



Sustainable Jersey for Schools Certification Report

This is the Sustainable Jersey for Schools Certification Report of Princeton High School (Mercer), a Sustainable Jersey for Schools bronze certified applicant.

Princeton High School (Mercer) was certified on August 20, 2018 with 150 points. Listed below is information regarding Princeton High School (Mercer)'s Sustainable Jersey for Schools efforts and materials associated with the applicant's certified actions.

Contact Information

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Actions Implemented

Each approved action and supporting documentation for which Princeton High School (Mercer) was approved for in 2018 appears below. Note: Standards for the actions below may have changed and the documentation listed may no longer satisfy requirements for that action. Additionally, points associated with actions prior to 2013 certifications may not be accurate.

Board Leadership & Planning

Professional Development for Sustainability

20 Points

🏅 Bronze Priority 🏅 Silver Priority School District

Program Summary: Professional Development Training for 20 District Teachers and

Administrators on 1/11 during a 3 hour half day training. During a Solar One training, teachers will have the opportunity to engage in hands-on activities, lesson planning, and discussion of best practices for program implementation. All GDL curriculum is aligned to Common Core and NGSS Standards. The lessons are hands-on, experiential activities that promote inquiry-based learning. Additionally, all of these lessons may serve as building blocks for cross-curricular projects. Solar One will provide in-depth training on the Energy Unit of the Green Design Lab curriculum during this training. Activities included conducting a classroom energy audit, making a sundial watch, constructing a magnet motor, experimenting with solar PV panels, and building a solar thermal oven. Last summer we also conducted a training on the new composting program for two hours with a rep from Central Jersey Waste. The Supervisor of Science, Garden Educators, Supervisor of Facilities, and the HS vice principal as well as others learned about best practices to implement the new composting program.

PDF: [PROFESSIONAL DEVELOPMENT FOR SUSTAINABILITY DOCUMENTATION](#)

WORD: [SOLAR ONE PD PARTICIPANTS](#)

WORD: [SOLAR ONE CURRICULUM DESCRIPTION](#)

WORD: [SOLAR ONE POST TRAINING RESOURCES](#)

District Sustainability Policy

10 Points

District

Program Summary: http://www.princetonk12.org/Board/Sustainability_Initiatives/ The PPS School Board passed a resolution entitled "Principles of Sustainability" in 2013. The purpose of the resolution was to set goals and expectations, and to create a framework for establishing environmentally-conscious behaviors throughout the district. The PPS Sustainability Policy is listed as a model for other schools to emulate in the "Spotlight" section of the Sustainable Jersey action item descriptions. This policy was created by members of the Princeton Green Schools Coalition, together with PTO members and school administrators, who all worked to champion passage of the resolution first by the Facilities Committee and ultimately by the entire School Board. After passage, the resolution was posted on the district website along with regular updates and email blasts about district sustainability initiatives from the PPS Communications Coordinator. The policy paved the way for subsequent acceptance and passage of the Resolution to Participate in the Sustainable Jersey for Schools certification process. See this link for current website posting (will be revised to reflect SJ certification updates before Sept 2017 school start). http://www.princetonk12.org/Board/Sustainability_Initiatives/

WORD: [DISTRICT SUSTAINABILITY POLICY DOCUMENTATION](#)

WORD: [DISTRICT SUSTAINABILITY POLICY DOCUMENTATION](#)

Food & Nutrition

Promote Locally Grown Foods

10 Points

School District

Program Summary: In regards to implementing locally grown foods into Princeton High School and the greater Princeton Public School community, various endeavors were attempted and successfully met. Primarily at Princeton High School, locally grown foods are provided by the courtesy of the United States Department of Defense’s “Fresh Fruit and Vegetable Program” where locally grown produce such as zucchini and squash are supplied. In doing so, Princeton High School is able to utilize these foods in the school lunch menu. For example, for the month of May, locally sourced mixed vegetables, side salads and side featured vegetables were all served during lunch. Furthermore, Mr. Paul Sample, Director of Food Services for Princeton Public Schools, implements various seasonal locally grown produce. In regards to the promotion of those unique vegetables, this year, five unique locally grown vegetables were featured (zucchini, yellow squash, bok choy, mushrooms, and spinach). Although these vegetables are served throughout the greater Princeton Educational District, many students are unaware that the foods are locally sourced and distributed through the Department of Defense. Thus, to successfully initiate the promotion of these foods, various infographic posters were created and implemented to successfully create outreach to students who were unaware of the location of their school lunch. Furthermore, the Princeton Education District’s actions to promote locally grown foods takes a local and hands on approach through a service called “Garden State on Your Plate”. In this program, students at the local middle school learn to cook and take advantage of locally sourced produce through hands on cooking courses. By doing this, students get to actively appreciate and understand the magnitude of consuming produce in a local, sustainable and healthful way. Through these initiatives, Princeton High School and Princeton Public Schools successfully and effectively creates an environment where the promotion of locally sourced produce allows for an educational and healthful enrichment for students and the community in regards to healthy eating.

