

District Nominee Presentation Form

CERTIFICATIONS

District's Certifications

The signatures of the district superintendent on the next page certify that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

- The district has been evaluated and selected from among districts within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
- 2. The district is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
- 3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
- 4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 5. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.
- 6. The district meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools District 2015-2019

Name of Superintendent: Ms. Connie Hendricks (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

District Name: The Jefferson School (As it should appear on an award)



Address: 22051 Wilson Road, Georgetown, DE 19947 Telephone: 302-856-3300 Fax: 302-8561750 Web site/URL: jww.jeffersonschool.com E-mail: c.hendricks@jeffersonschool.com

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Connie Andrices

Date: 2/9/2019

(Superintendent's Signature)

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

- The district is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs;
 2) improved health and wellness; and 3) effective environmental education.
- 2. The district meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Delaware Department of Education

Name of Nominating Authority: Mrs. Tonyea Mead

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Jonyea Meal

Date: 2/9/2019

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your district is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments, being sure to cover equally all three Pillars. Then, include concrete examples



for work in every Pillar and Element. Only districts that document progress in every Pillar and Element can be considered for this award.

SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to <u>green.ribbon.schools@ed.gov</u> according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: March 31, 2019

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



1. School Profile

School Name: The Jefferson School Street Address: 22051 Wilson Road City: Georgetown State: Delaware Zip: 19947 School Website: <u>www.jeffersonschool.com</u> Principal Name: Connie Hendricks Principal Email Address: c.hendricks@jeffersonschool.com Principal Phone Number: 302-856-3300 Total school enrollment (Fall 2018): 105 District Name: n/a

School type and demographics: Independent, private, nondenominational

2. Application Team Information

Lead Applicant Name (who prepared the application): Bill Nelson Lead Applicant Title (e.g., teacher, principal): Environmental Science Coordinator Lead Applicant Email: b.nelson@jeffersonschool.com Lead Applicant Phone Number: 302-856-3300

Application Team Members (Others who helped prepare this application)

	Name (First and Last)	Title/Department	
1	Connie Hendricks	Head of School	
2	John King	Social Studies Teacher	
3	Nicole Cocciolone	3 rd /4th Science and Math Teacher	
4	Terri Gladus	Summer Program Coordinator	



3. Summary Narrative

(NOTE: This is the 800-word summary that will be used to describe your school's programs and efforts towards the three pillars. If selected for an award it will be used in press releases and other outreach materials. You may want to return to this question after answering the remaining questions below.)

Summarize the school's efforts in all three pillars. Focus on your commitment and progress towards meeting Green Ribbon School criteria, especially:

- Partnerships or memberships the school has developed to meet your green goals
- The people, including any student team, involved in your Green School efforts
- · Your progress thus far, including results and benefits
- The plan to sustain your work

The Jefferson School started in 1992 as a nonprofit, private, independent day school, providing integrated, hands-on learning experiences for children ages three through 14. Tiny by design (current enrollment is 102 students; our maximum is 120), we believe that children are naturally curious, learn best by doing, and seek to understand interconnections. We provide enough information to kindle children's curiosity and then provide tools to help them forge their own paths of discovery and learning. We believe that education should be enjoyable and stimulating, that subjects should be integrated just as they are in the real world, and that children should play outside every day. We promote active, engaged learning via multi-sensory, hands-on experiences and we weave our 43-acre campus into our curriculum wherever possible.

Adjoining the Redden State Forest, The Jefferson School boasts two ponds, trails with fitness stations, an outdoor classroom, a Nature Explore Classroom area, pollinator gardens, vegetable gardens, a greenhouse, goats, chickens, beehives, numerous native tree, bush and wildflower plantings, and purple martin nest houses. We do not have a cafeteria; our students bring lunch from home or pre-order from a different vendor each day, and eat in their homerooms.

Since 2010, we have cultivated alliances with regional partners to build a naturecentered, active curriculum for our students. Partners include the Delaware Nature Society, University of Delaware College of Marine Studies, Lewes Historical Society, Delaware Tech, DNREC, Delaware Bee Keepers Association, Delaware Wetlands, First Lego League, Nanticoke Watershed Alliance, Stash Your Trash, Delaware Inland Bays, Oceana, Delaware Native Plants, Parkside High School Horticulture Dept (Salisbury), Janet Phillips/MyNature, DNREC solar car and bridge challenges, Echo Hill Outdoor School, iNaturalist, and the National Phenology Network.

