

U.S. DEPARTMENT OF EDUCATION  
**GreenRibbonSchools**  
**School Nominee Presentation Form**

**ELIGIBILITY CERTIFICATIONS**

**School and District's Certifications**

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools 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.
3. Neither the nominated public school nor its public school district is refusing 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. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole 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.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. 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 public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school 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 2015-2018**

Public  Charter  Title I  Magnet  Private  Independent  Rural

Name of Principal: Mr. Christopher J. Volpe

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

Official School Name: George L. Catrambone Elementary School

(As it should appear on an award)

Official School Name Mailing Address: 240Park Ave

(If address is P.O. Box, also include street address.)

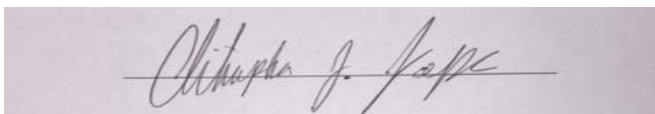
County: Monmouth State School Code Number \*: 252770300

Telephone: 732-222-3215 Fax: 732-222-6953

Web site/URL: <http://www.longbranch.k12.nj.us/Domain/13> E-mail: [cvolpe@longbranch.k12.nj.us](mailto:cvolpe@longbranch.k12.nj.us)

\*Private Schools: If the information requested is not applicable, write N/A in the space

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



(Principal's Signature)

Date: 1/27/2017



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

District Name: Long Branch Public Schools

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

A handwritten signature in black ink, appearing to read "Michael Salvatore".

Date: 1/27/2017

Michael Salvatore, Superintendent of Schools

### Nominating Authority's Certifications

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

1. The school has some configuration that includes grades Pre-K-12.
2. The school 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 and sustainability education.
3. The school 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: **New Jersey Department of Education**

Name of Nominating Authority: **Mr. Bernard E. Piaia, Jr.**

(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.

A handwritten signature in black ink, appearing to read "Bernard E. Piaia Jr.".

Date: **January 31, 2017**

(Nominating Authority's Signature)

### SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only schools 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 [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

#### 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](mailto: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.

**School Contact Information**

School Name: George L. Catrambone Elementary School District Long Branch, New Jersey

Street Address: 240 Park Avenue

City: Long Branch State: New Jersey Zip: 07740

Website: www.longbranch.k12.nj.us Facebook page: https://facebook.com/lbpublicschools/

Principal Name: Christopher Volpe

Principal Email Address: cvolpe@longbranch.k12.nj.us Phone Number: (732)222-3215

Lead Applicant Name (if different): Ann Degnan

Lead Applicant Email: adegnan@longbranch.k12.nj.us Phone Number: 732-571-2868 x 40710

Level <input type="checkbox"/> Early Learning Center <input checked="" type="checkbox"/> Elementary (PK - 5 or 6) <input type="checkbox"/> K - 8 <input type="checkbox"/> Middle (6 - 8 or 9) <input type="checkbox"/> High (9 or 10 - 12)	School Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private/Independent <input type="checkbox"/> Charter	How would you describe your school? <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural	District Name Long Branch Public Schools <input type="checkbox"/> Largest 50 Districts in the nation? Total Enrolled: <u>846</u>
Does your school serve 40% or more students from disadvantaged households? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	% receiving FRPL <u>90.46%</u> % limited English proficient <u>26.6%</u> Other measures _____	Graduation rate: N/A Attendance rate: 94%	

**SUMMARY NARRATIVE: Provide an 800 word maximum narrative for publication describing your school’s efforts to reduce environmental impact and costs, improve student and staff health, and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.**

The George L. Catrambone Elementary School was constructed in 2014 for a district whose logo and mascot are the Green Wave. Living up to this image, our teaching and learning incorporate the environment in all our thoughts and actions. LEED for Schools was used for the design of our new building and native plants were selected for our landscaping. The students and staff in every classroom are challenged to reduce the environmental footprint we leave on the Earth today, including pollution, excessive garbage production, fossil fuel dependency, and the destruction of our natural environment.

In our courtyard, students constructed a greenhouse from more than 2,000 recycled soda bottles they collected. With the growing season extended, students have been able to harvest enough vegetables and herbs from their gardens to feed our students, staff and the greater community. The courtyard serves as our outdoor classroom and also includes rain barrels to water the gardens and offset our water consumption.

In a continued effort to reduce waste, single use water bottles have been eliminated in our building and a student fundraiser sold reusable water bottles which raised enough money to purchase new bottle filling stations. In our lunchroom, reusable trays help reduce the amount of waste and a garbage audit made students more knowledgeable about recycling and cognizant when separating trash. Our third grade students learned of the negative impact straws have on our sandy shores, and as a result stopped using straws and have encouraged our whole building to follow their

lead. Our second graders are currently collecting used aluminum juice pouches which will be cleaned and repurposed into bags, wallets, and lunch boxes.

New to our school this year is the Power Save Team. A group of second and fourth grader students teamed up with New Jersey Natural Gas and the Alliance to Save Energy to learn how our school can reduce its energy consumption even further. They conducted energy audits in all classrooms and educated the staff and students how to reduce energy by monitoring lighting, temperatures, appliance power usage, windows and doors. Simple behavior changes like shutting lights off when leaving a classroom have already made a difference.

Not only have our students made gains in reducing waste and energy consumption, they are also making gains in nutrition and health. Students are making healthier choices with our farms to school practice and healthy fruit and veggie snack grants. Both of these programs helped fruit and vegetable choices make their way onto everyone's trays in the lunchroom. Students work out in gym and recess and our staff has jumped in with biweekly workouts after school to help everyone dance their way to a healthier lifestyle.

GLC was recently honored earning a bronze level certification from the Sustainable Jersey Schools program, and we are already working towards a silver certification. We have submitted for our Energy Star Rating this year and received an Energy Star Certification. In 2016, Sustainable Jersey for Schools awarded the Long Branch School District as the first recipient of the "Saving Energy Makes Cents Award." In healthier living, we have attained the Bronze Level for the Alliance for a Healthier Generation in 2016 and we are currently applying to the USDA's Healthier US School Challenge.

We are proud of the efforts, outcomes, and achievements our school has accomplished and know we still have a journey ahead as we continue inspiring both our students and the community to reduce the footprint we create.

**Instructions for completing this form:** Please answer all of the questions below to the best of your ability, **in a different text color**. A more complete application will increase your chances of success. You may supplement the information in these questions by describing alternative benchmarks or indicators of progress (see final question in each section).

