- Make sure that all grade-level teams are on board with and take advantage of opportunities that are available to them (see first lesson learned).
- Find allies immediately in other grade levels to help support this work and provide multiple voices/perspectives. In 2016, this happened, but very late in the project.





KIMBALL ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Grade 4 students went on an interpretive boat ride down the Anacostia River with Living Classrooms. Many of the students had never been on a boat before and learned all about their local watershed. Students left the river with a first-hand experience of what challenges their watershed faces and an appreciation for the living things it sustains.
- With the help from a new partnership with FoodPrints, Kimball's garden received a much needed revitalization. Students will now be able to plant and harvest vegetables in raised beds, which now include a timed drip irrigation system.
- Kimball is introducing environmental science into its S.T.E.A.M. (science, technology, engineering, art, and math) curriculum. Students will rotate through a term of science classes with an environmental lens, learning about the living things on the planet and the important task of taking care of them all.

ABOUT THE SCHOOL

Kimball Elementary School is a strong community of passionate teachers and curious students. Kimball is a 40/40 Focus School on the rise. While there is not always time for sciences at Kimball, teachers have found ways to include science lessons throughout the year. Kimball's students from pre-K through grade 5 consistently demonstrate their curiosity and eagerness to learn about the world around them. Kimball is located on Minnesota Avenue SE and abuts Fort Dupont, a national park. Kimball students love to take advantage of these grassy and wooded spaces in the middle of a busy city. In addition to the outdoors, students have grown increasingly interested in harvesting and cooking with nutritious foods straight from the school garden. Once a month, Kimball families and staff have the opportunity to "shop" together at the school's Joyful Market through Martha's Table. These markets bring the school community together while students show off their cooking skills and serve healthy free samples to classmates, families, and staff.



"Environmental literacy programming reaches Kimball scholars in ways we have not seen before. The students have the opportunity to experience subjects rather than just reading about them. From overnight trips to Hard Bargain Farm to boat trips on the Anacostia, our students experience parts of their local environment they do not encounter every day. The largest change that I have seen in students occurs at recess time outside. After environmental learning experiences, students show a much deeper curiosity in living things. Whether a fifth grader is contemplating the activities happening in a nearby moth's nest, or a 3-year-old is trying to find the best way to help ants bring objects back to their homes, the students are noticeably more curious and interested in the natural world around them."

— Peter Bailey, technology coordinator,
Kimball Elementary



ENVIRONMENTAL LITERACY PROGRAM

Kimball is at the beginning of its environmental literacy efforts. Through the FoodPrints program, Kimball students will begin learning about plants and the health benefits of eating nutritious snacks and meals. Students of all ages are able to shop at the school's monthly Joyful Markets, facilitated in part by the older students. Occasional trips to visit the nearby police horses capture the minds of preschool students as they learn how people and animals work together. Students in grades K-2 explore the world of insects through stories and lessons in pollination. Grade 3 students will have the opportunity to learn about the habitats of different woodland creatures, and experience these places when they visit Woodend Nature Sanctuary. Grade 4 students discover watersheds and the importance of keeping these vital environments clean and sustainable for both humans and animals. Finally, grade 5 students spend three days at Hard Bargain Farm Environmental Center, experiencing all different components of natural life and what it means to live symbiotically with the environment. Students in grades 3-5 also will learn natural science through an environmental lens during their S.T.E.A.M. specials course.



LESSONS LEARNED

- Speak to the teachers. General education teachers spend the most time with students and are often looking for new and exciting subjects to teach their students, or field trips to bring a lesson to life. Many teachers do not even realize how much they are already teaching that involves environmental science. The teachers will have the most knowledge on how to implement the program.
- Start small. It is overwhelming to attempt a full environmental education reform at once. It can also be disappointing depending on the physical barriers that are out of your control (e.g., old building, lack of available teaching time, limited funding). Instead, do what you can with what you have and keep an eye out for grants and free opportunities.
- Find staff members who have a passion for the environment. There are plenty of staff members in every building who would love to have a more positive impact on the planet. These staff members may not be traditional teachers, but can be a huge help. For example, the head custodian expressed a strong interest in taking students on a field trip to a recycling plant to show them why they should separate their waste. Unless you ask around, you will miss these opportunities and the important input from others.



2016 HIGHLIGHTS

- Formally launched a school-wide paper recycling program that it has made a huge impact thus far.
- Every student in grade 4 was able to go on a Potomac River boat trip with the Chesapeake Bay Foundation. This trip inspired the Watershed Club to write their proposal for the Caring for our Watersheds annual contest to have all students at KIPP schools be able to go on this trip.
- All students in grades 1-3 visited the Washington Youth Garden. Many of the students had never been to the US National Arboretum before and many students tasted veggies straight from the garden for the very first time.

ABOUT THE SCHOOL

Heights Academy is one of six elementary schools within the KIPP DC network of charter schools. Located in the historic southeast neighborhood of Anacostia, Heights Academy shares the Douglass Campus with three other KIPP schools. At Heights Academy, students in grades 1-4 focus on building community, achievement, and persistence in addition to their academic growth. Standing behind the belief that science education is an integral part of a rigorous elementary school education, Heights Academy offers a daily, 45-minute Next Generation Science Standards-aligned science program for all students. Students in grades 2-4 have a one-to-one Chromebook laptop where they engage in personalized learning programs such as Spatial-Temporal (ST) Math, iReady, Kahn Academy, and Accelerated Reader. Students also take specials classes in art, technology, physical education, and music. The school and network belief is that all students will rise to and through college.