PDF: [PROMOTE LOCALLY GROWN FOODS DOCUMENTATION](#)

IMAGE: [PROMOTE LOCALLY GROWN FOODS DOCUMENTATION](#)

IMAGE: [PROMOTE LOCALLY GROWN FOODS DOCUMENTATION](#)

PDF: [PROMOTE LOCALLY GROWN FOODS DOCUMENTATION](#)

School Gardens

10 Points

School

Program Summary: Our Garden was started in effort to renovate and add to a prevalent garden system at school. We focused on building a type of garden that did not already exist, a perennial garden ground bed. We built the garden in the side clearing of the school near the main entrance. Our garden is a perennial herb garden with lavender, thyme, rosemary, chives, tarragon and a few other herbs. This system serves as a prime example of soil nutrition through intercropping, so science classes including Biology 1, Biology Accel. Environmental Science 1, AP environmental science, and earth studies can run tests on the soil to determine the benefits of intercropping in farming procedures. The AP Biology class also performed the Plant Maze lab which helped students understand the importance of sunlight and its role in photosynthesis. Each student was made to grow a pea plant, and the plants were added to our school garden.

WORD: [SCHOOL GARDENS DOCUMENTATION](#)

IMAGE: [SCHOOL GARDEN ON SCHOOL WEBSITE](#)

WORD: [PLANT MAZE CHALLENGE - LEARNING ACTIVITY](#)

IMAGE: [SCHOOL GARDEN PHOTO 1](#)

IMAGE: [SCHOOL GARDEN PHOTO 2](#)

IMAGE: [SCHOOL GARDEN PHOTO 3](#)

Learning Environment

Student Participation in the Arts

10 Points

District

Program Summary: The arts are extremely important at Princeton. Every elementary school student is taking classes in music and visual arts and every middle and high school student has access to music and visual arts classes and high school students are demonstrating competency in at least one arts discipline by graduation. Please see the state reports for the Arts on page 40 for the HS and for the Middle School. **DISTRICT OVERVIEW:** Princeton Public Schools provides a comprehensive PreK-12 Curriculum which supports critical thinking and problem-solving. In today's ever-changing world, it is essential our children learn how to creatively attack challenges and persevere to find solutions. Throughout the grades, students will gain an understanding of the essential skills and concepts needed to build a strong foundation. Classroom instruction will support the diversity of our learning community and integrate technology to enhance 21st Century Skills. **DEPARTMENT PHILOSOPHY:** Active participation in an arts program is a critical component in every child's education. Arts programs enrich students' lives and provide a vehicle for them to communicate and express human emotion and ideas. In addition, the study of the arts prepares students to be successful in a twenty-first century world that demands innovative thinking and creativity in an increasingly competitive global society. We believe that all students are capable of growth in the arts and that there are skills and concepts inherent in the arts that cannot be taught in other disciplines. Participation in an arts program allows students to make connections across content areas and cultural boundaries. The New Jersey Core Curriculum Content Standards for Visual and Performing Arts document begins with the following mission statement:

WORD: [STUDENT PARTICIPATION IN THE ARTS DOCUMENTATION](#)

PDF: [DISTRICT PERFORMANCE REPORT](#)