**SCHOOL PROFILE: GREEN SCHOOL PROGRAM AND AWARDS (Cross-Cutting Question)**

1. Has your school participated in a local, state, or national program, which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes  No  If yes, please explain what program(s) and what level you are currently at, and state the years you have been involved in these programs. (e.g. [EPA Energy Star Portfolio Manager](#), [Eco-Schools USA](#), [PLT Green Schools](#), [Sustainable Jersey for Schools](#), and [NJ Learns](#)). (100 word max) **Long Branch Public Schools participated in Sustainable Jersey for Schools for two years and achieved a bronze certification for all 9 schools the second year. We also submitted for 6 schools to Energy Star this year and won certification for two schools including GLC Elementary. In 2016, Sustainable Jersey for Schools awarded the Long Branch School District the first recipient of the "Saving Energy Makes Cents". Finally, we partnered with an outside vendor in 2011 to educate us on tracking all utilities in order to reduce our energy costs and have saved \$2MM to date.**
2. Has your school, staff or student body received any awards for facilities, health or environment?  
Yes  No  Award(s) and year(s) Energy Star Saving Energy Makes Cents 2016 and Bronze certification Sustainable Jersey for Schools 2016 and Energy Star 2016, Alliance for a Healthier Generation, Bronze, USDA, Let's Move in Active Schools, Sustainable Jersey Green School Award (All 2016)
3. Has your school identified or created a place for teachers to go to share lessons on Sustainability?  
Yes  No  If yes, where? Rm 117
4. Has your School Board adopted a Green Strategic Plan or sustainability policy? Yes  No  Describe-Max 50 words

The board of education recognizes that responsible environmental stewardship is an integral part of its mission in ensuring that schools are well run. The board supports conservation and sustainable planning and operations, and shall endeavor to implement green initiatives such as a school and district green team, green cleaning, energy conservation, curriculum, community engagement, recycling, composting, waste management and sustainable practice in all day-to-day district operations. The district shall endeavor to engage all members of the school community in the conservation and green initiatives of the district.

5. Has your school created a Green Team? Yes X No \_\_\_ If yes, list team members and their roles.

- |   |                              |
|---|------------------------------|
| Ann Degnan - Facilities Manager                       | Michele Abner - PE Teacher   |
| Gary Vecchione-Asst Facilities Manager Energy Manager | Fred Balina - PE Teacher     |
| Christopher Volpe- Principal                          | Lisa Roesch - Teacher        |
| Joy Daniels - Vice Principal                          | Cheryl Addonizio - Teacher   |
| Jenna Valdeviazo - Science Supervisor (6-12)          | Katie Wachter - Teacher      |
| Neil Mastroianni - Science Supervisor (PreK-5)        | Martha Prieto - Teacher      |
| Dr Laurie Cancalosi, Supervisor, Physical Education   | Christine Zergebel - Teacher |
| Kathy Celli - District Head Nurse                     | Laura Oliveira - Teacher     |
| Charlene Arcangelo - GLC Nurse                        | Margaret Dos Santos- Teacher |
| Kelly Stone - Teacher PowerSave/ Gardens              | Sarah Choi- Teacher          |
| Michele Morey- Teacher PowerSave/ Gardens             |                              |

**In addition to a school team we also have a District Green Team.**

6. Has your school seen a cost savings from green initiatives? Yes X No \_\_\_ If yes, input **cost savings** data into table:

	Electric Energy Consumption (kwh)	Natural Gas or Fuel Oil Consumption (therms)	Electric Utility Costs (\$)	Natural Gas Utility Costs (\$)	Total Utility Costs (\$)	Annual Savings (\$)	% Reduction from Baseline Year
FY14-15	1,123,988	44,649	\$147,631	\$44,533	\$192,164	Baseline	Baseline
FY15-16	1,027,960	25,593	\$147,291	\$23,933	\$171,224	\$20,940	11%

**PILLAR I: REDUCED ENVIRONMENTAL IMPACT**

**Element 1A: Reduced/eliminated greenhouse gas (GHG) emissions. Use Portfolio Manager format if possible**

7. Can your school document reduced **Greenhouse Gas emissions**? Yes X or No\_ Data from Portfolio Manager.

	Electric Energy Consumption (kwh)	Natural Gas Consumption (therms)	Fuel Oil Consumption (gallons)	Carbon Dioxide from Electric (1.52 lbs/kwh)	Carbon Dioxide from Natural (11.7 lbs/therms)	Carbon Dioxide from Fuel Oil (26.033 lbs/gal)	Total # of Staff & Students	MT eCO2 /person	% Decrease from prior year
FY14-15	1,123,988	44,649	0	1,708,462	522,393	0	915	2.43	Baseline
FY15-16	1,027,960	25,593	0	1,562,499	299,438	0	915	2.03	16%

8. Has your school conducted an energy audit of its facilities? (e.g. LGEA, Eco-Schools Energy Audit) Yes X No \_\_\_

Percent reduction: 40 % Unit used (kBtu/sq ft or kBtu/student): 269.45 Time period: from 14-15 to 15-16

9. Has your school received [EPA ENERGY STAR certification](#) or does it meet the requirements for ENERGY STAR certification? (score of 75 or above) Yes X No \_\_\_ Year(s) and score(s) received: 2016 score - 79

10. Percentage of school's energy is obtained from on-site renewable energy generation: 0 %

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy programs: (Ex. ACES) Yes X No \_\_\_ If yes, what programs? Aces

11. Has your school reduced its total non-transportation energy use from an initial baseline? Yes X No \_\_\_

	Electric Energy Consumption (kwh) 1kwh=3.412 kBtu	Natural Gas Consumption (therms) 1therm=100kBtu	Fuel Oil Consumption (gallons) 1 gal. = 139 kBtu	Total kBtu	kBTU/sq.ft	kBTU /sq.ft.	% Reduction From Baseline
FY14-15	3,835,048	44,649,000	0	48,484,048	448.93		Baseline
FY15-16	3,507,400	25,593,000	0	29,100,400	269.45		40%

12. What year was school originally constructed? 2014 Total building area (sq.ft) 108,000

13. Has your school constructed or renovated building(s) in the past ten years? ( X ) Yes ( ) No

For new building(s): Percentage building area meeting green building standards: \_\_\_ Certification & level: \_\_\_ Total constructed area: \_\_\_ Which green building standard was used? LEED for Schools

For renovated building, which green building standard was used? LEED Existing Buildings: Operation & Maintenance

