

SUSTAINABILITY HERO

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John Henry

STEAM & Sustainable Schools Specialist, LEED Green Associate
New Jersey School Boards Association (NJSBA)

John Henry is a STEAM (Science, Technology, Engineering, Arts and Mathematics) and Sustainable Schools Specialist at the [New Jersey School Boards Association](#) (NJSBA). His passion for sustainability shines through the training workshops he develops, the projects he manages and the time he spends with school districts to promote healthier schools at lower operating costs. He has devoted the last fifteen years to advancing sustainability across a broad range of educational venues from K-12 schools, colleges and universities, government agencies and state departments of education.

John values collaboration and is known for his determination and drive. These qualities most likely stem from his early focus on playing competitive sports. “Sustainability is not an option; it’s not an add on,” John explained. “The way we do business, in every area of education and schools--we need to be sustainable, and to take it one step more, we need to be regenerative. My goal is for all of the schools in New Jersey to include sustainable and regenerative thinking into their strategic plans, policies and curriculum. And, the good news is that kids love working on the sustainability actions,” he added.

With work experiences spanning the solar industry, high-school teaching, NASA curriculum development and more, he has also served as a board member for the [Alliance for New Jersey Environmental Education](#) and the [U.S. Green Building Council- New Jersey Chapter](#) and is currently serving as the co-chair for the [Green Schools Committee for the U.S. Green Building Council- NJ Chapter](#). He has LEED Green Associate accreditation from the [U.S. Green Building Council](#) and was an advisory member for the [New Jersey Council for Vocational and Technical Schools](#) for green collar career development. John was also part of the curriculum writing team for a National Fish and Wildlife Foundation grant, “Building Ecological Solutions to Coastal Community,” in which curriculum was developed for schools related to climate change education.

When asked why he focused his career in the educational arena, John said, “When children approach sustainability challenges, they are not bogged down by politics or how hard it is going to be to get it done. They understand that we are polluting the earth and we need to have solutions now. There is a purity to their approach. There are things we can do now and we need to come together to implement them. Sometimes adults find compromises, get stuck on the price tag or feel like it can’t be done. I’m inspired by students.”



Founding Partnership: Sustainable Jersey for Schools and the New Jersey School Boards Association: In 2013, leadership from Sustainable Jersey and NJSBA met to discuss the development of a voluntary sustainability certification program for schools. John was at the first meeting and, as a participant on volunteer task forces, helped to develop the program [Sustainable Jersey for Schools](#) that was launched on October 28, 2014. NJSBA invested \$225,000 to jumpstart the program from 2012 to 2014 and has been a program underwriter ever since, contributing \$50,000 annually towards program operations.

“Sustainable Jersey for Schools is a gamechanger,” John explained. “It provides a one-stop-place for New Jersey schools to go to learn about the sustainability actions they can take and the resources they need to move forward. After the launch of Sustainable Jersey for Schools, there was no longer any excuse for a school or district not to move forward. The program provides a comprehensive check list for success.”



For the past two years, John has organized NJSBA’s Sustainability Working Sessions that provide free training on the Sustainable Jersey for Schools program. He has managed the integration of Sustainable Jersey for Schools into the annual NJSBA Workshop since the program’s launch. John serves as the co-chair of the Integrated Science, Technology, Engineering, Arts, and Math (iSTEAM) Taskforce and has helped to write four Sustainable Jersey for Schools actions including: [iSTEAM Planning & Implementation](#), [iSTEAM Strategic Plan Indicators/iSTEAM Policy](#), [iSTEAM Collaborative Units of Study](#) and [iSTEAM Professional Development Plan](#). John led the Sustainable Jersey for Schools webinar series *Beyond the Resolution* that focused on Sustainable Jersey for Schools actions that districts can do to support school applications. John is appreciative of the support he receives from NJSBA Executive Director Lawrence Feinsod, Ed.D., who serves as an ex-officio member of the Sustainable Jersey Board of Trustees, as well as from his directors Vince DeLucia and Patty Maillet for introducing him to NJSBA.

NJ Sustainable Schools Project: Before Sustainable Jersey for Schools was launched, John managed NJSBA’s New Jersey Sustainable Schools Project, a three-year pilot with eleven school districts. The project documented the processes the schools used to lower their operational costs and redirect those savings to other educational priorities. This program paved the way for Sustainable Jersey for Schools. John explained, “This program was a critical step in the evolution of NJSBA’s goal to provide resources and training to school leaders in the area of sustainability. The project highlighted steps that can be taken to improve a school’s operations in finance, buildings and grounds, curriculum, policy and other areas involved in the day-to-day and long-term operation of a school.”

