

APRIL 2017 SUSTAINABILITY HERO



ERICA DEMICHELE Supervisor of Curriculum and Instruction Delran Township School District (Burlington County)

Erica DeMichele, the Delran Township School District K-12 Supervisor for Science, Technology, Engineering, Food and Consumer Science and Sustainability, is an energetic sustainability champion and leader of the Delran District Level Green Team. In 2016, Delran Township School District was awarded a New Jersey Governor's Environmental Excellence Award and earned one of four statewide spots in the NJ STEM Ecosystem Alliance.

Her childhood home sat in the middle of eight-acres of Rhode Island open-space woods which gave Erica a strong connection to nature. After college, Erica worked in three states for the Public Interest Research Group (PIRG), and eventually became a teacher and supervisor in New Jersey. Erica is responsible for evaluation and curriculum development for 200 teachers and 3,000 students in four schools. She was instrumental in securing stipends to compensate eight teachers in the Delran School District who are leading school green teams and supporting sustainability work.

Eternally optimistic, Erica is outgoing, a skilled listener and natural problem solver. Erica said, "I take pride in working hard and doing meaningful work. I'm lucky to be in a profession that allows me to make a difference in the lives of children." Erica received an Education for Sustainability Certificate with New Jersey Learns, a program of the [Cloud Institute for Sustainability Education](#). She explained, "Jaimie Cloud often used the analogy of Thelma and Louise driving full speed toward the edge of the Grand Canyon. That's similar to how we are facing sustainability problems. But there is an end to what the Earth can take and there is no such thing as "away." It's time to integrate our systems and put politics aside. We are interdependent on each other and on the natural systems. So rather than exceeding or ignoring the limits, we need to tap the power of limits."

Certified by Sustainable Jersey for Schools: At the district level, Erica manages the Sustainable Jersey for Schools certification applications. She said, "I'm proud of what we have accomplished with Sustainable Jersey for Schools; it's a rigorous program that should be used across the country. New Jersey should be proud."

All of the district schools are participating in the program and Delran High School was certified in 2016 with 165 points (read the [Delran High School Certification Report](#)) and Millbridge Elementary School was certified in 2015 with 155 points (read the [Millbridge Elementary School Certification Report](#)). Erica has secured over \$16,000 in Sustainable Jersey for Schools grants. The student green teams are impressive, with over 250 active participants at the four schools.



Transforming a used shipping container for students in Uganda: When Erica first arrived at her job with the Delran Township School District, she wondered how she would begin to complete a 40-foot-long shipping container project in the Tech Education Department. She soon learned that relationship building with teachers, students and the community was essential in transforming the shipping container into a fully stocked library sent to Aloi, Uganda as part of the [Homes of Living Hope Project](#).



The Aloi community needed a library and an educational resource center for 3,000 orphaned children in war-torn Uganda. Although daunting at first, Erica loved the challenge. She said, “The project changed me forever. I’m just one person, but I know that the ripple of connectedness to Aloi from Delran is meaningful. One hundred years from now, our individual ripples will have grown into a wave of positive change for the children at Hope Lives Aloi School and beyond.”

Delran High School students, teacher Pete Miles and Support Services retrofitted the inside of the container including 30-feet of built-in bookshelves, laminated flooring, six handmade computer tables with computers, 2,000 books and over 4,000 pounds of supplies. Erica also secured two recycled playgrounds through [Kids Around the World](#). After nine months of work, the container was shipped to Uganda where it continues to be used today. Erica commented, “One of my favorite days working in Delran was the day that we packed the container. We stacked, lifted, and navigated the 14,000 pounds of playground equipment and donated goods and had a blast putting each piece in its place before sealing the doors.”

Energy Savings Improvement Program and solar on all school buildings: Erica explained that the Delran Township School District benefits from the leadership of Superintendent Dr. Brian Brotschul and Business Administrator Dr. Chris Russo (NJ Business Administrator of the Year) who have spearheaded energy savings. The District is implementing a \$4.5 million capital improvement project through an Energy Savings Improvement Program (ESIP) which uses projected energy savings to fund efficiency upgrades. The project consists of more than a dozen energy conservation measures including new air conditioning units, improved lighting and roof-top solar panels at the district's four schools that will produce 75 percent of the district's electricity.



Students will have access to hands-on learning about energy efficiency through dashboards that will display energy usage information. The program is projected to reduce the district's energy costs by 32 percent, which equals nearly \$285,000 per year. The district also expects to secure \$325,000 in anticipated rebates and incentives from the New Jersey Clean Energy Program and the PJM Energy Efficiency Credit. These projects could save taxpayers up to \$5 million over the next 15 years which will free up funds for Delran Township schools.