**Element 1B: Improved water quality, efficiency, and conservation**

**Water and Grounds**

14. Can you demonstrate a reduction in your school's total water consumption (measured in gal/square foot) from an initial baseline? Yes X No \_\_\_ If yes, please complete the table below. If no, please explain. (max 50 words)

	Water Consumption (gallons)	Total Occupants	Gallons Per Occupant	% Reduction from FY 2011
FY14-15	834,000	915	911.5	Baseline
FY15-16	825,000	915	901	2%

Do you include after-hour activities in your water consumption calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes X No \_\_\_ Documented by Utility Bills

15. Describe any strategies you use to discourage single-use beverage containers on school property. Describe how you assure the recycling of those containers if/when purchased and used at athletic locations, or other outdoor events. (Ex. Hydration Stations, bottle refilling fountains) We have added 2 bottle filling stations to water fountains outside the cafeteria area. We also added water coolers inside the cafeteria that allow for bottles to be refilled. We also have held several activities raising awareness of bottle recycling including building a greenhouse from recycled bottles. We are continuously selling BPA free recycled reusable water bottles for the faculty and staff to promote a zero single use water bottle initiative. Students are excited to use these reusable water bottles.

16. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? 100 %  
What types of plants are used and where are they located? Have you preserved any areas with native vegetation with minimal disturbance? (50-words max) The Property is approximately 12 acres and the entire perimeter of the

property was preserved with original plants and trees. Plantings were not replaced, however over 30 indigenous trees were replanted on the property surrounding the perimeter of the school as well as providing a natural barrier in the back of the school between the playing field and the swale.

17. How have you incorporated [native plants](#) into your landscaping? (50-words max)

The plants in our courtyard are relatively maintenance free. The trees and bushes planted are native to the climate and weather for our area and selected for those reasons. We had a Master Gardener plan the layout of where to grow our fruits and vegetables. All the plants were chosen based on suitability for our climate and our policy not to use pesticides or fertilizers. Our classrooms use the soil from our school's garden when they need to use soil for their individual classroom projects. In the spring, these classroom plants are placed outside in the garden to get direct sunlight.

18. Describe alternate Non-potable water sources used for irrigation (e.g. roof or parking lot runoff). We have 2 water collection barrels in our courtyard garden that will provide some of the water needed for our vegetable gardens in the spring. These barrels have a dual purpose of diverting water buildup away from the building and collecting as much possible water to maintain vegetable gardens in the spring and summer months.

19. Describe efforts to reduce stormwater runoff or reduce impervious pavement (e.g. rain gardens, bio swales, storm water basins). (50-words max) The school property has always been home to a swale that allow for drainage of storm water from the property. When the school was rebuilt, the swale was changed to be able to accommodate water runoff from a 100 year storm.

20. Our school's drinking water comes from: (X ) Municipal water source

21. Describe how the water supply for your school is protected from potential contamination. (Ex. Backflow preventers)

The school has two main water sources into the school. One is potable water, for drinking and sanitation and the second water source is for emergency fire suppression system. Both are 4 in lines and both lines are required by law and to comply with a backflow preventer on the line which is inspected and monitored yearly. (50-words max)

22. Describe the program you have in place to control lead in drinking water (e.g., pipe flushing, old plumbing solder).

NJDEP Lead in Drinking Water – Public Water System Information ( <http://www.nj.gov/dep/watersupply/dwc-lead-public.html> ) The school was built in 2014 with all safety concerns considered. No lead solder was used, no lead is contained in the faucets and all water is provided from a municipal water source which provides water quality tests yearly. (50-words max)

23. Describe how your school's site grading, irrigation system and schedule is appropriate for your climate, soil conditions, and plant materials, with an emphasis on water conservation and improved stormwater management.

Our school does not have an irrigation system. The school site used to flood in the back of the property with concerns to the neighboring property. The new site manages the storm runoff in a swale that allows storm management for a 100 year storm.

24. What percentage of school grounds are green space? (ex. Green roof, rain gardens, native plants, solar panels, fish farms, outdoor raised beds, living walls, wetlands/marsh, forest, grassland, etc.) 62.6% and list items.

The total square feet of the property is 422,961 sq/ft. The total area that is hardscaped is 158, 492 sq/ft. The remaining space is 264,469 sq/ft. The majority of this space is grassland but also includes a courtyard garden and 5 outdoor raised beds.

#### **Element 1C: Reduce waste production – Waste/Hazardous Waste**

25. What percentage of solid waste (including food service waste) is diverted from landfills or incinerators due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 8 yards x 12 pickups x 100% full each pickup = 96 yards

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 8 yards x 8 pickups x 100% full each pickup = 64 yards

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): N/A

Recycling Rate =  $((B + C) \div (A + B + C) \times 100)$ : 40%

Monthly waste generated per person = (A/number of students and staff): 96 yards / 947 individuals = 0.1 yards per person per month

26. What percentage of your school's total office/classroom paper content **contains at least 30%** post-consumer material, **or** fiber from forests certified as responsibly managed and/or chlorine-free?

As an elementary school, our annual paper order is comprised of school's of 25% post-consumer material, 100% recycled, FSC certified, and chlorine-free. The school's paper towels are comprised of 50% post-consumer material, 100% recycled, FSC certified, and chlorine-free.

27. Do you include after-hour activities in your garbage reduction calculations? (adult sport leagues, adult education, scouting, other community events etc.?) Yes X No \_\_\_\_\_

28. Describe how you have reduced your paper consumption, and how you measured that reduction or other uses you created for the materials (e.g. working and reviewing online, white boards). (50-word max)

Google Docs and email are used to convey information to the staff. Parents receive information via phone blasts and with access to the Parent Portal on Genesis. Flyers are sent out via emails to all families. Teachers utilize smart slates and also assign the online components of the curriculum in order to reinforce lessons. Students are also using wipe off slates in the classroom for computations and ELA class work. Online testing and benchmarking are utilized in all test taking classrooms to reduce the consumption of paper across subject areas.

29. List the types and amounts of hazardous waste generated at your school: How is hazardous waste disposal tracked?  
NONE

30a. Describe other measures taken to reduce or eliminate solid waste and hazardous waste (on-site composting etc.).

To reduce waste volume the cafeteria utilizes re-usable washable lunch trays. There are paper recycling bins in every room and hallway. Students have given up straw use in the building during breakfast and lunch, an effort started by third graders in a project to save local sea life from one of the top 10 types of pollution at the Jersey Shore. Year round, we run a clothing drive to repurpose outgrown uniforms and winter coats. We also participate in other collection projects such as gathering ink cartridges to send to Lexmark to be reused. Juice pouches are collected cleaned, repurposed then sold to raise funds for our garden. Plastic bottles, cardboard boxes, cans, and papers are collected for the creations in the MakerSpace Project, Physic Ed. Equipment and a variety of projects in the STEM classrooms.