Curriculum Mapping

20 Points

School District

Program Summary: The district uses Rubicon Atlas to map all curriculums using the Understanding By Design Framework. In 2007, Princeton began to place curriculum documents into electronic "maps" that are accessible to all of our teachers and administrators. These curriculum maps have created a mechanism to communicate content expectations for all teachers such that our district can gain consistency and coherence across all content areas. Teachers and supervisors use this tool, the Rubicon Atlas system, to design curriculum and instruction with attention to the progression of topics from year to year, as well as interdisciplinary projects at particular grade levels. The K-5 curriculum maps are organized into units with essential questions, enduring understandings, content, and skills. This format follows the Understanding by Design (UbD) approach to curriculum development. Its framework allows teachers to design their instruction with meaningful activities that lead to the desired learning outcomes as evidenced by assessments that reveal student understanding. At the beginning of the summer the superintendent and assistant superintendent provide a full day training to staff about how to write curriculum. Here is the description of the workshop "The intent of the workshop

is to create a common framework for the development of curriculum as well as a forum for sharing the diverse ideas and expertise of all those engaged in writing it. Participants will learn the format, components, and processes of constructing coherent curriculum using big ideas, essential questions, whereto, and the six facets of understanding. Together, participants will explore what these components look like for students, and consider Multiple Intelligences theory, project-based learning, and social emotional development to enhance student learning." The teacher are assigned various hours to work together to write. The supervisor checks the curriculum and provides feedback. It is then board approved and it becomes the district curriculum. We are on a five year cycle to review curriculum. The attachment is an example of the 100 different science curriculum units. Below is a sample of the framework we use.- Essential Questions: 1. What are the properties and characteristics of an ocean and its... Content and Academic Vocabulary: 1. Identify and locate the oceans of the world. (descending order of size:... Skills: Students will develop problem-solving, decision-making, and inquiry... Performance Tasks: Resources: Awesome Ocean Science – Cindy LittlefieldBill Nye’s Big Blue Ocean – Bill N... Enduring Understandings: 1. The ocean is a complex system that covers 2/3 of Earth's surface.2.... Learning Activities: Toss a globe ball around the room and mark on a tally sheet when their... Standards: NJ: 2009 CCCS: Standard 5: Science NJ: Grade 4 5.1 Science Practices 5.1... Ideas for Interdisciplinary Connections: The oceanography unit can be incorporated into various subject areas... Ideas for Differentiation The impact since 2007 when this has started is that rigorous curriculum has continued to be developed and improved upon by teachers and supervisors for the success of all students. http://curriculum.princetonk12.org/curriculum/Middle_School/ This link can be used to look through all the curriculum.

PDF: [CURRICULUM MAPPING DOCUMENTATION](#)

PDF: [SCIENCE CURRICULUM MAPPING DESCRIPTIONS](#)

Student & Community Outreach

Green Team

10 Points

 Bronze Required School District

Program Summary: The PPS District Green Team was officially commissioned by Supt. Cochrane (see document uploaded) for the 2015-16 year and met quarterly to establish a framework for coordinated action in pursuing SJ certification. Building on that foundation, in the 2016-17 year, individual green teams were added at each individual school (six total) with support grants from Sustainable Jersey. Designated representatives from each school served as liaisons to the the District Team in order to ensure coordinated action throughout the schools. This year, In addition to pursuing Bronze level certification actions, the district-wide thematic priority was improving compliance with sustainable waste practices. This involved a full, district wide composting program (with new hauler) along with education and training of students, teachers and maintenance workers. Waste audits were performed by students k-12 and by all k-5 elementary science lab teachers. See attachment for board approved teacher representatives from each school (Union Reps were Martha Friend and Paula Jakolew). Additional members of the District GreenTeam included the following: Steve Cochrane, Superintendent, Bonnie Lehet, Curriculum Supervisor, Stephanie Kennedy, Business Administrator, Gary Weisman, Facilities Manager, Edward Cohen, k-12 Science Supervisor, Kim McReynolds, Grants and Programs Specialist, Mia Sacks, liaison to Sustainable Princeton and the Municipal Green Team, Garden Educator, Priscilla Hayes and BOE representative, Patrick Sullivan. Parent/PTO reps from each school were Jenny Ludmer, Alexandra Bar Cohen, Sandy Moskowitz, Stephanie Chorney, Lisa Serieyssol and