“We believe in the need for access to science experiences for our students, and our school is fortunate to be able to partner with local organizations to help start a garden club, bring healthy cooking demonstrations to our campus, take students on field trips to see our local watershed and test river water quality via boat, and much more. We planted trees with our students and families this past fall and started the first-ever recycling program at Douglass Campus this spring, inspiring teachers, students, and families to reduce waste and recycle paper.” – Gaelan Gallagher, principal, KIPP DC Heights Academy

ENVIRONMENTAL LITERACY PROGRAM

Heights Academy's environmental programming occurs primarily within its daily grade-level science coursework. In addition to using FOSS (Full Option Science System) curriculum and the Next Generation Science Standards to explore science topics, students engage in grade-level environmental program projects. The grade 1 environmental project centers around the school's new classroom paper recycling program. Grade 1 students measure and compare recycled paper from each classroom, creating a bar graph on the lower school science bulletin board so the school can also analyze the data. In grade 2, students create "insect hotels" to learn about the needs and structures required to help insects reproduce and thrive, and observe insects in their natural habitats. Grade 3 students plant sunflowers and track their growth and study the role they play with pollinators, while also learning about plant life cycles, ecosystems and food webs, and how energy is created and transferred. In grade 4, students use principles of engineering design to create structures to attract pollinators using upcycled materials found on campus, then plant pollinating plants in the school garden. Students in grades 1-3 attend the Washington Youth Garden as their off-campus field experience, while grade 4 students go on a Potomac River boat trip with the Chesapeake Bay Foundation.

NEXT STEPS

The specific grade-level projects and field trips that started this year will continue next year for each new grade of students. The goal is to evolve the environmental literacy program as part of the school's full-time science program. Heights Academy will continue to use the programming from the pilot year and add on additional field experiences, school programming, grants, guests, curricula, and projects to enhance the current environmental literacy program. Heights Academy also will focus on growing the recycling program by reaching out to the other schools on its campus and asking them to join in the efforts.



LESSONS LEARNED

- Starting an environmental program at your school requires more than just you and your vision. You must have the support of your principal and administrative team, building maintenance team, and fellow teachers. Without a team and family approach, the visions you want to implement for your students and school community may not have lasting effects, or materialize at all.
- Explain your ideas clearly and explain how they will benefit your school community and the students. Establish buy-in, a shared purpose, or a shared belief among the people helping you with the arduous tasks that accompany starting programming or planning events. Let people know they are helping you start something amazing and important.
- Thank the people who help making things happen, especially if the people you enlist are normally behind the scenes (like a janitor, cafeteria staff, an administrative person, a business manager, or a parent that has volunteered). You need to make sure that your school and students know the role they played in making something happen and that these are celebrated for it. Ideas include a school-wide PowerPoint presentation and photo, morning announcements, student-made cards, a school newsletter, or even a bulletin board poster all show your appreciation as well.
- Do not try to do all of this yourself. To develop school-wide and grade-specific programming, recruiting fellow teachers to help can make a huge difference. By delegating tasks to others on your team, teachers begin to "own" different components of the programming which can bring it new life and detail. This also allows for your staff to invest in the program and develop ownership. You could extend this to families or other members of the school.





LANGDON ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Implementation of District of Columbia Public Schools' Science Cornerstones.
- Kindergarten project-based learning experience that explored the effects of the sun on the Earth's surface.
- Cafeteria organics recycling program with the Green Team.

ABOUT THE SCHOOL

Langdon Elementary School serves students in pre-K through grade 5 in a learning environment that promotes the acquisition of valuable knowledge and skills and serves as a foundation for each student to progress successfully through all educational levels. Langdon Elementary's curriculum consists of a traditional course of study with a focus on science, technology, engineering, art, and math (STEAM), which makes education and careers in the sciences more accessible for students. Langdon Elementary School also offers an Association Montessori International (AMI)-certified early childhood Montessori curriculum, a Tools of the Mind early childhood curriculum, and an early childhood autism program. Special subjects, such as art, music, library media services, health and physical education, and Spanish enrich Langdon students fully to be well-rounded citizens in our emerging global economy. Langdon Elementary fosters an ongoing exchange of ideas and resources for students, parents and educators to achieve our goals.



"The environmental literacy program has allowed Langdon students to see the impact humans have on the planet. Specifically, Langdon's cafeteria organics recycling program truly captured the amount of waste students were accumulating and gave students opportunities to problem solve for more efficient strategies. I knew we were on to something when a student said, 'Ms. O! We should be keeping track of how much milk we waste and how much money that is costing the school district.'"

— Lola Odukoya, instructional coach, Langdon Elementary



ENVIRONMENTAL LITERACY PROGRAM

The 2015-16 school year Environmental Literacy Program focused on two main goals: to increase science instruction for all students and connect students with how they impact the planet on which they live through the recycling of paper and cafeteria food (organics). Teachers created Next Generation Science Standards-aligned lessons and project-based learning experiences to engage students in rigorous and meaningful instruction. The STEAM coordinator facilitated the creation of the Green Team, a group of selected students whose purpose was to manage the recycling program and educate students on the importance of taking care of our planet. In addition to DCPS Science Cornerstones, all grades go on nature walks and participate in recycling and energy reduction activities. Students in grades 2-5 conduct exploration and observation lessons in the RiverSmart Schools outdoor classroom. Grade 5 students also attend the overnight meaningful watershed educational experience at Camp Fraser.



NEXT STEPS

Identify lead and direction of program due to staff changes. Current ideas include creating an edible garden, working with a food organization for a farm-to-table experience for the students, planting trees, creating a worm bin, and increasing the number of field experiences.

LESSONS LEARNED

- Identify an implementation team that will be able to stay with the program throughout the entire year.
- Include parents whenever possible to eliminate stress.
- Share results and success stories with the student body.
- Let students lead the goal-setting and implementation process.



LUDLOW-TAYLOR ELEMENTARY

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Creating awareness of the DC Environmental Literacy Framework within Ludlow-Taylor Elementary School. After meeting with individual teachers and grade-level teams to introduce the Environmental Literacy Framework and Next Generation Science Standards, teachers were open to incorporate the ideas into their classrooms.
- Providing teachers with new environmental education opportunities that were consistent with and complemented this effort. Students engaged with the FoodPrints program and the American shad restoration project.
- Exposing Ludlow-Taylor students to more field experiences. A major success this year was bringing 40 grade 4 students to the Anacostia River to release the shad fry they had raised from eggs in their classroom.