Our goal is to create an educational facility that can be shared with the larger community. To that end, we hired an Environmental Science Coordinator (ESC) in the spring of 2017 and a Summer Outdoor Program Coordinator in the fall of 2018 to work with the ESC to enhance both year-round programs and outdoor maintenance.



The ESC meets with all grades (pre-K through 8th) weekly; student and teacher participation in environmental topics is built into our schedule. In addition, the ESC has regular contact with our school head, maintenance person, and parents.

Pillar 1: Reduce environmental impact and costs

As of this writing we have addressed four Eco-Schools pathways (Energy, Wildlife Habitat, Biodiversity and Healthy Living), involving students each step of the way. We conducted the Eco-Schools energy audit and subsequent energy-saving campaign, measured the square footage of our impermeable surfaces, planted trees and pollinator gardens to reduce lawn area, estimated biodiversity around campus, evaluated tree size and forest quality, and started weighing our recycling and composting. We've investigated virtual water use, ecological footprints, and the life cycle of our stuff. We also switched overhead fluorescents to LED lighting, installed water bottle stations, and recently installed a solar voltaic field. These changes complement our existing geothermal heating system to reduce our environmental impact.

Pillar 2: Improve the health and wellness of students and staff

The Jefferson School has an active PE & health program, daily recess (with nature trail walks for interested students), and frequent classes outside at all levels. The majority of environmental science classes go outside once or twice a week. All levels take numerous outdoor-oriented field trips; the 5th through 8th grade students also attend the Echo Hill Outdoor School in the fall.

Our health classes regularly focus on nutrition and healthy eating habits. Once a month parents bring in healthy snacks for "Eating the Rainbow" events. We coordinate environmental science and health classes by investigating the environmental effects of different diets and distance our food travels; Middle School Choice students frequently provide healthy, handmade (and often solar-cooked) snacks for the school. For the Healthy Living pathway, we evaluated weekly time spent outdoors at each grade level. *Pillar 3:Provide effective environmental and sustainability education, incorporating STEM, civic*

skills, and green career pathways

As previously mentioned, the ESC provides regular environmental science education across all grades. In addition to the topics mentioned above, students participate in a yearly *Stash Your Trash* trash sculpture contest, a gardening contest at Salisbury's Parkside High School, and DNREC's solar car and bridge contests. Our school offers fall and spring campouts, a pre-holiday campfire, a winter hike, and a 5k run. Students have planted more than 100 trees and bushes and 350+ wildflowers just this year; students care for our chickens and goats, and our middle schoolers will build rowboats this coming spring. We have hosted speakers about wild edibles and anti-litter campaigns, and speakers from the Nanticoke Watershed Alliance, Oceana and the Delmarva Discovery Center; we participate in iNaturalist's *Delaware Schoolyard Biodiversity Project*, post phenology observations on *Nature's Notebook* for the National Phenology Network (including cloned lilac observations and the *Journey North* tulip gardens project).



Crosscutting Questions: Awards and Programs

These two crosscutting questions are **10% of your overall score**.

4. Does your school participate in a local, state, or national green schools program (e.g., Eco Schools USA, Project Learning Tree Green Schools)?

(X) Yes

() No

How TJS works to improve environmental literacy, create opportunities for children to participate in outdoor experiences, promote healthy lifestyles and provide better access to green spaces through schools and community programs:

- Science Saturdays fall and spring: Participating Partners include Delaware Nature Society, University of Delaware College of Marine Studies, Lewes Historical Society, Salisbury University, Delaware Tech, DNREC, Delaware State Parks, Delaware Bee Keepers Association, Delaware Wetlands, First Lego League
- Throughout the year, speakers from: Nanticoke Watershed Alliance, Stash Your Trash, Delaware Inland Bays, Oceana, Delaware Native Plants, Parkside High School Horticulture Dept (Salisbury), Delaware Forest Service and US Fish and Wildlife Service. Also: Janet Phillips/MyNature, DNREC Solar car and bridge challenges, Echo Hill Outdoor School, iNaturalist, Nature's Notebook/National Phenology Network
- Member, Delaware Children in Nature, Del Association of Environmental Educators, for which our faculty has both presented and served as the keynote speaker.
- Working with the Delaware Forest Service and the U.S. Fish and Wildlife Service to reduce our lawn area, increase forested area, and enhance garden areas with companion shrubs that will serve as outdoor collaborative classrooms and observation areas.
- Head is a member of the Delaware STEM Alliance, and a number of teachers have taken Project Learning Tree workshops.

