

Sustainable Jersey for Schools Certification Report

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

Penns Grove High School (Salem) was certified on August 01, 2022 with 185 points. Listed below is information regarding Penns Grove High School (Salem)'s Sustainable Jersey for Schools efforts and materials associated with the applicant's certified actions.

Contact Information

The designated Sustainable Jersey for Schools contact for Penns Grove High School (Salem) is:

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Actions Implemented

Each approved action and supporting documentation for which Penns Grove High School (Salem) was approved for in 2022 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.

Digital Learning Leadership

District Professional Development Plan *Retires 10/31/23*

10 Points

District

Program Summary: Our district and school professional development plans provide structure to

the professional development exercises that are required or are identified as needed. In addition, we include strategies for supporting the professional learning of parents and the community. Teachers receive a wide range of training topics, which ideally are embedded throughout the year, addressing learning gaps, equity, and essential social, academic and safety needs of the district. The district PD plan is a collaborative document accessible through Google by the building principals and central office staff. Each building, in coordination through the ScIP generate the goals and activities for focus for their respective buildings. The districtwide plan considers the input from each building, along with core district goals and state required expectations. Please also find sample survey results conducted to determine specific PD needs around digitial literacy.

PDF: 2020-2021 SCHOOL AND DISTRICT PROFESSIONAL AND PARENT LEARNING PLAN (2).PDF

EXCEL: MAY 15, 2020 IN-SERVICE SURVEY (RESPONSES).XLSX

Equitable Access to Digital Learning

10 Points

Bronze Priority Silver Priority District

Program Summary: In response to the recent events, the district quickly made providing a device to every student in district, a priority. Numerous surveys were utilized to identify where gaps existed within the community. The district followed up with several events for distribution of both computers and mobile hotspots to support internet access in the homes. Utilizing CARES Act fundings, the district was able to provide a device to EVERY student registered in the school district, but late fall, 2020. As a point of note, we collected survey results from each building identified devices in the homes, and use spreadsheets to filter and sort data, generating our complete figures. Our process did not include a written report, representing gaps, besides the cumulative data entered into state surveys as we made progress throughout the Spring, Summer, and fall of 2020. Currently, our comprehensive spreadsheets show distributed devices to all students.

PDF: TECHNOLOGY PHONE SURVEY RESULTS.PDF

PDF: FALL 2020 STUDENT_PARENT AND STAFF_TEACHER SURVEY RESULTS.PDF

EXCEL: 2020 PWC HOME TECHNOLOGY SURVEY DATA MARCH 16 2020.XLSX

EXCEL: CHROMEBOOK DISTRIBUTION (AUGUST 2020) (RESPONSES).XLSX

PDF: REPORT AND ANALYSIS DOCUMENT

Digital Learning Practices

Professional Growth and Collaboration

15 Points

School

Program Summary: The school district underwent a transformation overnight, where all schools, including Penns Grove High School became a 1:1 student device school. Along with this commitment, came the need to ensure all staff was prepared to provide a rich digital curriculum to students, utilizing available tools. Professional development also included online differentiated learning for staff through the use of a PD platform, SimpleK12. Our professional learning goals this

year centered around enhancing student ownership and engagement in students' own learning through the use of technology in the classroom. We supported the technology goals by providing one-one devices to all of our students, by purchasing new computers with camera capabilities for all teachers and administrators.

PDF: 2020-2021 SCHOOL AND DISTRICT PROFESSIONAL AND PARENT LEARNING PLAN (3).PDF

PDF: NOVEMBER 4, 2020 IN-SERVICE AGENDA - SHEET1.PDF

PDF: SEPTEMBER OPENING PD SESSIONS - SEPTEMBER 2.PDF

PDF: 10 SAMPLES OF TEACHER GOALS.PDF

WORD: EVIDENCE OF EDUCATORS' VIRTUAL COLLABORATIONS.DOCX

WORD: EVIDENCE OF EDUCATORS' VIRTUAL COLLABORATIONS SHOWING CONTRIBUTIONS WITHIN PERSONAL LEARNING NETWORKS AND EXAMPLES OF HOW TEACHERS APPLIED THEIR PROFESSIONAL LEARNING IN DIGITAL TOOLS, CONTENT AND PRACTICE.DOCX