ABOUT THE SCHOOL

Ludlow-Taylor is a fast-growing District of Columbia Public Schools elementary school located in the Capitol Hill neighborhood. The school serves students from pre-K through grade 5. Students come from all socio-economic backgrounds; however, a large number of our students rely on the Free and Reduced-Price Meals program, thus qualifying the school as a Title 1 school. One of the very unique qualities that make Ludlow-Taylor special is the vast array of special education programs that are a part of the school. Currently, the school has a partnership with FoodPrints that exposes all students to hands-on lessons about healthy eating and gardening. Ludlow-Taylor's staff are highly recognized and decorated as some of the District's top educators, which is reflected in the students' academic accomplishments. It has a very involved parent community that is always ready to assist with whatever the school needs.



"I am excited to take what I have learned from being a part of the Environmental Literacy Leadership Cadre and put it into practice to create awareness and craft viable solutions to some of the environmental issues that plague Washington, DC, our country, and the planet."

— Alecia Francis, grade 4 teacher, Ludlow-Taylor Elementary





ENVIRONMENTAL LITERACY PROGRAM

The goal of the environmental literacy program at Ludlow-Taylor is to provide students with real-world experiences to help them understand and devise solutions to solve major environmental and sustainability challenges that Washington, DC faces. A major part of the initiative centers around the school garden, which partners with the FoodPrints and RiverSmart Schools programs. The school is currently renovating the playground, which will provide much needed space to expand its garden as well as provide a quality outdoor classroom for students. As students move throughout the grades, they will continue to build on the crucial lessons they have learned about growing plants, composting, and recycling, and their important relationship with the environment. Students will learn about ecosystems and how living things get what they need. Students will also investigate how adverse changes affect the environment and organisms that depend on it. Students will also learn about the wildlife habitats that depend on the Anacostia River and how they play an integral part in making the river thrive again. Visiting the Bladensburg Waterfront and the Anacostia River will allow students to see how erosion impacts these wildlife habitats.



NEXT STEPS

Teachers hope to get much needed inter-disciplinary professional development to fully incorporate environmental literacy with the work they are already doing. Additionally, we will continue discussions about how to make this work align with science standards so it remains meaningful and sustainable.



LESSONS LEARNED

- Create a team or committee to thoroughly make an action plan to implement your environmental literacy program. Make sure your principal is a part of your team!
- Reach out to other schools that have developed and implemented an environmental literacy program and ask for assistance.
- Make teachers comfortable and give them the opportunity to work at their own pace. And be supportive.
- Start small and keep your students in mind.



MALCOLM X ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Students truly enjoyed visiting the Washington Youth Garden and learning about garden basics, pollinators, and compost.
- Grade 4 students learned a lot through the American shad restoration project and are excited to lead the next group.
- In close collaboration with the Department of General Services, we have researched cafeteria waste patterns and established plans to start a successful recycling program next year.

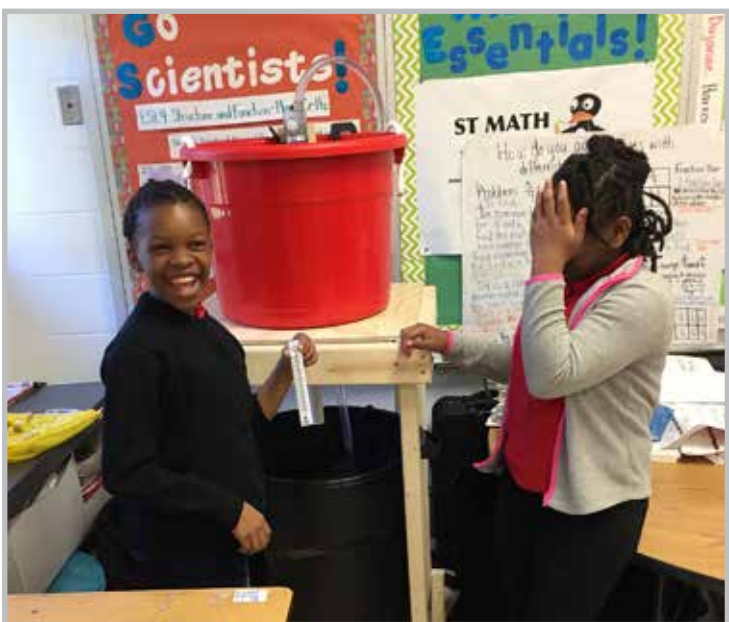
ABOUT THE SCHOOL

Malcolm X Elementary is located in the District's Ward 8 and serves 250 students from grades pre-K 3 through grade 5. Malcolm X is a designated priority school where the staff and community partners are working hard to bridge the gap for their students. The environmental literacy efforts in conjunction with the school garden coordinator have encouraged students to explore and learn from their local environment. The students now have a greenhouse garden area, recycling program, and STEM (science, technology, engineering, and math) programs in place to utilize for the upcoming school year.



“The environmental literacy program extended the reach and the scope of farm-to-cafeteria learning to reach every student at the school. Instead of the school garden only belonging to a few classes who chose to participate, each class was given the opportunity to learn about their local environment in unique ways.”

– Katie Harvey, school garden coordinator,
Malcolm X Elementary



ENVIRONMENTAL LITERACY PROGRAM

This year at Malcolm X the main goal of the Environmental Literacy Program was to expose students to their local environments and spark their interest in conservation. Students at Malcolm X learn about the basics of environmental systems, but the Environmental Literacy Program provided resources for the students to gain first-hand experiences. Students in grades K-3 visited the Washington Youth Garden and returned to school energized to work on their own school gardens. In addition, grade 4 students who participated in the American shad restoration project were eager to learn about the life cycles of the shad and how their own everyday actions affect the Anacostia River. Grade 5 students will set up the recycling program next year. Overall, the students were thrilled to leave the classroom and learn in an open environment that encouraged exploration and experimentation.

NEXT STEPS

Next year, Malcolm X is looking forward to focusing on its school garden and school recycling program. With the school's greenhouse completed and an irrigation system in the works, the garden should be fully producing in the fall. Now that teachers are familiar with resources available to them and types of lessons they can teach outside, students will be allowed more experiential hands-on STEM lessons. Next year, one of the teachers will be STEM-certified and is excited to use the garden as an outdoor learning area. The students who participated in the American shad restoration project are looking forward to leading the next class by providing them with advice and guidance. As grade 5 students, they also will lead the recycling program and litter clean up to help keep trash out of the Anacostia.

