

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 early learning to 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 and sustainability 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

 Public Charter Title I Magnet Private Independent Rural Name of Principal: Mrs. Elena M. Villani (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
Official School Name: Highland Elementary School
(As it should appear on an award)
Official School Name Mailing Address: 500 Highland Avenue, Lake Worth, FL 33460
(If address is P.O. Box, also include street address.)
County: The School District of Palm Beach County
Telephone: 561-202-0500
Web site/URL: hges.palmbeachschools.org E-mail: elena.villani@palmbeachschools.org
*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)
Name of Superintendent: Dr. Donald E. Fennoy II
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)



District Name: The School District of Palm Beach County

Lhave reviewed the information in this application and certify that to the best of my knowledge all information is accurate. (Superintendent's Signature) Date: 1/29/20

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: Florida Department of Education

Name of Nominating Authority: Commissioner Richard Corcoran

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

I have reviewed the information in this application and	certify to the	e best of my knowledge that the school	ol meets the
I have reviewed the information in this application and provisions above. (Nominating Authority's Signature)		i /	
Malinul	Date:	02/05/2020	
(Nominating Authority's Signature)		ver a jacan	

SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: March 31, 2021

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.



U.S. Department of Education *Green Ribbon Schools* 2019-2020 TECHNICAL REVIEW

Nominee Highland Elementary School, 500 Highland Avenue, Lake Worth, Florida 33460				
Evaluation Issues	Approvable	Special Notes		
Florida Department of Environment Protection: Check all records available regarding environmental violations for this school. Reviewer Name and Title: <i>Diane Pupa, Business Planning Program</i> <i>Manager, South East District, Florida Department of Environmental</i> <i>Protection</i>	YES	No outstanding violations.		
Florida Department of Health: Check Radon Monitoring Records: Reviewer Name and Title: Joseph Kidder, Radon and Indoor Air Program; Bureau of Environmental Health; Division of Disease Control & Health Protection; Florida Department of Health	YES 1-29-20	Florida law requires schools to test for radon levels every five years.		
Florida Department of Agriculture and Consumer Services: Check compliance with regulations related to National School Lunch Program Reviewer Name and Title: Lisa Church, Supervisor of Implementation, NSLP, SSO, SMP, Division of Food, Nutrition and Wellness, Florida Department of Agriculture and Consumer Services	YES 1-23-20	Compliance in order.		
Florida Department of Education: Check compliance with USDOE Individuals with Disabilities Education Act (IDEA) Reviewer Name and Title: Victoria Gaitanis, Program Specialist, Bureau of Exceptional Education & Student Services, Florida Department of Education	YES 1-21-20	Compliance in order.		

Highland Elementary School Green Ribbon Schools Summary

Highland Elementary School is a Title One School, which is located in The City of Lake Worth Beach, Florida where it is nestled between Interstate 95 and Tenth Avenue North. One of the most significant features about Highland Elementary School is its location in Palm Beach County. We are situated along The Lake Worth Lagoon, which provides our students with a greater understanding of the water cycle, erosion, weathering, and continental drift. There is scientific evidence on our campus to prove that the land where Highland Elementary School is located was once underwater, and eroded over time to form the top of a sand dune; hence the name, Highland. Even today, students participating in nature walks on our campus come across seashells within the soil.

Originally built in 1954, Highland Elementary School has been renovated throughout the years. The School was rebuilt in 1998 and complies with the standard Florida energy building code of the time. Ironically, Highland Elementary School was not built to be a "green school", nor were there any aspirations to become one. As a result, we had a tremendous job ahead of us. Highland Elementary's Green Team transformed the overgrown and non-environmentally friendly campus into a recognized Florida Green Apple School. On February 8, 2018, the Coastal/Greenacres Observer featured that Highland Elementary School had earned the designation of becoming a recognized Florida Green Apple School. On February 23, 2018, The Lake Worth Tree Board honored Highland Elementary by donating a Bustic Willow Tree to school. This huge recognition was featured in the March 1, 2018 edition of the Lake Worth Herald. We have eradicated the non-native and extremely invasive Brazilian pepper tree species from the school grounds. The removal of the Brazilian Pepper Plants enabled us to utilize our vast campus for native plants that are aesthetically pleasing. We celebrated our successful removal of the invasive species and planted the donated tree. This improvement along with many others has led to our recognition as a "Green School of Quality," through the FAU Pine Jog Environmental Education Center's Green Schools Recognition Program for the second year in a row. Our Green Team and our population of over 1,000 students have worked together with school administration to overhaul Highland's green practices, including grounds enhancement, sustainability, health/well-being, curriculum integration, school-wide green culture and community involvement.