Food & Nutrition

School Gardens

30 Points

School

Program Summary: The narrative that describes our school gardens initiatives started with the development of our courtyard as an Environmental Science Learning Center. We started our outdoor soil-based garden in the spring of 2021. We raised many cultivars of tomatoes from seed and cared for over 70 tomato plants in the summer. We had our first ever 2021 summer program and the students came into school Monday through Thursday 9 am to noon to work in developing the courtyard. Our outdoor soil-based tomato garden was one project that required regular care. Next year we plan to grow more vegetables and herbs for 2022. Next, we received a \$10,000 grant for our aquaponics school garden from Sustainable NJ and NJEA on Feb. 18, 2021. The system was installed by Sept. 2021 in our preexisting greenhouse. It is only three months old, but we have so far introduced tilapia and are growing vegetables and herbs via media beds, NFT and DWC. The hard part and most time-consuming part was the teamwork involved in putting the system together. https://youtu.be/R0JpYHoV1cM - Video announcing to the community that we won a \$10,000 grant. https://www.youtube.com/watch?v=QvsW4EJgX9o - Video from the Climate Change Competition that won us an additional \$1,000 from Sustainable NJ. https://youtu.be/ympybdl1eWA- Video of the recap/follow up with the mayor Moreover, we installed a hydroponics system in the agricultural science classroom. The purpose of the system is to allow students in Botany to produce food plants on a scale that could be replicated in a home. The unit is a ComFarm Grow Wall and was assembled, installed, and operated by the students in the class. We are aiming to get 30 points for hydroponics, aquaponics, and soil-based school gardens. Therefore, each garden document attached will contain the following evidence: 1. The Specific Garden Report 2. Documentation for how the garden was shared with the school community 3. Captioned picture of the garden. 4. Samples of the garden-related educational materials used with students

WORD: <u>AQUAPONICS SCHOOL GARDEN REPORT.DOCX</u>

WORD: <u>HYDROPONICS SCHOOL GARDEN.DOCX</u>
WORD: <u>SOIL BASED SCHOOL GARDEN.DOCX</u>

Classroom Chemical Purchase, Storage & Disposal Policy

15 Points

School District

Program Summary: Having worked closely with the county health department, remediation steps were taken to ensure storage areas comply with expectations, including limiting stock to two years, having prepared clean-up kits for spills, and keeping updated chemical logs.

WORD: PGCPRSD CHEMICAL HYGIENE PLAN 2018.DOCX
PDF: 7112 - SCHOOL SAFETY & HYGIENIC MANAGEMENT.PDF

EXCEL: CHEM INVENTORY.XLSX

Integrated Science, Technology, Engineering, Arts & Math (iSTEAM)

iSTEAM Collaborative Units of Study

50 Points

School

Program Summary: Penns Grove High School has implemented a multi-year implementation of the Connected Action Roadmap beginning in this past school year in order to develop units of study that are aligned with the New Jersey Student Learning Standards. In doing so, the teachers have been involved in bi-weekly Professional Learning Communities (PLCs) coaching sessions during their common planning time that is focused on ten (10) specific PLC conversations that impact their daily work, unit templates, and in turn our students. The coaching sessions are being facilitated by the Foundation for Educational Administration (FEA) and CAR experts. Teacher teams and content area supervisors were primarily involved in this coaching process. We have been able to successfully complete five (5) interdisciplinary units that make connections between science, math, and the arts. The units are driven by phenomena, fostered by students' interests, centered around addressing environmental situations. Many of the pertinent documents and unit guides are live-linked within each PDF unit document. PLC Team Members: Dr. Charles Powell (Math/Sci Supervisor), Diana Morris (Humanities/Arts Supervisor), Vicki Palaganas (Sci), Shannon Tyson (Sci), Danielle DiGravio(Math). Meeting dates: 10/21/21, 10/27/21, 11/10/21, 11/22/21, 12/06/21, 12/20/21, 1/11/22, 1/26/22, 02/09/22, 02/23/22, 03/07/22, 03/22/22, 04/11/22, 04/26/22, 05/10/22, 05/24/22