LESSONS LEARNED

- Start with a clear plan, but be flexible after students' interests evolve.
- Aim to have projects connect everyone (office staff, teachers, afterschool programs, parents) in order to have a successful change in school culture toward environmental issues.
- Take advantage of all the resources provided by outside organizations.



MUNDO VERDE BILINGUAL PUBLIC CHARTER SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Established five sustainability enduring understandings for graduating students.
- Grade 3 American shad restoration project and Anacostia River field trip.
- Partnered with REAL School Gardens to learn how to observe and train teachers to use the outdoors as a classroom and teaching tool.
- Conducted a school-wide compost competition.

ABOUT THE SCHOOL

The mission of Mundo Verde Bilingual Public Charter School is to foster high levels of academic achievement among a diverse group of students by preparing them to be successful and compassionate global stewards of their communities. At Mundo Verde, we seek to create a diverse, nurturing environment that fosters social and emotional development as well as academic excellence. Mundo Verde embraces an educational model known as Expeditionary Learning that has proved successful in one of Washington, DC's most sought-after public charter schools. Our curriculum is designed around "expeditions" – interactive, hands-on, long-term projects that spark curiosity, promote active learning, encourage teamwork, build character, and capitalize on children's innate spirit of adventure. By undertaking comprehensive studies of real-world issues in their expeditions, students learn to become stewards of their human and natural communities. We are the only school in the District to also focus on environmental sustainability and bilingual education.



"The shad project was a lot of fun; the students were so incredibly engaged! We will definitely do it again next year, but will incorporate it even further into our water expedition curriculum."

– David Levin, grade 3 teacher, Mundo Verde Bilingual PCS

ENVIRONMENTAL LITERACY PROGRAM

Mundo Verde Bilingual Public Charter School is the District's first public charter to be recognized as a US Green Ribbon School. The school is dedicated to educating young people to become global stewards in an increasingly complex world. At Mundo Verde, environmental sustainability is integrated into all aspects of the school's curriculum and operations. Mundo Verde students learn that natural, social, and economic systems are linked and interdependent. Students learn concepts, values, and behaviors that will last a lifetime. For example, by learning about plants, animals, and habitats, they build a foundation for understanding ecological systems. By learning about family and relationships, they begin to understand intergenerational responsibility. Mundo Verde encourages children's natural sense of adventure through outdoor exploration, physical activity, healthy food, and engagement with the local community. To ensure curriculum alignment with sustainability, Mundo Verde uses Shelburne Farms' "Big Ideas of Sustainability and Essential Questions" to guide the direction of expeditions. Curriculum connections also have been mapped with the DC Environmental Literacy Framework. New this year has been the creation of the following five sustainability enduring understandings that students will have upon graduating from the school:

- A positive connection with nature;
- An understanding that nature functions in cycles that maintain equilibrium;
- The perspective that all systems (natural and human) are interconnected across places and time;
- Appreciation for diversity and equity; and
- The mindset and skills needed to make a positive difference in their community, now and in the future.



NEXT STEPS

The school's environmental literacy plan will be used to work with teachers on revising their expeditions to better align with Mundo Verde's eco-literacy and sustainability learning standards and experiences. During summer professional development sessions, teachers will be introduced to the sustainability curriculum, vertical alignment and five sustainability enduring understandings upon graduation. Teachers also will receive training on how to use the outdoor spaces around the school as a teaching tool. Throughout the 2016-17 school year, the school's sustainability coordinator will assist teachers with revising their expedition plans to align with Mundo Verde's sustainability learning goals, and also consult, schedule, observe, and provide feedback to all teachers conducting outdoor lessons that use the schoolyard ecology as a teaching tool. Every teacher will be asked to lead and be observed teaching at least three outdoor lessons in the course of the 2016-17 school year.

LESSONS LEARNED

- It is more effective to have two school representatives than one. Schools that had two representatives reported feeling more confident in their ability to implement change at their school.
- Schedule weekly meetings with the Environmental Literacy Fellow. Have clear goals and products set for each meeting.
- Show teachers the connection between the new environmental literacy projects, fieldwork and standards and the work they are already doing in the classroom. Then encourage them to take it one step further by adding an experience in nature, or taking on a project that improves their community.





PEABODY ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Aligned authentic, engaging activities with Peabody Elementary School's existing curriculum, so the minimal changes the teachers needed to make resulted in great outcomes.
- Focused planning to make field trips more meaningful helped students have a better understanding of their surrounding environment and their impact on it.
- Worked with the school's Wellness Committee to bridge their agenda with environmental literacy resources.

ABOUT THE SCHOOL

Peabody Elementary School is purely an early childhood campus, with students only enrolled in grades pre-K 3, pre-K 4, and kindergarten. The pre-K grades follow the Creative Curriculum, which allows students to engage in various studies throughout the school year. Families are heavily involved in the school through volunteering and financial support. In the outdoor classroom, parents have worked to build many of the outdoor structures, including digging boxes for the young learners. Parents are also eager to volunteer for our FoodPrints classes, and many can be seen at any given class. They assist the teachers in working in the garden and making food with the children.



"I've seen how excited and engaged the children are to be learning about their environment during the school day. I'm so excited to utilize this plan and dig in next year!" – Annie Slattery, pre-K teacher, Peabody Elementary School



ENVIRONMENTAL LITERACY PROGRAM

Students in pre-K 3 complete a Creative Curriculum Trees Study in the fall and visit a farm to learn about animals and habitat. They also investigate pumpkin growth and pick pumpkins. Pre-K 4 students continue to investigate trees through a Creative Curriculum study and complete the Creative Curriculum Recycling Study. Students also visit the Washington Youth Garden and Anacostia Park. Kindergarten students engage in a Life Cycle study and go on visits to an apple orchard and the National Zoo. All classes have the opportunity to utilize the school's outdoor classroom (which includes digging boxes), FoodPrints lessons, worm composting, and Earth Day activities.

NEXT STEPS

Before the start of the school year, there will be a meeting with the Wellness Committee to establish goals, timeline for the school year, and implementation plan. Some engaging field trips have already been scheduled, as well as FoodPrints classes and new outdoor learning experiences. Since the pre-K 3 team has discussed how the environmental literacy plan and resources will guide learning in their classrooms, this grade will be a model for the other grade levels and support the teachers in the other grades to use the plan as much as they are able. Each child will engage in environmental field trips, experiences, and lessons throughout the school year.