As our vision for a Green Campus grew, we were put in touch with a student from one of our local high schools. A tenth grade student who wanted to work with a school that was looking to reduce plastic waste. Working tirelessly on a fundraiser to sell books, we raised enough funds to purchase a water refilling station for Highland Elementary School. Once *Keep Palm Beach County Beautiful* heard about our initiative, they kindly donated a second water refilling station to our school. As a result of this initiative, we were able to significantly reduce disposable waste and eliminate plastic bottle usage by obtaining not just one, but two water refilling stations. Our extremely culturally diverse community noticed the changes that were taking place within the school. To our great surprise the community itself embraced the idea of eradicating disposable waste, started attending our campus clean-ups, and literally worked together to

clean up the surrounding neighborhood. Our community finally understood what having a 'Green School' entailed, and revamped the neighborhood. The crosswalks "were painted" so that they were aesthetically pleasing. In addition, to this community effort, the City of Lake Worth was contacted to ensure that the streets were swept and that residences had recycling bins that were used appropriately. The changes that have taken place have significantly assisted us in reducing our carbon footprint and enabled Highland Elementary School the opportunity to participate and facilitate a positive impact to our local environment, as well as reduce contaminated run-off that flowed into The Lake Worth Lagoon. Our Green efforts have not only improved our student awareness and participation in maintaining our Green School, but also changed the mindset of the students. Our students then went home and were able to explain to their families how to recycle properly.

When Highland Elementary decided to pursue Green Schools, we began to work on a few key Health and Wellness improvements. The first was to address environmental health: our air quality. We needed to get our busses to stop idling to improve the air quality for both students being dismissed and for the staff members who had mandatory dismissal duty posts in our bus loop. Our Principal invited our bus drivers for a luncheon and there we explained the policies and our goals to the bus drivers, to which they were very receptive. As a result, bus drivers now shut the busses off while waiting for the students to be dismissed. To continue maintaining healthy indoor air, Highland works with the District's Indoor Air Quality Team to quickly report possible asthma triggers, such as mold, so that it can be remediated before causing harm to students and staff.

Next on the list was student and staff Wellness. The fifth annual Walk to School Day was embraced by Highland Elementary employees and reinforced through the engagement of many community partners including the Palm Beach County Fire Department, Sheriff's Department and Bridges at Highland. This event helped educate the students and families in our communities regarding appropriate routes so that students and their families can walk safely on our busy streets. Highland Elementary has also participated in Jump Rope for Heart that supports The American Heart Association. At our most recent event, over 700 students learned about cardiorespiratory endurance while physically jumping rope and noticing the difference in heart rate at rest from heart rate with vigorous physical activity. Last year Highland Elementary thought outside of the box and participated in the Leukemia and Lymphoma Society Pennies for Patients fundraiser. The fundraiser promoted awareness of ways Leukemia and Lymphoma affects students and educated students and staff with a STEM curriculum.

There have been Healthy Hydration competitions to promote drinking water and Color Weeks to motivate staff to eat fruits and vegetables. Highland Elementary also offers opportunities for the staff to increase physical activity by participating in group sports. In fact, Highland has its very own kickball team, "The Highland All Stars." Our team includes a minimum of fifteen active faculty and staff members that meet weekly for ongoing competitions to assist with motivation.

Highland Elementary' s Green Team provides environmental education through hands-on STEAM activities. Activities include providing students with the opportunity to plant edible foods to share with their families; working with local families and the surrounding community to create backyard gardens; providing students with seeds to explain why particular birds have specific beaks and feet; observe the birds and butterflies that visit the garden and transfer the outdoor experience to academic tasks in science, literacy, and mathematics. In fact, Environmental and Sustainability Education has become so popular that the Green Team has expanded into two additional STEAM (science, technology, engineering, art, and mathematics) clubs: "Ground-of-APaws" for grades 2-3 and Full Steam Ahead for grade 5.