If yes, which program(s) are you participating in, what level(s) are in progress, and what level(s) have you achieved?

Program	Level in Progress	Level Achieved (include date achieved)
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1	Eco-Schools Certification Bronze (2) & Silver (2)	Bronze (2): Wildlife Habitat and Energy Silver (2): Biodiversity and Healthy Living	2017 Bronze 2018 Silver
2	National Wildlife Certified Wildlife Habitat	Certified	Fall 2017
3	iNaturalist Delaware Schoolyard Biodiversity Project	active	Fall 2018

5. In the past five years, has your school, staff, students or student groups received any awards for environmental stewardship, student and staff health and wellness, or environmental education/civic programs?

(X) Yes

() No

If yes, provide award details below.

	Award	Awarded to	Awarded by	Year Received
1	Keynote speaker at DAEE conference	Connie Hendricks, Head	DAEE	Spr 2018
2	Eco-Schools mini-grant	Bill Nelson	NWA Eco Schools	Spr 2018

Note for questions 6 through 22: because we are a tiny (approximately 100 students) school with one administrator and a small staff, it was often difficult to respond to checklists accurately. At TJS we have very few written policies, because being so small we often don't need them; for almost any matter, it is very easy to talk to each other, decide on a course of action, and make that action the "policy." Time and again I wanted to check boxes because we have either talked about that particular issue or have changed our behaviors to address that issue, but I could not check the box because we don't have a written policy as would be necessary in a larger institution.

Pillar 1: Reduce environmental impact and costs



Pillar 1 includes four main elements and is **30%** of your overall score.

Element 1A: Energy conservation strategies

6. Which of the following programs or practices has your school implemented to conserve energy and to protect our environment from the negative effects of buildings and transportation? (Check all that apply)

[] Our school has an energy management plan in place that describes the steps we are taking, the key participants, our goals, and a schedule for conserving energy and reducing energy costs.

[X] Our school participated in an energy efficiency program that resulted in a comprehensive energy audit and cost effective energy efficiency improvements.
[] Our school has met our energy conservation target every year since we started our program.

[] Our school energy use is tracked and benchmarked using EPA ENERGY STAR Portfolio Manager or an equivalent program.

[] Our school is EPA Energy Star certified this year.

[X] 5% or more of the energy used at our school is obtained from on-site or offsite renewable energy sources.* *starting Feb 2019*

[] Our school was built or modernized to meet Leadership in Energy and Environmental Design (LEED), Green Globes, Living Building Challenge, or another green building standard.

[] Our school has a greenhouse gas emission reduction plan in place that targets energy use. We measure our annual progress against our reduction goal.

7. Use the list above as a guide to describe how your school programs, policies, and actions have reduced the amount of energy used in your building(s). Include data. Also include information about your efforts to protect our environment from greenhouse gas emissions, how you set your goals for reduction, and how you measure your progress. (Maximum 250 words)

We are fortunate that our school, built in 2000, was built with geothermal heating, so our energy bills have always been low for the size of our building (~14,000 square feet). After conducting our energy audit in the spring and fall of 2017, we highlighted behavioral changes—turning off lights when students leave classrooms and cubby areas, using reduced lighting while and turning down thermostats while working in classrooms—and then switched all of our overhead fluorescent bulbs to LEDs in late fall 2018. Comparing our December 2017 bill to December 2018, we used 19,840 KWH for 12/2017 versus 17,360 KWH for 12/2018, saving 2,480 KWH, or 12.5% (a decrease of \$409). We assume this is due to a combination of switching to LED overhead lighting and behavioral changes. Further, as of this writing, our solar field is almost complete and should be up and running within a couple of weeks. At that point, on a sunny day,



most of our electricity will be supplied by those panels; our school energy use will be largely carbon-neutral.

In addition, I have had the 3rd through 8th graders figure their carbon footprints, virtual water, and ecological footprints and we have discussed ways to minimize same. By so doing we have met most of our Eco Schools Energy Action Plan goals; we still need to work on carpooling and encouraging more energy conservation behaviors at school (students will create public service announcements for our all-school morning Triangle meeting).