Elizabeth Collier. Having made so much progress this year in improving waste practices, we plan to move next year to focus on energy and wellness. We will also focus on improving coordination and communication between schools and more comprehensive, timely documentation of our actions. We have received a pledge of greater support and involvement from the Facilities Committee in the coming year. **INDIVIDUAL SCHOOL GREEN TEAM SUMMARY:** Each school's green team accomplished the following: - setting up waste sorting stations at events (composting, recycling, landfill) and signage - same as above in cafeteria and classrooms -- new bins purchased with SJ grant funds. - color coding : bins and signage in cafeteria, classrooms and at events to facilitate sorting - signage has imagery or product samples to facilitate sorting - started a onsite composting program to create fertilizer needed for the school's vegetable garden, using compostable waste generated in the classrooms. - acquired and used sets of reusable plates and cups some events including all tastings organized by the garden specialist. - acquired and used - in larger events- paper products that can be composted (such as chinet) - Working toward zero waste school wide events. - created guidelines for 'green parties' in the classrooms, encouraging parents to donate or sew reusable tablecloths and pitchers to distribute water at parties, for instance - set up 'how to pack a green lunch' demonstration tables at family events with product samples and discount coupons. (For more details about each individual school's green team activities, please see the recent grant reports submitted to Sustainable Jersey.)

WORD: [GREEN TEAM DOCUMENTATION](#)

PDF: [GREEN TEAM FORMATION LETTER](#)

WORD: [GREEN TEAM ORIGINAL PRESS RELEASE FORMATION OF GREEN TEAMS 2015](#)

PDF: [INTERNAL JOB POSTING FOR GREEN TEAM](#)

WORD: [GREEN TEAM DOCUMENTATION](#)

Community Education & Outreach

10 Points

 Bronze Priority  Silver Priority School

Program Summary: Students from all the Princeton High School Environmental Science classes worked together from September through November to plan a number of measures designed to educate the community about sustainability. These plans were implemented after the winter break from mid-January through the end of March, 2018. Our Community Outreach and education project launched with a well-attended community discussion convened at the Princeton Public Library. We designed the agenda and areas of discussion to generate a maximum amount of engagement by the local residents who attended. *(For a sample of materials discussed, see attached documentation). Community members who participated were encouraged to create individual action plans to further generate engagement within their own circles. Another action we undertook was to engage the local business community on the issue of sustainability as they are one sector in our town lagging behind. We created brochures with sustainability tips that were either mailed, emailed or provided directly to more than 30 well-known local businesses. Our recommendations included ways to reduce water use, information about energy reduction programs and best practices, learning about state mandates, taking advantage of municipal support programs and sourcing products locally. We received almost uniformly positive feedback from local merchants who seemed more receptive to hearing this information from students than local government officials.

PDF: [BUSINESS OUTREACH PLANNING](#)

PDF: [GREEN TALK FLYER](#)

PDF: [BUSINESS OUTREACH PAMPHLET.PDF](#)

Green Fair

10 Points

School

Program Summary: On May 26th, 2018 from one to four in the afternoon at the Hinds Plaza we held a Green fair. Our aim is to spread knowledge on sustainability in order to promote change throughout our community. Most importantly, To teach people how simple changes in their daily lives can go a long way in sustaining our town. We organized with the municipal clerk, the Princeton Public library and Sustainable Princeton. Our participants included GenRenew, a startup Solar company, Sustainable Princeton, the New Jersey Clean Energy Program, the Princeton High School environmental club/community service group, Feeding Princeton- a high school club, Ashtag- an app committed to saving our towns emerald ash borer, Princeton University's Trash ARTStravaganza, Terracycle, the Princeton Public Library, and a local band named Rebel Alliance. Our booths included on recycling, food waste, Princeton's Climate action plan and transportation. We set up a make-your-own plant station and provided soil and wildflower seeds, a recycling game, a spin the wheel game with environmental questions and if participants answered correctly they received free plant food, a pledge wall and lastly an endangered species face painting station.

WORD: [GREEN FAIR DOCUMENTATION](#)

IMAGE: [GREEN FAIR PICTURES](#)

IMAGE: [GREEN FAIR PICTURES](#)

IMAGE: [GREEN FAIR PICTURES](#)

WORD: [QUALITATIVE NEEDS ASSESSMENT](#)

WORD: [GREEN FAIR PROOF OF EVENT](#)

Student and Staff Wellness

Programs to Promote Physical Activity

10 Points

School

Program Summary: PHS offers many clubs that promote physical activity during and after school. Clubs are available to all students, and are run mainly by students. The sports and recreation club are a great way to get to know other students with shared interests along with getting some exercise. The district partners with the town to offer the district fields so clubs can be run at all times after school and weekends.