Highland received a \$1000 grant for a weekly STEAM club that engages students in an interdisciplinary approach through project-based learning with the use of recyclables and environmental education. Expanding beyond the club opportunity, Highland also includes environmental and sustainability education school-wide. For instance, Highland organizes a biannual event called Drop Everything and Reduce (DEAR). Every single staff member and student walk the campus in search of trash, litter, or debris. Another example of environmental and sustainability education being implemented school wide is our Green Champ program. Student Green Team members are identified as Green Champs by wearing badges; identified as, "Solid Waste Authority", "Classroom Custodians" and "Energy Savers." Green events and recognition for environmentally responsible choices made by staff is recognized and highlighted in the weekly bulletin sent by the principal each Friday.

Florida Green Ribbon Schools Application 2019-2020

School Information

School Name: Highland Elementary School Address: 500 Highland Ave City, Lake Worth State, Florida, 33460 Twitter: @HighlandElemPBC Facebook: Highland Elementary School

Principal Name: Mrs. Elena Villani Email: <u>elena.villani@palmbeachschools.org</u> Phone: 561-202-0500

Lead Applicant: Mrs. Andrea Garfield Tomlinson Position/Role: Teacher Email: <u>andrea.garfield-tomlinson@palmbeachschools.org</u> Phone: 561-202-0500

School Type and grade levels served: K-5

Free and Reduced Price Lunch: 96% Minority: 96% Limited English Proficient: 78% Special Education: 10% Graduation Rate: n/a Attendance Rate: 95.43% Total Enrolled: 1089

Pillar I: Reduced Environmental Impact and Energy Costs

Highland Elementary has experienced a reduction in greenhouse gas emissions. Data is based on comparisons for school years 2016-2017 and 2017-2018. This is the timeframe when Highland's Green Team was re-established and began implementing green programming full-force. Even though student population at the school grew by 6%, Highland Elementary reduced their greenhouse gas emissions by 1%, or 10 metric tons.

- Initial GHG emissions rate (MT eCO2/person): 881 metric tons
- Final GHG emissions rate (MT eCO2/person): 871 metric tons

Documentation for the 1% reduction is based on utility records from the School District of Palm Beach County. Highland Elementary did not have any facility/HVAC upgrades during the noted timeframe. The reduction in emission rates are a direct result of Highland's grassroots sustainability efforts, involvement with community organizations and partnership with the District's Environmental & Conservation Services Department.

Highland Elementary has reduced its total non-transportation energy use from an initial baseline. Documentation is based on utility records retrieval from the School District of Palm Beach County. The time period measured: 07-2016 to 06-2017 compared with: 07-2017 to 06-2018

- Initial energy usage (kWh/student/year): 1,067 kWh. The total enrollment for 2016-2017 was 1,167 and the total kWh 1,245,840. The cost of electricity per student for this year was \$131.11.
- Current energy usage (kWh /student/year): 993 kWh, total enrollment for 2017-2018: 1,239 and total kWh: 1,231,147.
- The cost of electricity per student for this year was \$119.57. A total cost savings of \$4,853 from the baseline year 2016-2017.

In our efforts to conserve energy, all light switches on our campus have been labeled with "Turn it Off" stickers. As part as our Green Schools program, all classrooms received "Green Champ" badges to assign to students who were conscientious and willing participants to assist with implementing our energy conservation efforts. These students are responsible for ensuring that all electronics, computers, projectors, and lights are turned off when they are not being used. Our 'Energy Saver Green Champs,' can be found shutting down computers, turning off lights, and reminding adults and students alike to "Turn it Off." We have had complete student and faculty buy-in. As a result of reenergizing our energy conservation efforts, we were one of just five Palm Beach County Schools to decrease energy consumption as part of a regional contest called, *How Low Can You Go?* during the 2018 contest period.