LESSONS LEARNED

- Put in the effort to work with your staff to get buy in, otherwise the plan will fall apart. It took months to lay out a plan and employ it, and even then, certain things were not accomplished and needed to be pushed back to the next school year. Be ready to roll out the plan slowly.
- Collaborate not only with colleagues at your own school, but with many schools and organizations. Talking to people with similar and different experiences allows you to bounce around ideas and reflect on the learning and implementation process that will work best for your school.
- Tackle one goal at a time. In the beginning, there was concern that teachers would feel overwhelmed with even more activities and field trips. Consider starting with one grade level and extending the plan to all grades over time.





SCHOOL-WITHIN-SCHOOL @ GODING

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- With help from the FoodPrints program, School-Within-School @ Goding staff successfully initiated and followed through with paper recycling in all classrooms and common areas at our school building. That, along with cafeteria organic composting, has earned the school special recognition as recycling superstars in the District.
- The two new grade 4 School-Within-School teachers were able to take both of their classes on a boat trip on the Anacostia River. On the trip, they were able to discover the rich ecology of the river and understand the stresses on the river. Students also began the process of generating ideas for ways they can help support the health of the District's waterways.
- Grade 2 engaged in a year-long project to learn about the Chesapeake Bay Watershed as it is today and how it has evolved through its history. Topics included Powhatan Indians, watershed resources, ecology, and restoration efforts, including American shad restoration.
- Every student at School-Within-School was able to attend a monthly FoodPrints program in-school field trip. For the bulk of the day, kids worked in the garden, read books, wrote journal entries, and prepared healthy food, often from the school garden, that they enjoyed together at lunch.

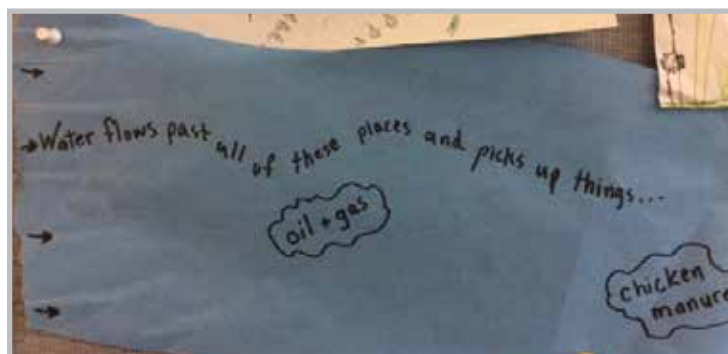
ABOUT THE SCHOOL

School-Within-School @ Goding is a District of Columbia Public Schools elementary school in the H Street corridor of Washington, DC. The school serves pre-K 3 through grade 5 students and also has two medically fragile classrooms and two autism inclusion classrooms. A Reggio Emilia-inspired school, School-Within-School incorporates project work and art languages into the curriculum at all levels. The school has a long history of environmental literacy and a commitment to green initiatives and outdoor experiences for adults and students.



"Being outside and learning about the world is natural for kids. It creates an immediate and positive effect on their motivation for learning."

— Alysia Scofield, grade 2 teacher, School-Within-School @ Goding





ENVIRONMENTAL LITERACY PROGRAM

At School-Within-School, students in the early childhood education (ECE) program are able to spend significant time outside on the school's playground and in its nature play space. They help raise monarch butterflies and hatch chickens. The ECE program also holds a yearly cherry blossom celebration in Stanton Park and goes on many other field trips to farms, gardens, and outdoor arts spaces. In grade 2, the students study the Chesapeake and Anacostia watersheds, while in grade 3, students raise silk worms. In grade 4, students learn about outdoor air quality and lead our recycling club. All of the elementary school classrooms participate in the FoodPrints program.

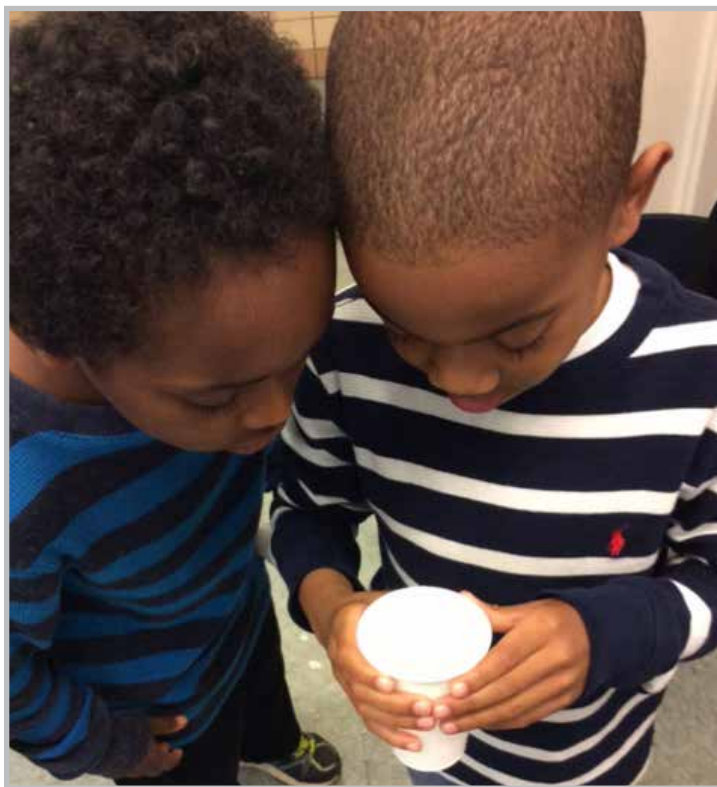
NEXT STEPS

Next year, School-Within-School will expand its recycling programs to include non-paper recycling and ECE classroom food waste composting. The school is adding grade 5, and is excited to connect that class with the Chesapeake Bay by sending them on an overnight meaningful watershed educational experience trip. Plans are currently underway for a student-created field guide of our school yard with the intention of submitting a student-created plan to Casey Trees to add more tree canopy to our school. School-Within-School also has begun teacher research into the possibility of submitting an application to become a US Department of Education Green Ribbon School in the next five years.