Element 1B: Water quality, efficiency, and conservation

8. Which of the following practices contribute to the protection and conservation of the school domestic (drinking) water? (Check all that apply)

[] We are served by a community/city/county owned water provider that is required to report annually on the quality of our water.

[X] Our school has its own well and we do water sampling in accordance with our local and state health authorities.

[X] Our building maintenance department cleans all water taps and drinking fountains on a regular basis to prevent bacterial contamination.

[X] We have a water reduction plan in place that includes:

- [X] low-flow water fixtures
- [X] native drought-tolerant plants
- [X] minimal or no landscape irrigation

[] Our school water use is tracked and benchmarked using EPA ENERGY STAR Portfolio Manager or an equivalent program.

[] We use only non-potable water (such as water collected from a rain barrel or rain cistern) for irrigation.

[] Our school has a greenhouse gas emission reduction plan in place that targets water use. We measure our annual progress against our reduction goal. [X] We have installed water bottle filling stations.

9. Use the list above as a guide to describe how your school implemented and is maintaining your water conservation program including your baseline, your goal, and your reduction rate to date. Explain how you will continue to reduce water use to meet your goal. Include who in the school participates in the water conservation program. Describe the work done to protect water taps and drinking fountains from bacterial contamination. (Maximum 250 words)

Since we have a well with no meter, we don't know exactly how much water we use—so we do not have a baseline or numerical reduction rate goal. Within those confines, though, we promote water conservation as much as possible. We investigated obtaining



a grant to put a real-time water use display in our Triangle (our public and all-school meeting area) this past fall but did not get the information from the display provider in time; we shall pursue it further for next year. As mentioned above, our students have figured their virtual water footprints and discussed water-saving behaviors here and at home; we have also posted signs in the bathrooms asking students to minimize water use at school, and we will have students create public service announcements re same to show at morning Triangle. Regarding outside water use, other than watering new plantings long enough to get their root systems established, we do not water or irrigate lawn or garden areas.

Element 1C: Waste Management and Product Procurement

10. Which of the following programs has the school initiated and maintained to reduce solid waste, eliminate hazardous waste, and procure environmentally preferable products? (Check all that apply)

[] Our school has initiated and maintained a solid waste management plan that includes waste reduction practices, collection of recyclable and compostable materials, elimination of hazardous waste, and preferred-purchasing requirements.

[X] Our recycling program collects every material that is collected in our city/county. *Note: the entire state of Delaware has adopted single stream recycling; we recycle according to their guidelines.*

[X] Our school composts organic materials on site.

[] Our school only purchases office/classroom paper that is 50% or more postconsumer material.

[] Our school only purchases office/classroom paper made of fibers from forests certified as responsibly managed in accordance with Forest Stewardship Council, Sustainable Forestry Initiative, or a comparable certification standard.

[] Our school purchases office/classroom paper that is totally chlorine-free (TCF) or processed chlorine free (PCF).

[] All new furniture purchases are certified by the Business and Institutional Furniture Manufacturers Association or a comparable standard.

[X] Hazardous and dangerous products at our school have been reduced or eliminated.

[X] Hazardous, dangerous, and universal wastes at our school are handled and disposed of in accordance with federal and state regulations.

[] Our school has a greenhouse gas emission reduction plan in place that targets solid waste reduction and recycling. We measure our annual progress against our reduction goal.

11. Use the list above as a guide to describe your solid waste management plan, including goals, materials you collect to be recycled or composted, your current recycling rate, and how you calculated the recycling rate. Include who participates in the



waste management program, any student learning objectives, and the educational and environmental benefits to date. Provide an overview of your environmentally preferred purchasing. (Maximum 250 words)

Blue Hen Disposal takes care of our solid waste; we have a trash dumpster and a recycling dumpster. We provide recycling containers in every room and collect it weekly; we recycle paper, cardboard, plastics, aluminum cans and glass bottles--everything the State of Delaware accepts. There are also compost containers in each classroom. Each week our third and fourth graders weigh each classroom's recycling and composting amounts for that week.

The Jefferson School has also taken the lead on what used to be Wicomico County/Salisbury's *Stash Your Trash* anti-litter program. In the fall of 2017 we had the two principals of SYT come talk to our students, then our 5th through 8th graders made "trash bug" sculptures out of recyclable materials, which were then displayed at the (last SYT-sponsored) trash sculpture display at Salisbury's October 2017 3rd Friday. This past fall our 3rd through 8th graders made "trash fish" sculptures, which we then arranged to display at area public venues with accompanying anti-litter messaging signs. They were on display at the Laurel Public Library in December and are currently on display at the Lewes Public Library; they'll move to the Nanticoke Arts Alliance in Seaford for February and then the Bridgeville Public Library for March, with venues for April and May to be determined.