30b. Describe how electronics are handled at the end of their useful life.

All printer and toner cartridges are sent back to the manufacturer for recycling. Once a new one is taken out of the box, the old one is returned in that same box. All electronic devices are recycled through the City recycling department.

31. Which green cleaning custodial standard is used? \_\_\_ EPA Green Cleaning Standard \_\_\_\_\_

What percentage of all products is certified? \_\_\_ 100% \_\_\_\_\_

What specific third party certified green cleaning product standard does your school use? Peroxy H2O2

Describe the measures your school has taken to use only green cleaning product. We removed all the older cleaning products and provided training to the custodial staff.



32. If your school has a nurse's office, how does the nurse track regulated medical waste? Describe the tools or mechanisms used to track this waste. Indicate (X) if you have the following:

- X School has a Generator ID number, unless exempted;
- X School manages the regulated medical waste on-site properly? (Use the proper containers, properly segregate the regulated medical waste, and properly store the containers)
- X School uses a licensed and registered regulated medical waste transporter, unless exempted?
- \_\_\_ School ships the regulated medical waste to a facility authorized to accept the regulated medical waste?
- X School completes the proper paperwork to document the shipment and maintain records for 3 years?
- X School files the generator annual report, unless exempted? - We are exempted

33. Is a Hazardous Waste Policy for storage, management and disposal of chemicals in laboratories and other areas with hazardous waste, in place and actively enforced? Yes \_\_\_ No X We do not have a laboratory or other areas with hazardous waste.

34. Do you have Underground Storage Tanks located at your School? No

35. Is your school compliant with the New Jersey Department of Environmental Protection's (DEP) Air Quality Permit requirement? (Equipment at schools that require air permits include boilers, emergency generators, space heaters and hot water heaters that have a maximum rated heat input of 1 million BTU/Hr or greater, to the burning chamber. Also, some schools might require an air permit for certain woodshop operations. Most of these pieces of equipment can be permitted.) Yes X No \_\_\_ List Permits: \_\_\_Boiler/Air Permit, Generator Permit \_\_\_\_\_

#### **Element 1D: Use of Alternative Transportation**

36. What percentage of your students walk/bike/skateboard, ride a school bus/use public transportation, or carpool (2+ students per car) to/from school? (Note if your school does not use school buses). How were these percentages collected and calculated?

86% of students ride a school bus to school. 732 out of 847 students in school data base are registered for bus transportation. Of the 14% of students that do not ride the bus daily, 41% of them travel to school in carpools of 2 or more students. Percentages we calculated using the daily number of students riding the bus to and from school compared to the number of student in school. Carpooling was calculated tallying arrivals and departures over a period of time with averages used.

37. Indicate (X) if you have implemented the following.

- X Designated carpool parking spaces All teachers that have to travel to other buildings carpool and have an assigned spot.
- X A well-publicized no idling policy that applies to all vehicles (including school buses, cars and delivery trucks) All buses that are waiting for departure, as well as arriving, turn off their engines until it is time to go. The same goes for all delivery trucks. As parents arrive they are not permitted to idle in the pick up zone. All cars are shut off until they are loaded with students.
- NO \_\_\_ A policy that encourages walking and/or bicycling to school 86% of our students are bused to school due to distance from their homes and the lack of alternative transportation.
- X Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows. Pick up zones/areas for parents are located 25 feet from the building.

- NO\_\_A Safe Routes to School program or a School Travel Plan. Although they learn about safe ways to travel by bike and walking, students at GLC do not walk or bike to school due to the distance from their homes.
- \_NO\_\_ Walk and Bike to School Days No, most of our students ride the bus, due to the distance.
- \_NO\_\_A Walking School Bus program No, most of our students ride the bus, due to the distance.
- \_x\_\_ Walking and bicycling safety curriculum All of our students participate in a program that is directed by our PE teachers as well as programs from Monmouth County Park Systems
- NO\_\_ Electric vehicle charging stations have been installed to encourage the use of these vehicles
- NO\_\_ Secure bicycle storage is provided to encourage bicycling to school

39. If your school has only bus transportation, describe how your school transportation use is efficient and has reduced its environmental impact.

With 86% of our students participating in bussing transportation as well as common bus stops in neighborhoods we have greatly reduced the environmental impact that hundreds of cars would create if not offered. With 15 busses transporting our students to and from school as well as after school programs, transportation in our town for our students is efficient and maintains a better environmental impact.

**Summary Question for Pillar 1**

40. Describe any other efforts toward reducing environmental impact, focusing on innovative practices & partnerships. As a large elementary school, we are very concerned with the environmental footprint we are leaving behind. While we teach our students about the environment and the impact we are facing with current conditions, we also teach them to be creative and problem solve to **become the change**. Students are encouraged to come up with solutions and plan a way to act on the changes we need. Our Say no to Straws Campaign was started by third grade students after viewing the health concerns this pollutant has on marine ecosystems. We acknowledge that our students are our hope for tomorrow, and we are working diligently to provide them with the tools they need to continue the progress we are making here, in our small corner of the world, and to expand our message globally.

**PILLAR 2: IMPROVE THE HEALTH AND WELLNESS OF STUDENTS AND STAFF**

**Element 2A: Integrated School Environmental Health program**

**Environmental Health**

1. Has your school conducted any "Occupant Survey" with teachers and students? If so, please state the date(s) and over results of the survey. (CHPS Occupant Survey) In lieu of a formal CHPS Survey our PowerSave selected student team has completed an Occupant Survey in our building in the form of an energy audit. In the month of November, teams of students audited each classroom and office in our building documenting Lighting (foot candles), Appliance (watts), Temperature, and the amount of time each was used. The team met and based on the information gave suggestions to each teacher or occupant of the offices. They are currently completing patrols around the building to monitor and maintain the suggestions that were made. Following these suggestions should result in lowering energy consumption in our building. The powersave team consists of 25 students and 10 staff members. Following their data compilation, students from this team will present their findings to the Board of Education and make suggestions for lowering the energy consumption and therefore cost in our building.
2. Do you have an Operations & Maintenance Policy for your building? Yes  X  No
3. Does your school have an Integrated Pest Management plan? Yes  X  No   Date last updated:  7/30/2012
4. Indicate (X) which of the following practices your school employs to minimize exposure to hazardous contaminants. Provide specific examples of actions taken for each checked practice.
  - X  School conducts both indoor (structural) and outdoor (turf and ornamental) IPM to reduce student exposure to chemical pesticides.
  - X  School reduces or does not use fertilizer on our property
  - X  School prohibits smoking on campus and in public school buses
  - X  School has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.