Facilities and Construction

The current Highland Elementary School was built in three separate periods. The kindergarten building and media center were built in 1975. The main classroom/administration building was built in 1998 and the portable classroom building was constructed in 2005. Energy saving updates to the facilities include white roof coating on the portable classroom building in order to reflect sunlight to keep the building cool and reduce energy usage. The project will be completed in February 2020.

Water and Grounds

Highland Elementary School has experienced a reduction in water usage as documented through utility bills.

- Time period measured: 07-2016 to 06-2017 compared with: 07-2017 to 06-2018
- Initial water use (gallons per student): 20.65
- Current water use (gallons per student): 20.05

• Percentage reduction in water use (initial – current)/initial): 2.9%

Highland Elementary uses low-flow faucets and toilets in the restrooms to reduce water. In recent years, Highland has collaborated with the community organization Bridges of Palm Beach County and the City of Lake Worth Tree Board to plant Florida natives on campus, which reduces the amount of irrigation needed. During the tree planting with the Lake Worth Tree Board, student Green Team members learned about the importance of water conservation and they learned that planting native trees contributes to water conservation efforts. The Highland Green Team also worked with District officials to ensure the removal of the non-native, invasive species like the Brazilian Pepper plants that were thriving on our campus.

Waste and Recycling

Highland Elementary School has a significant paper-recycling program. Our students, along with our Green Team, and custodial staff increased paper recycling tonnage from 1.71 tons in 2016-2017 to 5.81 tons in 2017-2018, which is a 4.1 ton increase!

We are always looking to implement pilot programs to increase recycling. Highland's latest Green initiative involved the District's Sustainability Coordinator and the Recycling Coordinator from the City of Lake Worth Beach to assist with our implementation of milk and juice carton recycling extravaganza. As a result of implementing our milk and juice carton recycling, we went from filling four 95-gallon commingled toters every week and increased that amount to include fourteen 95-gallon toters per week. The Green Team has worked extensively with both the custodial team and school food service staff to decrease disposable waste by implementing our milk and juice carton recycling initiative. This endeavor has led to a 250% increase in commingled recycling. We have already recycled nearly 75,000 milk cartons since school began in August 2019.

Since the installation of two water refill stations, Highland has saved 8,620 plastic water bottles from landfills or the plastic recycling stream as of 11/14/19. On August 14, 2019, this project was featured on our local news station, **Channel 5 WPTV**, **Protecting Paradise Series**. <u>https://www.wptv.com/news/protecting-paradise/palm-beach-county-treasure-coast-schools-work-to-become-more-environmentally-friendly-reduce-waste</u> Students and staff received reusable water bottles to encourage using the water refill stations all while reducing single-use plastics on campus.

In our cafeteria, the majority of our lunch periods use reusable lunch trays to keep our cafeteria plate waste to a minimum. However, the last lunch period typically uses polystyrene lunch trays. We are proud to say that we worked with our School Food Service Cafeteria Manager to switch from polystyrene lunch trays to eco-friendly lunch trays. We have been able to discontinue purchasing all of our polystyrene disposable waste.

Alternative Transportation

Highland encourages a variety of alternative transportation options in order to reduce our carbon footprint. Alternative transportation options include biking, walking, riding the school bus, and carpooling. We promote these alternatives via annual events, such as Bike to School Day, as well as

reminders on the morning announcements. Furthermore, the principal provides reminders in the weekly bulletin encouraging the use of alternative transportation.

Pillar II: Improving the Health and Wellness of Students and Staff

Environmental Health

In 2016, the stakeholders at Highland Elementary School decided to pursue Green Schools. We worked with facilities management and our custodial team to begin conducting surveys and checklists regarding all of the components that were needed to not only create an aesthetically pleasing campus, but also one that would provide a healthy environment and ensure the wellbeing of all students and staff members. The very first step that we took was to address our air quality. We needed to get our busses to stop idling to improve the air quality for both students being dismissed and for the staff members who had mandatory dismissal duty posts in our bus loop. After finding out that The School District of Palm Beach County had a School Bus and Heavy-Duty Diesel Vehicle Idling Reduction Policy (Policy #2.24), our Principal invited our bus drivers for a luncheon. There, we explained the policies and our goals to the bus drivers, to which they were very receptive. As a result, bus drivers now shut the busses off while waiting for the students to be dismissed. Our Reading Interventionist, who has an asthmatic condition, no longer needs to use rescue inhalers during her daily bus dismissal duty. We are extremely cognizant of the air quality in and around our school. In 2003, Highland became a certified Asthma Friendly School through the American Lung Association. To continue maintaining healthy indoor air, Highland works with the District's Indoor Air Quality Team to quickly report possible asthma triggers, such as mold, so that it can be remediated before causing harm to students and staff.