Element 1D: Alternative transportation

12. Our school provides the following alternative transportation options to driving in single occupancy vehicles to and from school. (Check all that apply)

[] Our school participates in a "Safe Routes to School" or similar program.

[] Our school has designated carpool parking stalls. Some assigned carpool spots

[X] Our school offers yellow school bus service. *We contract our local "Jolly Trolley"*

[] Our school is served by city/Metro public transportation service.

[] Our school has a well-publicized no idling policy that applies to all vehicles including school buses.

[X] Our school has a vehicle loading/unloading area(s) at least 25 feet from building air intakes, doors, and windows.

[] Our school has a greenhouse gas emission reduction plan in place that targets transportation. We measure our annual progress against our reduction goal.



13. Use the list above as a guide to describe alternative transportation options to driving in a single occupancy vehicle to and from school. Include how the alternatives are promoted, any data you have about participation in school bus service, public transportation, carpools, ride-sharing, and commuting to school by walking or biking. (Maximum 250 words)

One benefit of having a 43-acre rural campus is its biodiversity and peacefulness; a major disadvantage is that it is located far from our students' homes. Virtually all of our teachers and students live quite a way from school (and many use a narrow busy highway for part of their route), so almost all of us drive most of the time. We do offer a bus service (the route of which varies each year based on number and location of subscribers), and a number of our students carpool, but transportation is the most problematic of our efforts to make the school more sustainable.

Pillar 2: Improve the health and wellness of students and staff

Pillar 2 includes two main elements and is **30%** of your score.

Element 2A: An integrated school environmental health program

14. Which of the following programs or practices does your school implement to ensure the environmental health of the school community? (Check all that apply)

 [X] Our school implements an up-to-date Integrated Pest Management program.
 [] Our school implements an up-to-date Indoor Air Quality Management Plan modeled after the EPA's Indoor Air Quality (IAQ) Tools for Schools or other national recognized model.

[X] Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.

[X] Our school does not have any wood playground equipment or other structures that contain chromate copper arsenate or we have identified these structures and have taken steps to reduce exposure.

[X] Our school has a comprehensive green cleaning program.

[] Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L or our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

n/a—Sussex County has a very low risk of radon exposure, with average measurements falling below 2 pCi/L according to

https://www.hightechhomeinspections.com/eastern-shore-radon-levels/

[] Our school has an Asthma Management Program consistent with the National Asthma Education and Prevention Program.



[X] Our school has a chemical management program in place, with elements of purchasing, inventory, storage, training, spills, and hazards communication.

15. Use the list above as a guide to describe how your school implements and measures the success of your integrated environmental health programs and practices to ensure the health and safety of the school community. Include information on how your school addresses exposure to health hazards including radon, chromate copper arsenate, carbon monoxide, chemicals, asthma triggers, and mold. (Maximum 250 words)

At Jefferson School we are sensitive to the cleaning chemicals we use, the finishes on our play areas and indoor furniture, use of chemicals on our lawns and gardens, and other areas of potential chemical exposure for our children and staff. We take exposure into consideration when we planned the original building and when considering changes to floor/wall/ceiling coverings and construction materials. Regarding our cleaning materials, where possible we use as little of the particular chemical as possible, and look for the least toxic solution wherever possible. We use no lawn pesticides, herbicides, fungicides or fertilizer on our lawn areas. Because we are a tiny school with basically one administrator, we do not find it necessary to have formal, written management programs and cleaning policies; we just do it.

2B. High standards of nutrition, fitness, and quality outdoor time for both students and staff

16. Which of the following programs or practices does your school implement to promote nutrition, physical activity, and overall school community health? (Check all that apply).

[] Our school participates in the "Coordinated School Health" program (www.cdc.gov/HealthyYouth/cshp/).

[] Our school participates in the USDA's Healthier School Challenge.

[] Our school participates in a Farm to School or comparable program to use local, fresh food in our cafeteria. *n/a—no cafeteria*

[X] Our school has a food garden either on-site or in close proximity to our building, which is utilized by the cafeteria or by teachers.