- X School uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)
- X School does not have any fuel burning combustion appliances (e.g. boilers, generators, hot water heaters)
- X School has tested all frequently occupied rooms in contact with the ground, and first floor rooms above basement spaces that are not frequently occupied for radon gas and has fixed and retested rooms with levels that tested at or above 4 pCi/L . **School Radon Test completed 2016** X Yes \_\_\_ No
- X School built with radon resistant construction features tested to confirm levels below 4 pCi/L. Yes \_\_\_
- X Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure to this pesticide/wood sealing preservative. **We do not have wooden structures or playground materials.**

6. Describe how your school controls and manages chemicals routinely used in the school, as well as construction or cleaning activity that produces odors or dust, to minimize student and staff exposure. **We have moved to a green cleaning set of solutions so little to no chemicals are utilized in the schools. Any construction work that produces odor or dusts ie painting, we perform after hours when staff and students are not present. (100-word max)**

7. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100-word max)

**Our school is working towards an Asthma Friendly Certified School through NJPAC. We have always adhered to the structure of the program, however this year we are utilizing the tools from NJPAC to turnkey the training to Nurses and staff and will completed by February 2017. We also have our Nurse, Principal, Asst PRincipal all registered with Enviroflash to provide us alerts on air quality concerns.**

Is your school signed up to receive air quality alerts through Enviroflash which issues notifications of days when poor air quality is forecasted to occur? Learn more Yes X No \_\_\_

**Our school is signed up to receive alerts through Enviroflash with notifications when poor air quality if forecasted. With these notifications we are able to modify and eliminate harmful exposure for our sensitive and affected students here at GLC. Modifications on these days affect students time outside for physical education classes as well as recess.**

**Alternative, safe options are provided for these students.**

Has your school developed a plan for implementation to modify activities to protect the health of students and teachers when poor air quality is forecasted? Yes X No \_\_\_

**When poor air quality is predicted our school eliminates outdoor recess and physical education by providing safe alternatives indoors for all students. Large motor areas such as the gym and all purpose room can be used for gross motor activities as well as the use of the classrooms and hallways for space appropriate activities. Student's health is a primary focus here at GLC and we take all necessary measures for the safety of our students and staff both inside and outside of the regular classroom. Staff is made aware of these days and appropriate precautions are taken.**

Have you provided brochures to students, teachers and parents to educate them about air quality and steps they can take to protect their health and decrease their contribution to ozone pollution? Yes X No \_\_\_

8. Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup any visible mold or remove moldy materials when found. Our staff actively inspect and monitor for and all leaks or condensation. **Our custodians and Maintenance staff take immediate action to clean the area and remove all water. At any time, if an area goes beyond wetness and turns to mold we immediately remove it - we respond during the same work shift to remediate the issue. It's top priority to remediate any issue causing the growth.**

9. Our school has installed local exhaust systems for major airborne contaminant sources. Yes X No \_\_\_

**Our School was designed and built by the NJSDA and utilized LEED For Schools 2007 as a basis of design. Each and every area has appropriate exchange of air including exhaust systems to eliminate major airborne contaminants.**

10. Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. **Our level of maintenance on the unit ventilators has several layers. Our custodians maintain the air vents weekly. They also vacuum the units and replace the filters twice a year. The larger units are serviced by the maintenance staff. OUR Maintenance staff, maintains the chiller tower and roof top units including changing the filters 4x's a year.**

11. Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with filtered outside air, consistent with state or local codes, or national ventilation guidelines. **Our school is new and was designed and built by the NJSDA and utilized LEED For Schools 2007 as a basis of design. We have the latest systems and design to meet all state and local codes. We maintain the system to run properly under those guidelines and hired an Energy Manager to assist in inspecting those systems to ensure they are running properly as designed.**
12. Indicate (X) steps your school has taken to protect indoor environmental quality:
- X** Implementing [US EPA IAQ Tools for Schools](#) and/or
  - X** Conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.
  - X** Participating in the Pediatric/Adult Coalition of NJ's Asthmas Friendly Awareness Program
  - X** Other **The Buildings and Grounds Department also maintains a procedure to investigate any reported air quality issue with 24 hours of the report. We also have a company on call to provide air quality reports as necessary and work in conjunction with the District Head Nurse to investigate any and all concerns reported.**
13. Indicate (X) if your school's green procurement practices pertain to the following: ([Buy Recycled](#) / [Buy Green](#))
- |   |   |  |
|---|---|--|
| <input type="checkbox"/> ___ Construction             | <input type="checkbox"/> ___ Fleets                               | <input type="checkbox"/> ___ Office Supplies   |
| <input type="checkbox"/> ___ Carpets                  | <input checked="" type="checkbox"/> <b>X</b> Food Services        | <input type="checkbox"/> ___ Paper   |
| <input checked="" type="checkbox"/> <b>X</b> Cleaning | <input checked="" type="checkbox"/> <b>X</b> Landscaping          | <input checked="" type="checkbox"/> <b>X</b> Other (50 word max) <b>Paper towels and toilet paper.</b> |
| <input type="checkbox"/> ___ Electronics              | <input checked="" type="checkbox"/> <b>X</b> Meetings&Conferences |  |
14. What system do you use to determine if the above products and services are considered sustainable? (ex. DOE Purchasing for Energy Efficient Products, CHPS High Performance Database, Electronic Product Environmental Assessment Tool (EPEAT)) \_\_\_ DOE Purchasing for Energy Efficient Products \_\_\_\_\_