LESSONS LEARNED

The most important piece to implementing environmental literacy into School-Within-School was engaging and collaborating with administrators, teachers, staff and families that support these initiatives. Once projects begin, adults and children alike find such great joy and satisfaction in participating in outdoor experiences and environmental learning. The culture begins to shift and the integration of environmental projects, clubs, and initiatives becomes expected rather than feared.

It is also essential to partner with the many local organizations that are so supportive and helpful in engaging students in outdoor experiences and classroom environmental learning. Without the Anacostia Watershed Society, Washington Youth Garden, Aquatic Resources Education Center, US Botanic Garden, FoodPrints, OSSE, Living Classrooms, and many others, the environmental literacy programs at School-Within-School would not be possible.





SEATON ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- For the first time, grade 5 students participated in an overnight Chesapeake watershed experience. They spent three nights in the woods, where they had the opportunity to spend time in nature and learn about how our city is ecologically connected to the bay.
- Seaton Elementary School won the Alliance for a Healthier Generation's National Healthy Schools Gold Award, which celebrates Seaton's work with students that focuses on all aspects of wellness. A large part of the award came from Seaton's many programs that involve learning in the school garden during and after school.
- Four teachers participated in extensive professional development in the fall as a part of the RiverSmart Schools program, in which they learned how to incorporate more environmental education into the classroom. Teachers used what they learned to plan an Earth Day celebration, in which all students participated in activities such as a recycling relay and a water runoff demonstration. Students also made and tasted salads they made from vegetables harvested vegetables in the garden.

ABOUT THE SCHOOL

Seaton Elementary School is a pre-K through grade 5 school with just over 300 students in the Shaw neighborhood of Washington, DC. Seaton has a very diverse school community with students and teachers representing more than 30 countries. Many Seaton students speak English as a second language and the school has a large ESL program that particularly serves students speaking Spanish, Mandarin, and Amharic. Seaton has many interesting partnerships that focus on health, wellness, and the environment, including the Department of Energy and Environment's RiverSmart Schools program, SweetGreen in Schools, YMCA Before Care, DC Scores, Girls on the Run, CanoeMobile, Old City Farm, and more. Seaton has a large outdoor space with a big garden, soccer field, two playgrounds, and a large asphalt area with basketball hoops and running space. The school is working with the RiverSmart Schools program to make the school more "green" with permeable pavement, water catchment, and more garden space.



"Seeing kids make connections between the cafeteria and classrooms and the garden makes it all worth it. One of my students ate spinach at lunch because he said now that he helped to grow some in the garden, he knows that it tastes good."

— Sarah McLaughlin, grades 3-5 special education teacher, Seaton Elementary School





ENVIRONMENTAL LITERACY PROGRAM

Seaton Elementary has implemented environmental literacy largely through its many partners and programs. Seaton used the Common Core Science Standards along with the DC Environmental Literacy Framework to come up with a plan that works best for its school. Each year, students focus on specific themes such as sun's energy, wildlife habitats, or the water cycle. Along with those themes, students complete projects in the garden and participate in a field trip that brings to life what they are learning in the classroom. Each grade is responsible for caring for a different aspect of the garden, such as the compost pile, the pollinator garden, and the wetland area. Individual grade activities are complemented by school-wide events such as Earth Day, Growing Healthy Schools Month, and our Wellness Fair. The idea is that by graduation, students have a holistic view of how humans are connected to and responsible for being ecologically responsible citizens.

NEXT STEPS

Next school year, Seaton Elementary plans to continue to work with its partners and field trip connections to implement the same environmental education programming but with more classroom-to-field trip fluidity. Seaton has a training planned for all teachers at the beginning of the school year to get everyone on the same page. The school also is working with its partners to plan trips at meaningful points in the year for students so that trips align with work they are doing in the classrooms. Seaton hopes to expand its after school gardening club to include more students and families, encouraging more weekly involvement in garden care. Seaton hopes that the more teachers become comfortable with using the school's outdoor space, the more that they will use it during class time.



LESSONS LEARNED

- Start small! One little garden bed is plenty to teach all sorts of lessons and activities.
- Most things are free. With some work on Craigslist and with parent help, you can procure most gardening supplies that you need for free.
- Field trips! Field trips are amazing and provide meaningful experiences for kids. Try to get as much information as possible about what will happen on the trip ahead of time, so that you can provide pre-learning activities for the kids. The information on the trip will stick better if it's not the first time students are exposed to it.



TYLER ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Tyler Elementary launched a paper and cardboard recycling program with an Earth Day Recycling Box-decorating Contest. Each class participated by decorating a box to use as their paper-recycling container. Winners received parfaits made with local produce.
- Taking inventory of current environmental topics taught and field trips taken created space for teachers to discuss teaching practices and determine what environmental topics must be added to create a vertically aligned environmental literacy curriculum.
- For the first time, Tyler Elementary offered FoodPrints programming for all classes, which integrated gardening, cooking, and nutrition education into the curriculum and greatly increased student ownership of the school garden.

ABOUT THE SCHOOL

Tyler Elementary School, part of District of Columbia Public Schools, is located in Ward 6 near Eastern Market and is home to more than 500 Tyler Tigers from grades pre-K 3 to grade 5. Tyler's student population is composed of 76 percent black, 12 percent white, and 10 percent Latino or Hispanic. Tyler is a Title 1 school with 99 percent of students eligible to receive free or reduced-price lunch. The school offers three programs: Spanish Dual Language, Creative Arts, and Special Education. Special subjects include music, physical education, health, world language, and media.



“While we did some amazing things at Tyler this year, what meant the most to me was when I heard our students teaching others ‘to wait to pick that veggie until it was ready’ or ‘to put that paper in the recycling receptacle, not the garbage.’ They learned and understood that the choices they make have an impact on them and our planet. I have no doubt, with the continuation of this environmental literacy program, students’ knowledge will increase and they will become the advocates to create the greatest impact.”