[X] Over the past year, our students spent an average of at least 120 minutes per week (for middle and high schools) or 90 minutes per week (for elementary schools) in school supervised physical education. *2x 40 minute periods PE plus 30 minutes daily recess with variety of PE options*

[X] At least 50% of our students' annual physical education and physical activity (including recess) takes place outdoors.

[] At least 50% of our students have participated in the EPA's Sunwise or equivalent program (to protect students from skin cancer).

[X] Our school integrates health measures into student assessments.



17. Use the list above as a guide to describe how your school implements high standards of nutrition, fitness, and quality outdoor time for both students and staff. (Maximum 250 words)

All students have PE twice a week and Health once a week (40-minute periods), plus daily outdoor recess for 30 minutes. Health students spend a lot of time on healthy eating habits, nutrition, fast food and food choices, and the importance of a healthy diet. Once a month our PE teacher hosts an "Eating the Rainbow" day for the school, whereby parents bring in a variety of fruits and vegetables to snack on. Recently we've also started coordinating weekly Environmental Science lessons with healthy eating lessons—teaming health's assignments interpreting food labels for fat, salt and serving size with environmental science's studying food waste and figuring food miles, the ecological footprint of different foods, and life cycle assessments of foods.

Also, our 5th-8th grade *Choice* students regularly create healthy, hand-made, seasonal food offerings for the whole school: dehydrated apples and bananas, apple crisp made with hand-ground flour and hand-rolled oats, pumpkin pies made with fresh pumpkin paste, kale chips, etc. Our 3rd and 4th grade classes use seasonal vegetables, salads, pumpkins, herbs, tomatoes, etc. from our raised bed garden to make dishes as well.

In addition to in-school activities, we also sponsor fall and spring on-campus family camping nights, a star night with local astronomers, and a spring 5K walk/run for the school and larger community. Further, we have a "Road Kill Café" area (featuring decomposing deer, fox, raccoons and other finds) that students visit frequently; game camera photos of scavengers are regularly featured in our morning Triangle meetings.

<u>Pillar 3: Provide effective environmental and sustainability which incorporates</u> <u>STEM, civic skills, and green career pathways</u>

Pillar 3 includes three main elements and is 35% of your overall score.

Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems

18. Describe how your school integrates and assesses/measures students' environmental or sustainability literacy at each grade level including curriculum, courses, outdoor learning, and assessments. (Maximum 250 words)

Since the environmental science coordinator works *with* grade level teachers to integrate the outdoors with curriculum, we do not have separate environmental literacy measurements; student environmental science work is rolled into the grade level teacher's overall assessment. Since it is integral to the philosophy of the school and of the ESC's job description to get students outside and use the campus wherever



possible, we don't feel the need for separate, formal environmental literacy assessment. We take kids outside and bring the outside in wherever possible; pairs of students measure the weather each day and report in morning Triangle, students take care of our goats and chickens each day, students measure and take the recycling and composting out to their respective bins each week, and students water new plantings regularly during the spring and fall. Additionally, we weave environmental issues/considerations into science and social studies classes and into morning Triangle, and our students have regular interactions with a variety of local environmental groups in the form of speakers, outdoor workshop days, field trips and tree and wildflower plantings on campus.

We are also gratified to observe regularly what is perhaps the most significant indicator of environmental awareness: when our students encounter an insect or fungus or amphibian or reptile, they are invariably excited to observe it and touch it while at the same time wanting to make sure they don't hurt it. Our students are not afraid of nature, they are invested in it—and that's gold.

19. Describe professional development opportunities available to your teachers in environmental and sustainability concepts and the number and percentage of teachers who participated in these opportunities during the past 12 months. (Maximum 250 words)

Most directly, the creation of an environmental science coordinator position has helped bring environmental considerations to the forefront of school culture just by virtue of daily and weekly contact—bringing in speakers and hosting special plantings and outdoor workshops, in the classroom, by webpage, and in morning Triangle. Teachers are also encouraged to sign up for environmentally-oriented professional development; we've had at least three teachers go to Monarch Butterfly workshops and two teachers attend a Clean Streams workshop; in the last year we've had wild edibles experts, speakers from the Nanticoke Watershed Alliance, Oceana, Stash Your Trash and Delaware Inland Bays speak to our students and plan with our teachers. Also, the head and env sci coordinator regularly attend DAEE meetings and conferences and report back to the school; our head asks each teacher to spend a day at another, like-minded school (with emphasis on utilizing the outdoors) and report back to the faculty as well.