EXCEL: [SPORTS REC CLUBS](#)

Staff Wellness Program

10 Points

Program Summary: The programs we have implemented have focused not only on student, but also on staff wellness with the goal of promoting a "trickledown effect" of positive and healthy habit modeling for our youth. The Move Into May Challenge was a successful month long, district wide, step challenge to motivate staff to incorporate more physical movement into their daily schedules. We have implemented staff yoga classes after school as well as lessons for student and staff on meditation for anxiety and stress reduction. We also offered meditation and salsa dance lessons in our summer institute for the staff. The results of these initiatives have resulted in happier, less stressed, and more knowledgeable staff and students as addressed by the current results of the 2017 Stanford Survey and independent feedback.

WORD: [EMAILS FROM MOVE INTO MAY CHALLENGE](#)

WORD: [MOVE INTO MAY FLYER](#)

WORD: [MOVE INTO MAY PARTICIPANTS](#)

WORD: [WELLNESS SUMMER INSTITUTE COURSES](#)

Student Safety

Safe Driving Awareness Programs for High School Students

10 Points

School

Program Summary: Our safe driving initiative aims to teach high school students about the dangers of distracted driving and the ways they can positively contribute to our community through education and safety. We have used a google form and shared a quiz with every class in Princeton high school on facebook. Through our responses we have curated a video that will target areas of need where many students answered incorrectly. We also have been closely working with the drivers education teachers at the school on how they can implement our video into their classes. We also interviewed these teachers for how they think we should go about student education; for students and by students! Our student team has been working closely with the "U Got Brains?" organization in our school, which is a student run community service group aimed at spreading awareness for driver safety including having guest speakers and hanging posters through the school. Our team has sat in on meetings with the "U Got Brains?" leaders and interviewed them for our video as well as having their community members take our quiz and visit our facebook page. By sharing our video with the drivers education teachers and the community service leaders, our initiative for a safer community will not end as we leave for college. The video can be shown as an example of a student initiative and a great way to inspire other peers. Through this project we hope to improve the driving community around Princeton, our town has a huge population including students and pedestrians and it is of the utmost importance to keep our community safe.

WORD: [SAFE DRIVING AWARENESS PROGRAMS FOR HIGH SCHOOL STUDENTS DOCUMENTATION](#)

PDF: [SAFE DRIVING AWARENESS PROGRAMS FOR HIGH SCHOOL STUDENTS DOCUMENTATION](#)

PDF: [SAFE DRIVING AWARENESS PROGRAMS FOR HIGH SCHOOL STUDENTS DOCUMENTATION](#)

PDF: [SAFE DRIVING AWARENESS PROGRAMS FOR HIGH SCHOOL STUDENTS DOCUMENTATION](#)

Waste Reduction & Recycling

Waste Audit

10 Points

 Bronze Priority  Silver Priority School

Program Summary: As we have learned from thorough research and experience in our Environmental Science class, a waste audit is essential as it is the first step in establishing a baseline for a waste reduction program. Our audit consisted of the following: documenting the quantity of trash receptacles in our school and their specific location and, sorting, categorizing, and documenting the type of waste. This audit was essential for determining what types of waste are being generated and in what quantity. The audit was performed by 20 student volunteers from the Biology class on September 28th. With the data collected from the audit, the students were able to identify methods to enhance recycling efforts and reduce waste. These methods included the need for more explicit labeling of waste receptacles as well as ongoing efforts to educate students and school personnel on proper waste disposal habits. With our reduction in waste, there will be a direct correlation to diminish the amount of waste sent to landfills. This accumulated waste contributes to global climate change by releasing excess carbon dioxide and methane gas into the atmosphere. All our findings for a more effective waste disposal system were presented to the Principal, Gary Snyder at the Administrative meeting in October. We anticipate, that as our findings are implemented in the 2018-19 school year a significant reduction in waste by our school community will occur. We anticipate that upcoming waste audits from others students will successfully corroborate this reduction.

PDF: [WASTE AUDIT DOCUMENTATION](#)

PDF: [WASTE AUDIT DOCUMENTATION](#)

PDF: [WASTE AUDIT RECOMMENDATIONS](#)