Erica and the green teams are leading outreach efforts to support the program. In March 2017, the Delran Schools held an Electricity Challenge Week. The school with the most energy savings, calculated per square foot, will win the contest. Erica and the four school green teams educated over 300 parents and community members about how the team is incorporating learning about energy usage and behavior by tracking energy use. According to Erica, “Education and collaboration with the District Level Green Team, as well as the school green teams, has been a big success.” Review the [ESIP & Electricity Challenge Week Board of Ed Presentation](#) and watch the video of Erica leading the Board of Education presentation: [Delran Green Teams Electricity Challenge/ESIP 3/13/17](#).

Not your average summer camp, Delran STEAM UP: Erica co-wrote and received a PSE&G SPARK Grant in 2015 and 2016 that allowed her to plan a special four-week summer camp called [Delran Cubs STEAM Up Summer Camp](#), for students in Grades 2-6. Camper "engineers" participate in week-long explorations focused around designing a solution to a real-world problem, such as cleaning an oil spill, designing windmills to harness energy, enabling vertical farming or designing a futuristic mag-lev system. STEAM stands for Science, Technology, Engineering, Art and Math, a new focus for forward thinking New Jersey educators.



Participation in the Philadelphia Zoo's UNLESS Project: The Delran High School and Millbridge Elementary School Green Teams have been collaborating on a program created through the Philadelphia Zoo, called the [UNLESS Project](#) (as in "Unless someone like you cares a whole awful lot, nothing is going to get better. . ." from Dr. Seuss's story, *The Lorax*). Last year, the contest focused on the impact that the school's paper usage has on climate change and how that relates to the decline of Red Pandas. The goal of the contest was to demonstrate a measurable decrease in the amount of paper used at home, at school or in the community by changing behaviors. Millbridge Elementary earned second place, winning \$750 and Delran High School took third place, receiving \$250. The focus of this year's contest is to use less electricity. The class "Guardians" are making sure the lights are turned off when leaving the classroom and the projectors are off when not in use.



Education and past experience: Erica attended public schools in Rhode Island and went to the University of Rhode Island where she earned a Bachelor of Science in Zoology. After college, Erica worked as a campus organizer at Florida State University, working for the [Public Interest Research Group \(PIRG\)](#). At Florida PIRG, Erica's focus was the Save Our Everglades Campaign. During the election that fall, she worked with California PIRG where she helped organize the Campaign Finance Reform Initiative known as Proposition 212. Erica then served at New Jersey PIRG where she organized university students at Rutgers University in Camden around hunger and homelessness issues and education in the public schools.

Erica moved into education at the K-5 level through a position at the New Jersey Aquarium Summer Sea Camp. She then taught bilingual chemistry, biology and earth science at Camden High School for two years, obtaining a Teacher of Biology Standard Certificate from the New Jersey Department of Education through the Alternate Route Program. Erica worked for fourteen years as a teacher at Cherry Hill East High School where she wrote proposals for and was awarded two grants totaling \$7,500 that she used to repair the school's greenhouse and plant an organic garden with a team of students, teachers and community members. Erica obtained a Masters in Educational Leadership at Delaware Valley University in Pennsylvania, and attained a Principal and Supervisor of Curriculum Certificate.

What you may not know about Erica: Erica is an especially energetic person, so it makes perfect sense that she arrived in this world early, so early, that her father had to handle her surprise delivery at their home on Mother's Day 1974. Erica grew up in Rhode Island where she raised chickens, pigs and sheep. Her mother was a public school teacher for 30 years and was an inspiration to Erica in her professional life and through her gardening and cooking abilities. Erica admires her father for his openness to tackle anything. She said, "He said, 'Let's raise chickens.' And then we figured out how to do it together." Erica has an older brother, Major Kyle St. Jean who is serving his third tour of duty in Afghanistan with the United States Army Reserves. Erica and her husband Greg live in Haddonfield, New Jersey. They have two daughters, Brooke, age 6, and Emma, age 4.

In her free time, Erica enjoys cooking and entertaining, which has landed her the nickname 'Martha Stewart' by friends. She is an avid reader, making sure to read what the students are reading in class. Her most recent books include: [Oh Rats, The Story of Rats and People](#) by Albert Marrin and [Shipwreck at the Bottom of the World](#) by Jennifer Armstrong.