Element 3B: Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy

20. Describe how environmental and sustainability education at your school supports teaching science and engineering practices (e.g., asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument from evidence) and supports robust general science education that



includes a deep understanding of life, physical, and earth sciences. (Maximum 250 words)

Though we will be in a much better position to respond next year when our new building is finished and a current classroom is converted to a STEM projects workspace, we address STEM-oriented education in a variety of ways. First, we host twice-yearly Science Saturdays for which we ask specialists to provide activities and demonstrations. A spacesuit company representative has students try on space suits, the designer of the Indian River Inlet bridge provides a bridge-building challenge, a member of the Lewes Historical Society demonstrates his historic hunting skiff, a beekeeper demonstrates hive maintenance, a laser-cut die sign maker has students cut their own dog tags, and many others.

Each grade has science as a core subject and each teacher favors project-oriented learning. For example, this past fall our 7th and 8th graders built an *Educational Passages* mini drift boat, complete with GPS, that gave us daily updates on its progress across the Atlantic; this coming spring students will build two rowboats from kits. Using a Toshiba STEM grant, 7th and 8th graders will also work with the math and environmental science teachers to build and launch rubber-band-propelled boats on our ponds.

Each year a different theme ties together individual classroom efforts (last year was flight, this year it's sailing), and throughout the year teachers highlight classroom projects in morning Triangle. Our students have built wind generators, modeled geologic processes, constructed Special Olympics events for a local institution, and hosted model airplane contests to study aerodynamics.

21. Describe how your curriculum connects classroom content to career and college readiness, particularly post-secondary options that focus on environmental and sustainability field studies and/or careers. (Maximum 250 words)

Being a pre K through 8th school we don't bill ourselves as "college prep," but we are well aware that the vast majority of our students will go on to college. As such, we are accredited by Middle States, have our students take ACT Aspire standardized tests, and align our curriculum to be college-bound. Our math sequence follows state guidelines, our language arts students learn to write five-paragraph essays and research papers, our science students learn core concepts in biology, chemistry and physics. We host a yearly career day wherein parents and invited members of the community come in and talk about what they do and what they needed to learn in order to get there. Whenever we have a speaker—especially fresh-out-of-college speakers that typify environmental organizations—we ask them to explain how they arrived in their position and what they'd recommend to our students. Regarding environmental science, we have surveyed environmental organizations and listened to Ted talks of green architects, green engineers and social designers; we've investigated stormwater design in light of



rising sea levels and more frequent coastal flooding and researched ways to combat microplastics in the environment. At this age, our focus is not so much on "this is your next step in life" but rather "here are some of the amazingly wide variety of things people can do to effect positive change."

Element 3C: Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community

22. Describe your students' civic and/or community engagement experiences integrating environmental and sustainability topics/concepts, field studies, community service, etc. Address if and how students conduct an age-appropriate community engagement projects around a self-selected environmental or sustainability topic at every grade level; and partnering with local academic, business, informal science institutions and/or other schools to help advance the school toward the 3 Pillars and/or assist the progress of (an) other school(s), particularly a school with lesser capacity in these areas) (Maximum 250 words)

Though we have a well-established community service club and host numerous community service events throughout the year (food drives, money to help with veteran housing, clothing and gift drives for needy families), this environmental science coordinator position is a year-and-a-half young and still being established, so most of my emphasis has been on our immediate community of The Jefferson School campus. We have had students display posters at the Delaware Association of Environmental Educators conference, and our trash sculptures are making the rounds of area libraries to spread their anti-littering message (they've also generated more than a few newspaper and television stories); however, most of the students' efforts have gone towards creating more pollinator gardens, planting Monarch-friendly patches of milkweed, establishing "pizza gardens" in our raised bed gardens, building an outdoor classroom, making labels for native trees and shrubs, and planting native trees and shrubs.

Because we want The Jefferson School to become a learning hub for other schools and extend our efforts to the larger community, we are creating an environmentally-oriented summer camp. To have an effective program during the school year we need to have twelve-month continuity, and to serve the larger area we need to attract children beyond those who attend TJS. Our outdoor program coordinator is developing six one-week nature-oriented sessions for children ages pre-K through 14. In addition to enhancing our relations with area environmental organizations, she will ensure that on-campus efforts (plantings, gardens, projects) will be both used and maintained during the summer months.