Mold is something we take very seriously at Highland Elementary School. Recently, we had an entire building on our campus remediated for mold, which was reported by our administration to our District's Environmental and Conservation Services Department. After the mold was remediated, the building was resurfaced and resealed to prevent future mold growth. Teachers have been directed to immediately report water leaks to prevent damage from moisture and avoid mold growth. Further, Highland's Green Team Coordinator contacted facilities management to obtain the School District of Palm Beach County's Green Custodial Handbook and begin implementing each component.

Our true Green Initiatives were achieved when we finally hired a head custodian who was able to enforce the goals written in the school district's Healthy Custodial Green Cleaning Procedure Manual. According to this extensive manual, "One of the primary goals of a green custodial program is to protect the health of the building occupants. This is accomplished in many ways including the identification and removal of harmful contaminants such as particulates, mold spores, bacteria and viruses." Highland's Green Champion works with the custodial staff to ensure that procedures for identification and removal of harmful contaminants such as dust, mold spores, bacteria and viruses are properly followed as described in the manual. Our Head Custodian worked with facilities management and obtained not only the list of district approved chemicals by *Trumix*, but also requested and received the dispensers that distribute the proper quantities of cleaning solutions to reduce potential chemical hazards and maintain a healthy, clean environment for all stakeholders at Highland Elementary. Highland Elementary is very aware that indoor air pollution can have an adverse effect on public health within the school building. The Head Custodian at Highland Elementary has had ongoing contact with facilities management to ensure that all of our buildings on Highland Elementary's campus have sufficient and well maintained HVAC systems. Our Head Custodian has put the following schedule in place to ensure that we maintain healthy ventilation and comply with the state of Florida's mandated policies to promote a healthy school environment:

- Weekly inspections of the maintenance rooms for unsanitary conditions such as leaks and spills. while ensuring that these rooms are free of trash, chemical products, and supplies.
- Establish and implement regular cleaning schedules to change filters
- Ensure that condensate pans remain unobstructed and drain properly.
- Ensure that air ducts and the interior air handling units and ventilation ducts are clean and dust free.
- Unit ventilators are inspected to ensure that the areas are free of clutter, books, or other items that would hinder the ventilators from working properly.
- All stakeholders are educated and encouraged to report any ventilation concerns.

For many years Highland's Green Team members did not include the Head Custodian, nor the School Food Service Manager's input, but we now collaborate for the purposes of creating and maintaining our school status and designation as a Florida Department of Environmental Protection *Green Apple School*. Our Head Custodian and his team continually communicate with Highland's cafeteria manager to ensure proper ventilation in the kitchen by examining and providing weekly inspections of kitchen machinery. The School District of Palm Beach County, contracted *Hulett Environmental Services* to assist all schools with pest management. Hulett uses a Green approach for pest control. Their products are made out of "low impact formulation such as a bait or gel, rather than the old smelly spray approach." In addition to weekly pest maintenance, Highland's Head Custodian reaches out to Hulett if any school personnel report or spot any pest for immediate eradication from the campus.

Highland Elementary's Green Champion annually signs up for The Florida Department of Agriculture and Conservation Services, "Harvest of the Month," program. This program has assisted with not only providing ideas for activities in our garden, but also has enabled us with teaching all of our students about how planting specific vegetation can assist with pest management. For example, we plant lettuce to eliminate carrot flies, Highland's Green Team planted lemongrass seed to repel mosquitoes. As we work with Harvest of the Month we gain further understand regarding gardening and planting Florida native trees and plants to help us deter pests and enhance our campus garden.