– Victoria Willis, grade 1 teacher, Tyler Elementary



ENVIRONMENTAL LITERACY PROGRAM

Tyler is in the beginning phases of developing an environmental literacy program. One major project for the school includes recycling paper and cardboard in all classrooms and school areas. If students are taught beginning in pre-K 3 about the importance of reducing, reusing, and recycling paper, they will become strong examples of stewards of the environment by grade 5. As teachers work to increase, collaborate, and vertically align what environmental topics are being taught within each grade level, students will gain necessary knowledge about all areas of environmental literacy by the time they leave elementary school. One of the school's goals is to provide teachers with the resources, materials, organizations, programs, and field trips to effectively teach in a way that is meaningful to students. FoodPrints is one program that has been successful in helping Tyler students understand the importance of taking care of the environment.

NEXT STEPS

Next year at Tyler, there will be one common environmental school goal: recycling paper and cardboard. Before school starts, the Department of General Services will offer professional development for teaching students how to recycle and why recycling is important for the environment. There will be new recycling bins in every classroom. Large recycling bins also will be located at the end of the hall on each floor for easy access. Bilingual signage will be created and posted on the recycling receptacles, so all students and adults will know what goes in each receptacle. Individual grade levels will continue to think about, plan and develop environmental lessons that fit with their units and areas of studies. This also will provide purpose and meaning behind grade-level field trips and eliminate overlaps or gaps between grade levels. FoodPrints will continue at Tyler next year, with an effort to have all classes participate. A greater focus will be made to involve teachers in the planning and enlist at least two parent volunteers in each class.

LESSONS LEARNED

- Personal desire and commitment is essential. It will be time consuming, but it's important.
- Create a team to help. Teachers, administrators, and parents can be great supports.
- Build on the strengths of your teachers and address the weaknesses step by step.
- Be patient. The little changes will eventually make a huge difference.



VAN NESS ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- Office of the State Superintendent of Education School Garden Grant recipient – \$10,000 to develop a school garden for the 2016-17 school year.
- Recognition by the Department of General Services: *DCPS Recycle Right! Competition* Honorable Mention Award and *DCPS Recycles!* Honor Roll Award.
- First school in DCPS to successfully implement both classroom recycling and organic composting programs.
- Chesapeake Bay Trust Grant recipient – \$1,600 to implement professional development for teachers about the watershed.
- Pre-K 4 classes visited the US Botanic Gardens where students participated in hands-on activities about seeds, created seed balls, and toured the gardens.

ABOUT THE SCHOOL

Van Ness Elementary is located in the heart of Southeast Washington, DC, and reflects the revitalization of the Navy Yard community. Van Ness opened in the 2015-16 school year and is still in the midst of renovating its infrastructure to be completed by August 2016. The school currently serves students in pre-K 3 through kindergarten. Located minutes away from the banks of the Potomac River and the Anacostia Riverfront community, the school can address environmental issues, the importance of stewardship, restoring the Potomac River, and the role of the riverfront to local community development. This combination of urban renewal and environmental initiatives in the community presents an opportunity for Van Ness to design a unique school curriculum that models and engages with environmental initiatives in the surrounding neighborhood.



“Initially, I was against the idea of recycling in a space with limited facilities ... but throughout the process of trials and accomplishments, I must say, recycling works! Our teacher and maintenance collaboration is so much better. It has drawn us together.” – Paul Mullings, building foreman, Van Ness Elementary



ENVIRONMENTAL LITERACY PROGRAM

Improving environmental literacy among students is a key priority at Van Ness; as such, it is a key part of the curriculum. The school created a “Green Team” comprised of teachers, parents, the school nurse, administrative staff, maintenance staff and nonprofit organizations. The school garden committee plans and develops school-wide initiatives related to classroom recycling, organic composting, and the school garden. Environmental literacy activities included a whole school recycling presentation and recycling truck touch with the SWEEP Jr. program of the Department of Public Works; monthly Eating the Rainbow program by Revolution Foods; field trip to the US Botanic Garden with FoodPrints; and the Pennies for Otters initiative to support Niko the river otter at the National Zoo.

As the school continues to add a grade level to the student body each year, the development of the school garden will play a vital role with environmental literacy. Community partnerships will provide support for field trips across the curriculum to include art, music, social studies, math, literacy, and social development. Independent tasks will include recycling, composting, watering, seeding, weeding, going on scavenger hunts, observing habitats, digging in designated areas, sketching, and journaling.

NEXT STEPS

Looking ahead, the new school garden will be inspired by the ecology and ecosystems that exist in the Navy Yard community. The new outdoor space will inspire students to create murals and poetry about plants, flowers, or insects; read garden books in the garden; have book drives to increase garden related books in the school library; and participate in cooking demos, nutrition lessons, and lunchtime in the garden. Students also will investigate the connections between the garden and watershed issues, water conservation, and river clean up. In addition to the outdoor classroom, there will be an effort to improve environmental literacy of school faculty with professional development opportunities.

LESSONS LEARNED

- Community partnerships are vital to supporting environmental literacy among students and teachers.
- There are many grant opportunities available to support environmental literacy.
- Field trips are fun and excellent ways to reinforce environmental literacy.
- Professional development is crucial for knowledge and implementing lessons.





WATKINS ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- All grade levels continued to participate in the FoodPrints program. Students planted and harvested vegetables from our school garden. They used these fruits, vegetables, and herbs to prepare and enjoy nutritious meals. They also studied grade-level appropriate plant science and environmental science topics.
- Students in grade 2 completed a thorough study of pollinators with lessons overlapping with the classroom and FoodPrints lessons.
- Teachers of grades 3-5 previewed the environmental education content of the science assessment to help them focus on environmental education as they prepare their students for the new high-stakes test.
- Grade 1 students went on their first trip to Port Discovery.
- The Capitol Hill Cluster School Parent Teacher Association (CHCS PTA) has committed to make specific allocations for buses for field trips for all grade levels next year.

ABOUT THE SCHOOL

Watkins Elementary is located near the corner of 12th Street and Pennsylvania Avenue SE, in the Capitol Hill neighborhood. The building is surrounded by school gardens, tended by volunteers under the guidance of a master gardener. Watkins is a grades 1-5 school that is part of the Capitol Hill Cluster, which also includes Peabody Early Childhood Campus and Stuart-Hobson Middle School. Approximately 500 students attend Watkins. Students have been lucky to participate in the FoodPrints program since it was started in 2009. Watkins has a beautiful teaching kitchen, which will be preserved as the school undergoes renovation during the 2016-17 school year. The CHCS PTA supports school programs through its many fundraising efforts including the Capitol Hill Classic.



