

Subcommittee on Early Childhood, Elementary and Secondary Education
“Environmental Education: Teaching Our Children to Preserve Our Future”
April 22, 2008
Testimony of Karen Harris

Thank you, Chairman Kildee and Representative Sarbanes for holding this hearing about environmental education. I am Karen Harris and I am the principal of Pot Spring Elementary School in Baltimore County.

It’s been four years since I began my tenure as the principal at Pot Spring Elementary. Pot Spring is a diverse school in the central area of Baltimore County Maryland. We have over 570 students in grades Pre-K-5 who come from over 28 countries speaking 32 different languages. We have children from a wide range of economic backgrounds as well. Many of our students come from affluent families, however we also have a large population that come from government subsidized housing. The diversity of our school is one of the qualities that make it a great school but it is also one of the challenges in creating a high performing school for all students.

When I took over the school Pot Spring’s Maryland School Assessment (MSA) scores had been relatively flat for the three preceding years. The boys underperformed the girls on all subtests of MSA. The minority population also underperformed the non-minority students. Four years ago the instruction was very traditional. When I talk about traditional teaching, I mean, the majority of work was done through reading textbooks and completing worksheets with teacher directed lessons. There was very little engaging, authentic or differentiated instruction. I knew I had to make some changes so I began by

changing the culture. I also knew from experience at a previous school that we would be most successful with a school-wide instructional focus.

We began integrating the use of the environment as a context for learning all subjects several years ago as a way to create more engaging, rigorous and authentic lessons for our students, especially our most reluctant learners. My goal was to improve staff development (the teaching), improve the quality of work we ask the students to do (the learning), and improve student achievement (the results). All of the staff have received extensive training on how to incorporate the use of the outdoors to teach math, reading, science, art, language arts, etc. over the last three years. They are encouraged to expand their classroom by engaging the students in learning “Outside the Walls”. It is not unusual to see students applying their measurement skills to determine the area needed for a garden. Students can be seen writing descriptive essays at our outdoor learning classroom. Students apply their skills of writing to persuade by writing Baltimore County officials for permission to plant trees outside their classroom in order to have some shade on a sunny day. The students also write grants to the Chesapeake Bay Trust asking for funding for their environmental projects. During lunch time our fifth grade “Bay Ambassadors” can be found behind the school creating Reef Balls that will be lowered into the Chesapeake Bay to provide an artificial oyster reef. Some of our youngest students learn to count by tens as they group recycled bottle caps into packs of 100 for our family environmental night. Another example of how integrating environmental education into all subjects has changed our teaching and learning was through a second grade study of animals and their habitats. The teachers purposely involved the students in exploring animals and their habitats both in and outside of their

classroom. This was a natural extension to the BCPS STEM unit for second grade. One group of teachers became passionate about the plight of the Bluebird after attending the MAEOE conference and began to inspire the students to discover that our schoolyard was not attracting many native Maryland birds. The students decided to create a bluebird trail to attract bluebirds, which are native to the area. During science they studied bluebird habitats and in social studies they studied neighborhoods and communities. As part of language arts students wrote announcements that were read to the entire school about their project. Last spring at our *Earth Day, Every Day* celebration, our entire school worked to build Bluebird nesting boxes among other environmental activities. The boxes were installed around our school grounds this year. Each grade has been assigned a nesting box to monitor, collect the data and write about their findings. The teachers have been impressed with the quality of the work the students are producing. The students are motivated and see meaning to their learning—characteristics of high quality work. They are applying reading, writing and math skills to an authentic, real life project that they feel will improve our local environment. We are fortunate in Baltimore County to have curriculum already in place that makes integrating environmental education a natural fit. At Pot Spring we view it as how we do what we do, not an addition to our already full instructional plate.

Two years ago our school began exploring the qualifications necessary to become a Maryland Green School as a natural outgrowth of our integration of environmental education. This program was chosen for several reasons: it seemed like it would actively engage the teachers and the students in the learning process; there were opportunities for staff development that would benefit all teachers no matter what grade or subject they

taught; the project could be integrated into the BCPS curriculum at all grade levels; a variety of other schools were involved around the state creating a network for the teachers; there wasn't a cost to the school; the program would help our students become stewards for the environment; and we liked the idea of focusing on environmental science and thought most students would as well. We have documented all of the environmental projects our students have done for the past two years. Our hope is that we will be awarded Green School status this year.

Over the past four years at Pot Spring I have witnessed the school's climate and culture change. In addition there have been improvements in academic performance, behavior, and student achievement. Throughout the building students are collaborating with their classmates, applying teacher feedback to their writing and investigating real life problems in order to make our school and community environment a healthier place. Students are learning with a purpose and they know what that purpose is.

Our boys have made improvements by having the opportunity to learn through hands-on engaging work. In addition we have seen steady improvement in MSA scores for all of our sub groups. Pot Spring has received recognition from both the county and the state for continued and sustained improvement on MSA in 3rd-5th grade. Our office referrals have decreased and so have our out of school suspensions. It appears that students would much rather be in their classrooms than sitting in the office. Classroom instruction is so much more engaging and rigorous.

Our integration of environmental education has been successful for a variety of reasons. I have involved all stakeholders in the decision making process along the way. In

addition, I have encouraged my staff to teach differently and supported their efforts to change. The staff have participated in intensive and ongoing professional development on how to create integrated lessons. Teams of teachers have been encouraged to work together to plan integrated lessons. Our master schedule provides daily opportunities for each grade level to collaborate. Not only do teachers need time to work together and learn from each other, but they also need time to work with and learn from “experts” so opportunities have been provided for experienced experts in environmental education to help them on their journey.

Integrating the use of environmental science into all subjects has helped both our students and teachers make meaningful connections to their learning. When students understand a real life purpose and application for their learning, they tend to put more effort into their work.