SUSTAINABILITY HERO



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Jennifer Carcich Supervisor of Curriculum & Sustainability Coordinator Unity Charter School, Morris County

A passionate educator with 25 years of teaching experience, Jennifer Carcich is the supervisor of curriculum and sustainability coordinator at <u>Unity Charter School</u>, a free public school open to all students from New Jersey. She has taught in urban, suburban, private, public and charter schools. Her love for the environment and education has distinguished her as a sustainability leader and motivating force for innovative, smart and impactful change in New Jersey. Under Jennifer's leadership, Unity Charter School has been certified with <u>Sustainable Jersey for Schools</u> since 2015 and has achieved silver-level certification in 2020 and 2021.

Jennifer is a 2019 <u>TransOptions</u> Outstanding Educator, the 2020 <u>Alliance for New Jersey Environmental Education</u> Educator of Excellence and a member of the <u>Morris Township Environmental Commission</u>. She currently is on the New Jersey Department of Education's subcommittee for identification of gifted and talented students, has been published in Educational Viewpoints Journal this spring and is an adjunct teacher at Kean University.

Endlessly curious and insatiable when it comes to her ongoing learning, Jennifer is always developing new ways to challenge her students. Providing young people with opportunities to learn in nature is essential to Jennifer's constructivist approach to education. She engages the broader community to create avenues for students to have access to society outside of the school.

She explained, "At Unity, I feel like I am part of something great. Education should change students' lives for the better. I believe it is the way to change society for the better. Through the day-to-day interactions with our youth, we craft the

citizens of tomorrow. The lessons we teach both with our words and our actions, profoundly impact the caliber of young adults we have graduating from our high schools. To facilitate students becoming engaged citizens, I strive to provide vigorous experiences both in and out of the classroom so the student can explore and invent solutions."

Sustainable Jersey for Schools Silver-Certified: Sustainability is the core mission of Unity Charter School and has been since the doors opened in 1998. The school has participated in Sustainable Jersey for Schools from the outset, certifiying at the bronze-level in 2015 and 2017. In 2020, Unity Charter achieved silver-level certification and Jennifer narrated the <u>Unity Charter certification acceptance video</u> for the virtual awards event. Unity Charter



School achieved silver-level certification again in 2021. For more information, read the <u>2021 Unity Charter School Certification Report</u>; visit the school's <u>website</u>, <u>Facebook page</u> and <u>Twitter</u>; and review the school's <u>District Sustainability Policy</u>. Jennifer leads the school's green team that consists of the executive director, two lower school teachers, members

of the in-house lunch staff and 30 students and their families. Jennifer is profiled in a recent New Jersey Public Charter Schools Association <u>video</u>.

Vegetarian, Zero-Waste Lunch Program: Unity Charter School has been a vegetarian school since it opened. The lunch program offers meals that are vegetarian, zero-waste, freshly-prepared and nutritionally balanced. "Our lunch program is unique in New Jersey and nationally," said Jennifer. "The meals are different than the typical school lunchroom

experience that often includes poor-quality food, short lunch periods and excessive packaging and waste."

The school lunch served at Unity is strictly vegetarian, with some vegan and gluten-free alternatives. It is organic and locally sourced whenever possible and the milk is hormone-free. In keeping with the zero-waste policy, the students eat together using reusable cups, plates, trays, utensils and cloth napkins. The lunch includes produce from the school garden and microgreens grown in the science lab. The school works with



five local farms to source seasonal foods to incorporate into the menu. The food is labeled so the students appreciate its origin. She added, "Our corn crop was great this year. For the past seven years, we have had the kids harvest, dry and shuck the corn grown in the garden. We then pop our own corn for the parents to try." Unity Charter School received a \$10,000 Sustainable Jersey for Schools grant funded by the New Jersey Education Association which they used to improve their community garden and add a pollinator garden. Lunch leftovers are composted and used as fertilizer in the school's teaching garden. The overall program offers valuable life-lessons in nutrition and healthy eating that will be a part of the students' lives moving forward. Unity Charter School received Sustainable Jersey for Schools certification points for this work with the actions: Healthy Food Choices Beyond the Cafeteria and Promote Locally Grown Foods.

Bicycle Wheel Dome with Hops: Jennifer shared, "We encourage Unity Charter students to continuously explore the possibilities of using natural and recycled materials to make art and create unique green spaces." A great example is the student-initiated bicycle wheel dome that is used as a quiet space and for growing hops. This unique work of art was made with a collection of upcycled bicycle wheels. Ranging in size and style, the wheels are bound together, creating a durable geodesic structure. The students planted hops which have grown around the dome. Hops are a climbing vine plant commonly used to brew beer but also have many additional uses.