“It is so rewarding to see students expressing excitement and curiosity as they interact with the world around them. It inspires hope to know that students are developing more of a connection to the world around them and are developing a sense of stewardship, starting with their local schoolyard and extending out into our city and watershed.”

– Sashaum Deprez, grade 2 math and science teacher, Watkins Elementary School





ENVIRONMENTAL LITERACY PROGRAM

Students at Watkins experience the greatest cohesion in their environmental education through their participation in the FoodPrints program. Through this program, students progress through a series of lessons centered around nutrition and gardening. In grade 1, the focus is on learning about plant parts. Grade 2 progresses to learning more about plant parts with the addition of pollinators and an introduction to photosynthesis. In grade 3, the focus shifts to how food choices affect nutrition, while students in grade 4 dive deeper into plant science and return to the concept of photosynthesis along with studying decomposition and composting. Grade 5 students study the origins of different foods and also incorporate more math into their cooking and gardening. In addition to the series of lessons in FoodPrints, grades 1-2 students study differences between plants and animals in their classrooms and through field experiences such as trips to the zoo and the US Botanic Gardens. Grades 3-5 students spend one day out of the week in the science lab and also participate in activities such as raising and releasing ladybug larvae, Debris Day at Kingman Island, and science fair.

NEXT STEPS

Next year, Watkins teachers plan to tap into some of the experiences and resources that were offered this year, but were not able to utilize. Grade 4 teachers will raise and release shad and go on the Anacostia River trip, and grade 5 students will hopefully go on an overnight Meaningful Watershed Experience. Grades 1-2 students will have additional science experiences through Project Lead the Way. Fortunately, although the school will be in a swing space next year at Eliot-Hine Middle School, Watkins students will be able to continue with the FoodPrints program on a more limited scale. When students return to the Watkins building in the 2017-18 school year, the plan is to get the recycling program off to a strong start.

LESSONS LEARNED

- Try to have at least two people on an environmental literacy team.
- Engage the Environmental Literacy Fellow to assist with scheduling field trips.
- Participate in monthly Environmental Literacy Leadership Cadre meetings to keep focused and energized and to learn about additional environmental education opportunities.



MAURY ELEMENTARY SCHOOL

ENVIRONMENTAL LITERACY SNAPSHOT

2016 HIGHLIGHTS

- For the second year, all grade 3 students took part in the DC Beekeepers Junior Beekeeping Program, an eight-week unit on bees, the environment, pollination, and plant life.
- In partnership with the Anacostia Watershed Society, students in grades 1 and 3 had in-class lessons on their watershed and ways to protect it through the Rice Rangers and Junior Rice Rangers program. Grade 1 students learned about various native plants and took a pontoon boat trip on the Anacostia River. Grade 3 students grew native rice plants in their classroom and then planted them in the local wetlands.
- Maury Elementary students are stewards of lunchroom waste. All grade levels K-5 fully understand and implement recycling, composting, and trash at the end of the lunch period. Students help facilitate this process. In addition, Maury partners with the Department of General Services to provide and implement a waste reduction plan at the Maury STEM (science, technology, engineering, and math) Expo each year.

ABOUT THE SCHOOL

Maury Elementary School is a small, community-based school that offers students a personalized learning environment. Through work and in play, students discover their potential, embracing diversity and benefiting from strong relationships with staff, parents and volunteers. Maury is committed to providing inquiry-based learning experiences, arts enrichment and academic programs that enhance students' growth and development, inspiring a passion for learning and self-empowerment and promoting high achievement.



“Our school had many pieces that were exceptional when it came to environmental education. However, we had never tracked what this looked like at each grade level. Creating an Environmental Literacy Plan for our school allowed us to step back and truly look what we were doing well, where we had gaps and what we could do to ensure that all grade levels had meaningful environmental program. It was also helpful to work with teachers at other schools who were going through the same process. We learned from one another to provide the best programs for our students and ultimately make our schools great places for environmental education.”

– Vanessa Ford, Think Tank facilitator/STEM coordinator, Maury Elementary School



ENVIRONMENTAL LITERACY PROGRAM

Maury Elementary School students focus on environmental literacy in a variety of ways. Early childhood classes study flowers, water and buildings, always asking great questions and exploring the natural world to find answer. Kindergarten through grade 5 students partner with local organizations. Kindergarten and grade 2 students work with the Washington Youth Garden, grades 1 and 3 students with the Anacostia Watershed Society, and grade 4 students with Living Classrooms. Field experience for Maury students culminates in grade 5 with a three-day, two-night trip to Camp Frasier. In addition to partnerships, students focus on solving real-world environmental programs in the school's STEM program, Think Tank. From learning about and creating solar ovens to designing ways to clean up oil spills, students at Maury strengthen their problem solving skills through knowledge of the environment.

NEXT STEPS

Maury Elementary is always looking for ways to enrich its environmental program. In the coming year, the school plans to utilize the environmental literacy plan to identify gaps in learning and find ways to teach more content through the lens of the environment. Suggested programming includes restarting a Green Team to focus on the outdoor classroom, utilizing grow lights and the Tower Garden to grow throughout the year, and providing teachers and custodial team with training around the importance of proper recycling.

LESSONS LEARNED

- The Green Team should consist of multiple teachers. While it is important to have a lead adult in charge of creating and scheduling student work, having multiple adults trained, invested, and involved will help ensure that any program is fully implemented.
- Gardens are an amazing tool for learning, but they do take a lot of planning and upkeep. Have a team of teachers, students, staff, parents and/or community members take part in the planning, planting and maintaining gardens. Look for support from local organizations.
- Partner with experts. Washington, DC, has a wealth of experts in various areas in the field of environmental literacy. Reach out to them and see what programs they have for students. From assemblies to field experiences, some of our richest resources are in partner organizations.



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District of Columbia
Office of the State Superintendent of Education

810 First Street NE, Ninth Floor
Washington, DC 20002