**Element 2B: Nutrition and Fitness**

**Food and Nutrition, Fitness and Outdoor time**

15. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships. (100-word max each)
- X** Our school participates in the USDA's Healthier US School Challenge. Level and year: **We are currently applying to the USDA's Healthier US School Challenge, and we have attained the the Bronze Level for the Alliance for a Healthier Generation in 2016.**
  - X** Our school participates in a Farm to School program to use local, fresh food. **Yes, our school does participate in the Farm to School Program. Sodexo uses the distributor, Amprogi, and provides Jersey fresh produce to our students at GLC. We also participate in the Fresh Fruit and Vegetables Program in which our students receive locally grown fresh fruit or vegetables two times a week as a healthy snack.**
  - X** Our school has an on-site food garden that teaches nutrition and environmental education, describe. **Yes, our on-site Garden is located our courtyard and tended to by our students and staff school wide. Our garden provides hands-on experience for our nutrition and science curriculum. We recently built a greenhouse out of recycled bottles that involved all of the 3rd, 4th, and 5th grade students. We also have a compost heap that is made of decomposing leaves that will later be used as fertilizer.**
  - X** Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. **Our garden provides tastings for our students and the fruits and vegetables that are harvested are donated to our students in need as well as local food banks like St Vincent dePaul (Holy Trinity).**
  - X** Our students spent at least 120 minutes per week over the past year in school supervised physical education. **Our students are engaged in physical activity 160 minutes a week.**
  - X** At least 50% of our students' annual physical education takes place outdoors. **\_The students spend 25 minutes outside every day weather permitting during their Physical Education lab time.\_**

- \_\_\_Our school participates in the NJ Safe Routes to School Resource Center. Level and year: \_\_\_Our school has had Safe Routes to School assemblies for our students in December focusing on pedestrian safety and last June they focused on bicycle safety.
- \_\_\_Our school participates in International Walk to School Day in October or National Bike to School Day in May. Year(s): No, we do not participate because the city of Long Branch is a little over six miles long and its width is narrow. Eighty-six percent of our students are bussed to school because they live too far to safely walk or bike.
- \_X\_Our school has a School Wellness Policy that addresses both nutrition AND physical activity. Our Wellness Policy is located on our District Web Page under Policies and Information. District Policy #8505 and follows the Healthy, Hunger Free Kids Act of 2010 (HHFKA) standards for school lunch and breakfast. The Wellness policy has established goals for nutrition, nutrition education, physical activity and school-based activities.
- \_X\_Our school has a School Wellness Committee that meets at least once a year. Our school Wellness Committee has met once already and plans to meet again later in the year. Our focus has been to maintain and improve our wellness policy. Birthday and holiday parties are limited healthy snacks and fruits. The kids really enjoy fruit Kabobs.
- \_X\_Health measures are integrated into assessments. The nurse administers height, weight, BMI, blood pressure, hearing and vision screenings. The physical education teachers administer the FitnessGram tests which measure muscular strength and endurance, cardiovascular endurance and flexibility. The FitnessGram results are charted and kept on each student while in our school and later passed onto the middle school to show growth and identify any at-risk students.
- \_X\_At least 50% of our students have participated in the EPA's Sunwise, or equivalent program. While our students have not participated in the sunwise program approximately 50% of our students have participated in the STEM curriculum PLTW (The Sun the Moon and the Stars). In this program, students learn about the sun and the effects UV rays have on people. They track average hours of sunlight for a year and graph the results. They participate in a mystery challenge with UV changing beads to see how harmful UV light can be. They bring the bracelets home to use for safety precautions. Students use this information to design a playground that protects children from harmful UV rays while they are at play outside.
- \_X\_Some food purchased by our school food service is locally sourced from regional farms. \_\_\_Yes, our food services department works to get locally grown produce from Jersey Fresh farmers. We had apples and squash that were locally grown and prepared for our students this fall.
16. Is school lunch waste composted on-site? Yes \_\_\_ No \_X\_ Percent\_\_\_\_\_ How is it used in your outdoor classroom? We do not compost lunch but we do have a composting bin outside in our garden that is used to boost our soil in the spring. This composting bin composts materials like leaves and plants.
17. What environmental technologies are used with curriculum? (weather station, energy monitoring system, GIS, web cam, etc) At GLC we are able to use the environmental technologies from Draker Labs to enhance our curriculum. Through our website and Draker Labs we can monitor the energy usage of each early childhood, elementary, middle and high school in our district currently using solar energy. We are also able to monitor and learn from a weather station through this technology.
18. Describe the type of outdoor education, exercise and recreation available. (100-word max) We offer Health and Physical Education to all students. Each student receives one 35-minute Quality HPE class once a week. Quality PE provides students with a multitude of important learning experiences that cannot be duplicated in the classroom. Physical Education is that phase of education which is concerned with the teaching of skills, improving physical fitness, the reinforcement of other subjects, self-discipline, leadership and cooperation, enhancing self-efficacy, stress reduction, and strengthening peer relationships. Physical Education is more than running, calisthenics, or sport. It is a total movement experience that focuses on fun, involvement, character, self-esteem, health and fitness, and total well-being for our students. It is an essential part of every day to live long, healthy lives.

**Coordinated School Health, Mental Health, School Climate, and Safety**

19. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? \_X\_ Yes \_\_\_ No If yes, describe the health-related initiatives or approaches used by the

school: We employ a District Head Nurse that oversees all the coordination of programming related to physical activities, mental health programs, family activities, counseling, Asthma and communicable diseases.

20. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health, school garden education and/or safety?  Yes  No

Our District Head Nurse coordinates our activities with LB BOH, Monmouth Medical, Local FQHC, Prevention First, Dept of Children & Families, Mobile Dentists, Prevent Child Abuse of New Brunswick, MM /St. Barnabas Foundation, Crisis Unit @ MM, School Based Youth Services from Dept of Children & Family, County YMCA Counseling of Matawan (in 7 bldgs/ MEDICAID). We also are working with Sodexo as a partner on Nutrition in the gardens.

21. Does your school have a school nurse and/or a school-based health center?  Yes  No

22. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.): School Climate and mental health are addressed through a myriad of school wide systems and programs. The School Safety Team, led by building Anti Bullying specialists educate all stakeholders regarding policy and procedure. Anti-bullying programs, activities and curriculum are also proactively in place to support a healthy school climate. In addition to this, Intervention & Referral Services (I&RS) teams address all behavioral, health and counseling requirements for identified students.

### Summary Question for Pillar 2

23. Describe any other efforts to improve coordinate health and safety, nutrition and fitness, highlighting innovative or unique practices and partnerships. (100-word max) Nearly 4 years ago, Long Branch Public Schools opened a Health Center on campus providing easy access to a doctor or physician's assistant. This facility supports the wellness of both staff and their families 7 days a week. The Health Center's dispensary provides on-site access to medicine. Also available is are X-ray, phlebotomy, physical therapy and chiropractic services. In addition to the health center, staff exercise and yoga groups meet after school at GLC for aerobic exercise. This is offered 2 times per week. Teachers and staff are welcome to take part in the PE activities each week after school.

### PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION

#### **Element 3A: Interdisciplinary learning that prepares students to navigate the key inter-relationships between dynamic physical and social systems (E/S literacy) is documented, assessed for and mapped.**

1. Indicate (X) which practices your school employs to help ensure effective environmental and sustainability education. Provide examples of actions taken, highlighting innovative or unique practices and partnerships.  School has an environmental or sustainability literacy requirement. Although our school does not have an environmental or sustainable literacy requirement we act and teach as though we do. Our school and district support and promote a commitment to make the students, staff, and buildings in our city green, sustainable, and environmentally proactive sites. We are committed to providing healthier choices to our students through the lunch and breakfast programs as well as being proactive with recycling and the amount of waste we produce. Our health and PE teachers support and encourage a healthy mind and body through exercise and health education. Faculty and Staff support and provide instruction in green careers as well as instruction on how our student can be proactive today. Students plan and implement projects and ways to have the entire student body make changes in their daily lives to promote a more sustainable lifestyle. We educate our families and the community in the events we host about not only what the students are doing at school but ways these activities can be carried on at home. Our sustainable goals are embedded in our daily practices and part of the lifestyles we promote for our entire family.

Recurring environmental and sustainability concepts are integrated widely throughout an interdisciplinary curriculum. The notion of sustainability and being green is a unifying theme that is seen throughout the curricula and programs offered to our students/staff/and faculty. In art and in STEM activities (including makerspace), students often make use of recycled/repurposed materials. Physical and health education programs educate our students/staff about the choices they will face on a daily basis. Our PowerSave members have already changed behaviors within the building but are beginning to expand their green influence outside the building through video "commercials" highlighting sustainable choices. Our garden club provides fresh produce that goes directly to our local community members. There

are afterschool opportunities for students to get involved in the green movement. Throughout all of these efforts, students become aware of “green” being a possible career path as more and more people see the need to be “green”.

X Student learning of environmental & sustainability concepts is evidenced by authentic assessments.

Students receive regular formative and summative assessments in science courses. The topics covered are specified by the NJSL-S which are based off of the Next Generation Science Standards. The focus of these new standards is to engage students with practices, processes, and content in different ways than in the past. Since students are often asked to solve problems and/or design solutions to problems, a natural connection forms between the science/engineering concepts and the needs of our society. Students of all grade levels participate in a STEM program as part of their specials block. This program helps build student application of scientific concepts and allows them to self-assess the effectiveness of their designs. True to the nature of science and engineering, this program and in our science and social studies courses emphasize the importance of the “improve” portion of the design cycle.

X Students evidence high levels of proficiency in these assessments.

As evidenced by report cards, student perform well in science. The data from the most recent NJASK4 Science administration shows that 69% (121/184) of students are proficient or higher. 10% (18/184) of last year’s 4th grade students scored advanced proficient. 31% (63/184) of students scored at a partially proficient level.

X Professional development (PD) in environmental and sustainability education (E/S) are provided to teachers.

Teachers have received environmental and sustainability training 2x per year from our District Facilities Manager and Energy Manager pertaining to the building and district. We have received yearly training from the School's Green Team regarding the Sustainable Jersey School Application and ongoing projects and efforts throughout the building. Selected and volunteer teachers and staff have received training through NJ Natural Gas partnership and PowerSave Schools with energy consumption and saving. Teachers participating on the green team in our building receive training each year with practices pertaining to environmental efforts and opportunities each year.

X Describe the PD in which faculty or administrators participated and how it contributed to the implementation of your E/S Goals. When was the PD held? Who attended?

Each year staff members are given an opportunity to learn about or refresh the building’s (and district’s) vision of sustainability by participating in a Sustainable NJ for Schools training. This year, 4 staff members from this building were able to attend the PowerSave Energy Program training held at the NJNG headquarters in Wall Township, NJ. Additionally, our Energy Manager and Facilities Manager hold Energy Efficiency Trainings yearly for the staff. To address health and wellness, the school nurse provides training to the staff.

X Environmental/Sustainability Education is offered in after-hour school programs

Environmental/Sustainability Education is offered both during the school day during students free time (recess, lunch, homeroom) as well as after school for students interested in the program. Approximately 150 fourth and fifth grade students are bussed to the middle school daily to extend their school day by 3 hours. While there they are immersed in a variety of STEAM, Art, and Health/Nutrition related courses of learning elected by the students. K-3 students may choose to extend their day 2 times per week for 3 hours by staying after for a STEAM, Readers Theater, Coding, or tutoring program that correlates to Environmentally/Sustainable education. Students in the school on the Green and Power Save Team give up their homeroom class and recess/ free lunch period bimonthly to continue energy training and sustainable education. At these times they also complete energy and environmental audits around the building.

**Element 3B: Use of (E/S) to prepare students for career pathways and to develop STEM/STEAM content, knowledge, and thinking skills.**

2. How does your school use sustainability and the environment as a context for learning science, technology, engineering [art] and mathematics (STEM/STEAM), thinking skills and content knowledge?

*Sustainability and the environment are a large presence in student’s daily science lessons, as well as the STEM and Art programs we have for every student at GLC. In the STEM curriculum students are solving real world problems following an engineering design process like;*

· *mimicking nature to create a tool to be used to spread seeds for a garden*

- researching alternative renewable energy sources and ways to connect them
- researching the effects of the sun / designing playgrounds where children can play safely
- discovering the power of wind as a source of energy to complete a task
- finding unique ways to conserve energy and water
- Using multiple types of recycled materials both mandated and not to explore art
- Creating art with an Energy theme

Students here at GLC are exposed to environmental safeguarding and education daily through instruction of content knowledge as well as critical thinking and reasoning skills. They are challenged to solve problems by working together to find solutions to issues that face the globe today. We are working to educate students for the impact they will have on the world and what they can do to become responsible environmentally aware citizens.

3. How does your school use sustainability and the environment as a context for learning green technologies and/or career pathways? Please describe student performance criteria and assessment results (200-word max)

Students are provided with hands on experience using and building green technologies in order to learn about sustainability and the environment. Our students were charged with recycling, cleaning and preparing 2-liter bottles that are being used to build a greenhouse that will supply year round fruits and vegetables. Furthermore, students researched, designed and are building a compost. These activities incorporated not only math and science skills, but also allowed students to act as project managers and contributing team members of the GLC community. While our STEM curriculum begins in Kindergarten exposing students to all career paths, students can choose to follow a specific career path as they continue with the curriculum through Grade 12. Formative and Summative assessments are used throughout the STEM and science curriculum with the majority of students meeting or exceeding the NGSS standards.