Unity Charter School Partnership with Morris Township

Environmental Commission: Jennifer serves as a bridge for collaboration between Unity Charter School and the Morris Township Environmental Commission. In 2020, the school's collaboration with the Environmental Commission resulted in a Morris Township plastic bag ban ordinance. Volunteer families from the school green team collected data from local businesses to help inform the Township Committee's decision.

This winter, a team of eight graders at Unity Charter School researched electric vehicle adoption within the Morris Township and Morristown zip codes and presented their data and insights to the Environmental Commission at a Facebook Live event. The data revealed that Morris Township and Morristown have an annual electric vehicle growth rate of about 15 percent. Continuing at this rate, the municipality will register approximately 1,440 electric vehicles in the area by 2025, which is less than half of the number needed to meet New Jersey's statewide goal of 330,000 electric vehicles. A higher

local growth rate of more than 25 percent will be needed to reach that number. The students noted that the addition of an electric vehicle charging station would help with electric vehicle adoption. On February 17, 2021, the Morris Township Committee unanimously adopted an ordinance appropriating \$100,000 in the General Capital Improvement Fund to provide for the installation of electric vehicle charging stations at two municipal facilities. Jennifer said, "Unity believes excellence in education provides opportunities for students to develop self-confidence, social awareness and commitment

to global citizenship. The presentations to the environmental committee are a perfect example of how students are doing this." Unity Charter School received Sustainable Jersey for Schools certification points for this work under the action: <u>Civic & Stewardship Volunteer Initiatives</u>.

Monthly Field Trips for Each Class: Unity Charter School provides monthly field trip opportunities for the students. "We want students to have more autonomy in their learning. So, they have more time outside and out of the classroom," explained Jennifer. Field trip locations have included: Urban Garden in Morristown; BrookHallow Farm in Boonton; Cooper Grist Mill; Sandy Hook; Fosterfields Farm; Ocean Beach; Sea Camp at Cape May; Ringing Rocks in Pennsylvania and more. The students use every moment to engage with the outdoors while learning. Walking field trips are common, for example, a sixth-grade class traveled by foot to the Frelinghuysen Arboretum to observe and



learn about the plants that play a role in several of the novels they read throughout the school year.

Oak Tree Planting Project: Known for the value it brings to the surrounding ecosystem, the oak tree is a fast-growing species that provides shade, fights pollution, and controls erosion and storm water, in addition to its many other benefits. Jennifer is leading a campaign to create an oak tree nursery and implement an oak tree planting project in Morris Township. She is hoping the project will become a model for other communities. You can meet the Morris Township Environmental Commission members in person at the <u>2021 Morristown Festival on the Green</u> on October 3, 2021. Free wildflower seeds, reusable grocery bags and oak tree planting kits will be available.

Education and Career: Jennifer has a Bachelor's degree in Elementary Education and Teaching from Long Island University. She has two Master's degrees, one in Special Education and Teaching from Kean University and a Master's degree in Elementary Education and Teaching from Nova Southeastern University. Before coming to Unity Charter School, Jennifer was a teacher of general and special education at the elementary and middle school levels for the Bernards Township Board of Education and was a kindergarten teacher at Sacred Heart School in Jersey City.

More About Jennifer: Jennifer was born in New Jersey and comes from a large Italian family based in Kenilworth. "Although we didn't call it sustainability, my family composted, gardened and cooked large meals from scratch," she said. Due to a job transfer, her family moved to a farming community in Illinois where she attended first through eighth grade before returning to New Jersey for high school. Her early experiences camping, hiking, fishing and gardening set her on the path to viewing the world through the lens of sustainability. She is the first person in her family to graduate from college and traces her strong work ethic to her parents. Jennifer and her husband Chris live in Morris Township with their three children, ages 17, 14 and 12.

In her free time, Jennifer enjoys running and plogging. Plogging, a Swedish term, is the act of picking up litter along your running path. She said she is perfecting the ultimate plogging trash bag to bring on her runs.

Sustainable Jersey for Schools is thankful to sustainability heroes like Jennifer who work hard every day to unlock the potential of our young people and increase New Jersey's capacity for innovation by producing systems thinkers who will find better solutions to our most pressing problems moving forward.