PDF: EVOLUTION UNIT

PDF: GENETICS UNIT

PDF: ECOSYSTEMS UNIT

PDF: OYSTERS UNIT

PDF: POLAR ICE UNIT

PDF: SAMPLE STUDENT WORK

Outdoor Classroom

10 Points

School

Program Summary: The students in Mr. Fitzpatrick's English class utilized the courtyard for a couple of lessons in 2021. This teacher, with the help of his student teacher, had a blow-up projector set up for his Beowulf lesson. He also provided a big outdoor feast to further emphasize the tradition in the story. For another lesson, nature was incorporated in the classroom because Mr. Fitz also had students sleep outside in tents to honor the teacher who most impacted them. This came from another book his students read in regard to slavery. The students in the Biology and Environmental Science classes regularly utilize the 15' X 35' butterfly sanctuary in the courtyard in the spring and fall. Nature is used in the classroom because students sow seeds, identify, grow and care for nectar and host plants. The space is used almost every day by other teachers with their students as the weather permits. The professional development provided to school personnel related to the utilization of the space is during faculty meetings in Fall 2021; Sept. 9, 2021, Oct. 7, 2021, and Dec. 2, 2021. In these meetings, the principal and superintendent train the teachers on expectations and encourage them to bring their students outdoors to conduct lessons to bring nature into learning. We have a nature and learning program that raises awareness school-wide to further encourage use of the outdoor classroom.

WORD: CURRICULUM BASED LESSON PLAN WITH NEW JERSEY STUDENT LEARNING STANDARDS.DOCX WORD: OUTDOOR CLASSROOM SHORT REPORT.DOCX

WORD: SLIDE PRESENTATION OF STUDENT WORK THAT WAS TAUGHT IN THE OUTDOOR CLASSROOM SPACE. DOCX

WORD: <u>SAMPLE SHORT RESPONSE OF STUDENT WORK FROM BEOWULF THAT WAS TAUGHT IN THE</u> OUTDOOR CLASSROOM SPACE.DOCX

POWERPOINT: PICTURE, PLAN OR MAP OF THE SPACE SHOWING CLEARLY THE NATURAL FEATURES OF THE SPACE AND THE BUILT ELEMENTS. THE PICTURE_PLAN_MAP MUST ALSO INDICATE WHERE THE DIFFERENT KINDS OF LEARNING ACTIVITI.PPTX

Student Participation in the Arts

10 Points

District

Program Summary: All elementary school students are provided a class in visual arts and a class in music as specials, weekly. In addition, all middle school students are provided a class in art and have access to classes in music. At the high school level, all students have access to classes in visual arts, musical arts, and theater. Because the arts are clearly an important component of the curriculum for school leadership and the community, in 2019 the district hired an additional music teacher at the Middle School, to allow for a comprehensive instrumental and choral curriculum for students. Furthermore, the district has hired a theater teacher to serve at the high school in 2020 who is in addition to an instrumental music teacher and a choral teacher, providing the students a plethora of choices in arts integration.

PDF: ARTS LETTERS.PDF

Biodiversity Audit & Management Plan

10 Points

School

Program Summary: We accomplished a great deal doing this biodiversity audit and creating a management plan. We found out that 68% of the Penns Grove High School Campus is made up of buildings and concrete. There is only 25% space to improve our biodiversity index, which is our grassland area. The biodiversity index score was the report card that further helped us gauge the health of our ecosystem. We found that our highest scores were in the garden and the lowest scores were in the grasslands around the outside of our school and in a large part of the courtyard. Our students used the iSeek App on their phone to identity all the plants and animals on the campus. We found that we have less beneficial insects and too many pests. Our students communicated their findings to the entire staff at a faculty meeting on 12/16/21. The presentation was successful and from there we fashioned a plan to improve our biodiversity index. We contacted the NJ fish and wildlife via email to ask them to help us to achieve the following goals: We want to learn more about state wildlife and plant species that are in decline for a number of reasons, from development to pesticide/herbicide use and/or agricultural practices. We want to work with our local state fish and wildlife agency to identify the best ways to improve biodiversity and habitat needs for these specific wildlife, and then design a habitat or multiple small habitats based on their recommendations because we don't have them. We are hopeful that we will be able to make positive change in this area in the 2022-2023 school year with the help of our Green Team, experts, students, staff, volunteers and community members.