4. How does your school address teaching the science of sustainability in your K-12 scope and sequence? What science standards do you target? What evidence of student learning are you assessing for and monitoring in this area?

Next Generation Science Standards are implemented across all grade levels K-5. Students are assessed in these standards both through unit Science tests as well as classwork, participation in discussions, and projects they complete in groups and individually. We include sustainable lessons for each grade level as they link to their specific standards. Percentage of last year's eligible HS graduates who completed the Environmental Science / Earth Systems (or similar environmental course) course during their high school career: N/A

**Element 3C: Development and application of authentic civic engagement knowledge, skills and dispositions through place based learning experiences (project-based/service) and community partnerships**

5. Describe students' civic/community engagement projects integrating environment, environmental justice ([as defined by EPA](#)) and sustainability topics.

This year's district art show's theme is The Power of Art, which intends to connect artwork to themes around energy, conservation, and other sustainability topics. The Art teachers have collaborated with the Sustainability committee to plan art projects that raise awareness about preserving our natural resources. For example, many art projects are made using recycled and reused materials.

In addition, as part of the Library elective, students bring in clean disposable materials from home (egg cartons, wrapping papers, paper rolls to name a few) to contribute to our school Makerspace, which is a task-based class that allows students to design their own projects. Our library is a menagerie of animals, robots, and other creations made exclusively of recycled objects.

Our reading, science, and social studies curricula are tied to content knowledge in sustainability and the environment. Students participate in units about endangered species, energy conservation, and recycling. For example, third graders participate in a language arts unit about Green Schools, and fifth grade students research the benefits and disadvantages of different energy sources.



6. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills.

Our school participates in many outdoor learning activities throughout the year. The most notable of these is our school vegetable garden, which is planted and taken care of by our STEM teachers and their classes. Individual homerooms also participate in the garden maintenance, including one 3<sup>rd</sup> grade class which is building a school compost bin out of used shipping palettes. Our fifth grade students attend a Clean Ocean Action Summit at Sandy Hook National Park where they learn hands-on about conservation, environmental issues, and their duty as citizens to keep the oceans and Earth clean. In addition, our entire 4<sup>th</sup> grade attended a Fossil Dig at Poricy Park to learn the prehistoric soil formation of the Navesink and Red Bank layers, and preservation of the river bed where the fossils are discovered.

7. Describe students' outdoor learning/ place based learning experiences at every grade level.

Our school has a garden in our courtyard that all grades participate with the planning, planting, harvesting and distribution to local families in need. We worked with Providing Hope a local non-profit organization. These volunteers worked with our entire staff and students to connect and support the benefits of growing crops and healthy living. Together this organization and our students provided local families in need with fruits and vegetables. Students from all grades have worked collaboratively and created a successful, sustainable garden producing on average 184 lbs of food. Students attended to the garden during the school year and community service was extended with the upkeep through the summer.

Furthermore, curriculum connections have been made to environmental issues of "going green" in a school wide project to collect water bottles building a greenhouse model for our District's School Wide Art Show. Our full size greenhouse is currently being built here at GLC with all recycled materials (2 Liter bottles). In conjunction, students are grasping the understanding of how such projects save the environment with the start of the school Power Save Program. Many of our school's efforts have been recognized through Sustainable Jersey Schools earning our Bronze Certification level. Students in Third and Fourth grade also spent time outdoors observing the native natural habitats of our area. Each of these students also learned about, planted and cared for tree saplings this past spring for Arbor Day. Second grade students also did a project on the effects of what happens to the core of an apple once it is thrown on the ground.

8. Describe how your partnerships help your school and other schools integrate the 3 Pillars into the curriculum, student learning and school culture. Include both the scope and impact of these partnerships. In what ways is your school sharing & promoting (outside of school) its efforts to uphold all 3 Pillars? communities)

One of our most significant partnerships is with Providing Hope. This organization, which strives to build strong communities, helped us plan and begin our sustainable garden. They also helped with our harvest by donating to families in need, both in our district and the larger Monmouth County community. The harvests from our garden were also sent to the St. Vincent de Paul food pantry that is run by our local church, Holy Trinity. As the children cultivate the crops, they understand that the food we grow goes on to help our local people in need.

Additionally, we are partnered up with New Jersey Natural Gas through the PowerSave Energy Program. Staff and students are working to find ways to save energy and money in our school. The Power Team has conducted energy audits and consultations to educate teachers how to use less energy in the classroom.

Through our partnership with Sodexo, students receive nutritional education with the Fresh Fruits and Vegetables program. Each week healthy eating habits are promoted through the sampling of fresh produce.

Our final partnership is with Clean Ocean Action of New Jersey which provides Ocean Pollution and Protection Education to both students and staff.

### **Summary Questions for Pillar 3**

9. Describe any other ways that your school integrates all three pillars into curricula, student learning and school culture to provide effective environmental and sustainability education. Highlight innovative or unique practices and partnerships. Our school provides STEM classes to all grades through a course called, Project Lead the Way. Students participate in investigations that encourage creativity and critical thinking skills that can be utilized to enhance our Math and Science lessons on conservation and the environment.

In addition, some of our students participate in an afterschool program that allows children to increase their knowledge of health and wellness and environmental practices, through courses including, but not limited to yoga, cooking, skateboarding, gardening, and recycling.

In our Library classes, held once a week for all grade levels, the teacher provides students opportunities to build and create with recyclable and reusable materials. Students enjoy reusing items to create their own inventions and contraptions which helps students see the value of recycling.

We include many guest speakers and assemblies throughout the school year focused in recycling, deforestation, marine pollution, energy consumption and reduction, and sustainability. Open ended project based learning includes solar panel discussion in math to use in gardening and cooking and that is just the beginning. With student, staff, and district level green teams the possibilities we have for implementing a change are endless.

10. How are your descriptions in number 8 supported or enhanced by your efforts in Pillar 1 to reduce environmental impact and costs for your school. Our gardening program with partners Providing Hope, teaches students the benefits of growing your own food. With so many pesticides and unhealthy food choices, our sustainable garden ensures freshness and quality. This program educates our students on the value of composting, nutrition, and ways to help the community through St Vincent de Paul food pantry, with minimal cost. It instills responsibility and teaches lifelong skills that students will be sure to use in the future.

Through Sodexo, our students are tackling nutrition head-on while, The PowerSave Team creates awareness and opportunities for staff and students to save energy, while instilling more energy-efficient habits that will benefit the environment as well as decreasing our costs at home and at school. We are consistently working not only to save money but to reduce our impact and make a greener tomorrow.