NJSBA Sustainability Consulting Services and Board Member Training: To help schools reach their sustainability goals, John and NJSBA’s sustainability Subject Matter Experts work with schools to create a sustainability plan and achieve program certifications like that of Sustainable Jersey for Schools. John also offers training and services to help schools evaluate their relationship to STEAM education. John said, “I want schools to know that I am available to them. I love to sit at the table, review what has been done and present what is possible.” NJSBA offers a variety of certification programs for school board members who want to take their training to a higher level. The [Certified Green Leader](#) certification provides school board members with a deeper understanding of sustainability and the [I-STEAM Leader](#) certification increases their understanding of integrative STEAM education.



STEAM Tank Challenge: John was instrumental in designing and developing the [STEAM Tank Challenge](#) that is created and sponsored by NJSBA and the U.S. Army. The STEAM Tank Challenge encourages students to explore the different areas of STEAM by pitting student teams against each other in a contest modeled after the “Shark Tank” television show. “For our students to be successful in the technical and related fields, they must be exposed to learning environments that allow them to be creative and use the design process, critical-thinking and problem-solving skills while incorporating innovative and entrepreneurial thinking,” John explained. “The creativity of the student projects amazed us. In the first year that STEAM Tank was introduced, there were 32 submissions, with 17 teams selected to present their ideas and inventions at Workshop. The number jumped in 2017. There were 410 submissions and 90 teams are advancing to the finals at NJSBA workshop after regional competitions.” On October 23 and 24, 2018, the 90 finalists will

compete in the I-STEAM Green Command Center on the exhibit floor at [Workshop 2018](#). Winners will be announced at the [New Jersey Education Association Convention](#) in November 2018.

New Jersey Green Program of Study Pilot: John managed the last two years of a five-year pilot project, [the New Jersey Green Program of Study for Sustainable Design, Green Construction and Sustainable Energy](#). It was an innovative partnership among [New Jersey Department of Education](#), [New Jersey Council for Vocational and Technical Schools](#), public schools, governmental bodies and businesses that developed a statewide technical education program for emerging “green” careers. It was the first time a career and technical education program in New Jersey had been developed on a statewide level to meet local and regional workforce needs. In recognition of this work, NJSBA and the New Jersey Department of Education received a Best Practices in Sustainable Education award from the U.S. Green Building Council-New Jersey Chapter in late 2015.



Montclair State University, Woodbury High School and NASA: John has a Masters in Industrial Studies and Technology Education from Montclair State University. While he was a student, he applied for, and received, a two-year research and development grant from the U.S. Department of Energy and began his career teaching energy and power courses at Montclair State University. John spent 14 years as a classroom teacher. He coordinated an electric vehicle program at Woodbury High School and also co-authored, and received, a National Aeronautics and Space Administration (NASA) Explorer Schools grant that resulted in Woodbury High School receiving the designation as the only NASA Explorer School in New Jersey at the time.

After receiving the grant, John was selected as a [NASA Einstein Fellow](#) and served at the Office of Education of NASA Headquarters located in Washington DC. He was on the National Selection Committee for [NASA Explorer Schools](#) and assisted with the development of the educational components for the History of Winter, a NASA Explorer School content workshop. He served on the NASA Explorer Schools Planning Team at NASA’s Wallops Flight Facility for the Student Experiment Module Balloon (SEM-B) and the FREEspace sounding rocket student experiment program. He was a committee member for the development of habitat curriculum for Astronaut Barbara Morgan for the STS 118 Space Shuttle flight. John said, “Working at NASA was an unbelievable experience. Helping to develop the first lesson plan to be taught in space and working with Astronaut Barbara Morgan was certainly a high point.”

John was one of the lead trainers for project InSTEP™ (Integrating Strategies and Technology in Education Practice), a U.S. Department of Education program featuring Problem Based Learning and STEM education. He participated in the [Teacher at Sea program with the National Oceanic and Atmospheric Administration \(NOAA\)](#) on the Nancy Foster ship. And he spent many years working at the Educational Information and Resource Center, a state-created local education agency formed to serve school districts and municipalities as a resource and conduit to help them accomplish their goals. In 2013, he was hired by the NJSBA as the STEAM and Sustainable Schools Specialist.

What You May Not Know About John: John grew up and went to high school in Brick Township, New Jersey. He is one of three children. Sports defined his childhood; he played football, baseball and ice hockey in high school. He went on to play football at Montclair State University. In addition to his parents, his early mentors were his coaches who taught him to work hard and learn how to win and lose. He spent his summers and time out of school building houses and doing construction work, which contributed to his skill in industrial studies. He enjoys being outside-hiking, camping, going to the beach and spending time with his three children. He has two daughters, ages 22 and 19, and a son, age 20.

Words of Advice: John said, “You’re doing the right thing by focusing on sustainability. But if you want things to be different, it takes action. You can be a leader, a follower or a worker bee--there are many different roles but at the end of the day you need to be part of the change. You don’t have to do the work alone, just make sure you are taking action. Be in it.”