POWERPOINT: BIODIVERSITY AUDIT AND MANAGEMENT PLAN REPORT.PPTX

PDF: LETTER FROM THE SCHOOL PRINCIPAL EXPRESSING A WILLINGNESS TO SUPPORT INCREMENTAL IMPLEMENTATION OF THE PLAN.PDF

POWERPOINT: <u>SAMPLES OF THE RESULTS OF THE BIODIVERSITY AUDIT AND PLAN WERE COMMUNICATED</u> TO THE SCHOOL COMMUNITY (1).PPTX

WORD: BIODIVERSITY ACTION PLAN 2021.DOCX

Biodiversity Project

10 Points

School

Program Summary: Penns Grove High School (PGHS) supports the restoration of the habitat of New Jersey native pollinators. The students in our Environmental Science classes and Biology classes aim to restore habitat and respond appropriately to the negative consequences of urbanization and the effect anthropocentrism has had on NJ pollinators. Our vision began with a focus on the restoration of the Monarch butterfly. Monarch caterpillars' only source of food is organic milkweed. Their numbers have declined due to habitat loss and chemicals like pesticides frequently used by residential gardening. In the summer of 2020, we completed the build of a 15'X35' butterfly sanctuary with the \$5,000 grant money we received from Channel 6 News, WaWa and the Cherry Hill Environmental Law Center. We held our first butterfly release in Fall 2020. https://www.nj.com/galleries/LHFVR5F4TZA73IFRLS7PCOBZZY/

PDF: _TEAM MONARCH.PDF

PDF: MONARCHMISSION_MS-HS-CURRICULUM_2018.PDF
PDF: TEAM ACTIONS FOR ENV. CENTER DEVELOPMENT.PDF

PDF: 2A LEADING_INITIATING SCHOOL-WIDE INITIATIVES WITH STUDENTS AND FAMILIES PICTURES OF STUDENTS WORKING IN COURTYARD.PDF

PDF: <u>BUDGET FOR \$5000 GRANT.PDF</u> PDF: <u>NJ.COM MEDIA COVERAGE.PDF</u>

Student & Community Outreach

Green Team

10 Points

Bronze Required School District

Program Summary: Fortunately, Penns Grove High School has a team of teachers who are driven by the value of environmental education and its impact on student learning. As part of the Sustainable NJ grant process and Bronze pursuit, a Green Team was established to include various stakeholders from the Penns Grove High School and beyond in planning strategic actions to improve the school district's approach to sustainability and conservation. A major emphasis for the team this year has been to plan the implementation of the environmental center is supported by the sustainable NJ grant and various steps to improve our green approach. Further, we planned sustainability lessons that will be taught to the elementary school students by our high school students. We started our first recycling program of sneakers, plastic film, batteries, and toner cartridges. We won an additional \$2,000 grant to further recycling initiatives. We conducted a biodiversity audit on our campus and identified areas where we are in need of more green infrastructure.

PDF: GREEN TEAM LETTER SUMMARY 2021-2022 SY (1).PDF
PDF: COPY OF GREEN TEAM ACTIONS & DEVELOPMENT.PDF

Student Learning

Education for Sustainability Grades 4-12 Science

5 Points

School

Program Summary: Penns Grove High School 11th and 12th graders participated in the NJ Climate Change Conference. First, we watched the webinar on Trees and Climate Resilience: https://www.youtube.com/watch?v=-

NrrBV4o2Hw&list=PLdUm_MyWrj6rBWShiGxPGzWi9HSVUfkIZ&index=9&t=1120s We focused on delving into how planting trees could be a great sustainability-related issue to meet the action steps for Education for Sustainability Grades 4-12 Science.. We employed effective methods to engage our students on this issue by first having them answer questions based on what they learned from the webinar. Here are some of the questions: How do resident driven models work to get trees planted in a community? What is wrong with the million tree campaign? Explain an Urban Heat Island Effect. How do trees reduce the Urban Heat Island Effect? What is a watershed?

How is water affected by things we do to the land? What is a combined sewer system? What happens when the systems overflow? Then students were asked to get into teams and construct models that relate to this topic. They designed the following models on whiteboards: Stormwater Runoff Model 2. Combined Sewer System Model 3.Trees intercepting rainwater model 4. Carbon Sequestration Model 5. Photosynthesis Model The student assessment culminated on the 2nd day when we utilized lesson 24 from iHub Biology entitled: How Does Planting Trees Compare to Other Solutions for Climate Change? Students were asked to research, make a powerpoint presentation or slides, and present to the class. There was a peer review of each presentation based on a rubric. This was an important sustainability topic to delve into because it positioned us to apply for grants to obtain money to buy trees. We would like to add more to our campus and the urban environment.

WORD: EDUCATION FOR SUSTAINABILITY QUESTIONNAIRE.DOCX
WORD: COPY OF LESSON PLAN THAT IS ALIGNED WITH NJSLS.DOCX
WORD: SAMPLES OF STUDENT WORK AND GRADED RUBRIC.DOCX