Culture and Climate: Student and Staff Wellness

Highland Elementary has created a culture and climate dedicated to student and staff wellness. Throughout the school year, specific activities are planned to educate students and staff about healthy lifestyle choices. Additionally, Highland Elementary provides students and staff opportunities to improve health and wellness. One opportunity is the fifth annual **Walk to School Day**, which took place this year on October 2, 2019. The event was supported by Highland Elementary employees as well as many community partners including the Palm Beach County Fire Department, Sheriff's Department and Bridges at Highland. This event helped educate the students and families in our communities regarding appropriate routes so that students and their families can walk safely on our busy streets. The students were taught to look in all directions and listen for traveling vehicles. They were also encouraged to share the dangers of technology use while walking and the importance of crossing in visible areas and more. Walking to school instead of driving helps to reduce our carbon footprint by decreasing carbon emissions.

For over a decade, Highland has participated in **Jump Rope for Heart**, an annual event at Highland Elementary that supports The American Heart Association. At our most recent event, over 700 students learned about cardiorespiratory endurance while physically jumping rope and noticing the difference in heart rate at rest from heart rate with vigorous physical activity. Physical health is not the only thing they learn. The students also learn about behavioral wellbeing by understanding and encouraging others of varying abilities. Support of others is encouraged when they raise money to help others that were born with heart problems get the medical help they need.

In addition to participating in Jump Rope for Heart, last year Highland Elementary thought outside of the box and participated in the **Leukemia and Lymphoma Society Pennies for Patients** fundraiser. We raised \$5,724.79 in our first year participating making us "Rookie of the Year" for FY19. The fundraiser promoted awareness of ways Leukemia and Lymphoma affects students and educated students and staff with a STEM curriculum.

Students at Highland Elementary School participate in regular physical activities during their state mandated recess. Students spend thirty minutes each day on the playground and participate in teacherled physical activity games. Daily activities include kickball, soccer, tag, hide-and-seek, as well as compete in relay races. Additionally, all students at Highland attend Physical Education classes on a rotating two week schedule. All physical education lessons are curriculum based as required by the Florida State Standards. In order to facilitate student's physical abilities, our PE Teacher plans lessons that include balance, throwing and catching, as well as running around our track to increase their physical endurance. Annually, students participate in Field Day. All students in grades Pre-K- 5th grade head out to the PE field and rotate stations that are put together by our PE teacher. Games such as ring toss, sack races, tug-o-war, and now participate in a recycling relay event in which they need to sort the items into their appropriate containers.

Highland Elementary, also, has ongoing health and wellness endeavors. Our staff activities are spectacular for the health and well-being of the entire faculty. For example, biometric screenings are offered each year to the staff. The screenings encourage staff members to take advantage of the Health & Wellness Rewards offered by the school district. Highland Elementary's Aftercare Director serves as the Wellness Champion. The Wellness Champion plans educational activities for staff to participate in to encourage healthy habits. There have been Healthy Hydration competitions to promote drinking water and Color Weeks to motivate staff to eat fruits and vegetables. Highland Elementary also offers opportunities for the staff to increase physical activity by participating in group sports. In fact, Highland has its very own kickball team, "The Highland All Stars." Our team includes a minimum of fifteen active faculty and staff members that meet weekly for ongoing competitions to assist with motivation.

As a result of the combined efforts of all stakeholders at Highland Elementary School, we have created a positive culture to allow both students and staff members the opportunities to focus on personal health and wellness. Highland's additional wellness activities include:

- Keep Palm Beach County Beautiful has collaborated with Highland since 1998 on beach cleanups and gifted our campus an additional Water Refill Station in 2019.
- Our cafeteria offers students healthy food choices for breakfast and lunch for a balanced diet including grains, fruits, dairy, and vegetables. Furthermore, Highland has organized a temperature controlled sharing table for students to select additional healthy snacks such as fruits, salad, milk, and juice to supplement their lunch options, consume during snack time, and bring home. This initiative provides students who live at or below the poverty level, more access to free and healthy food choices.
- Not only do students get to plant in our garden, they also get to enjoy the fruits of their labor by taking home such vegetables as lettuce, radishes, okra, lima beans, carrots, just to name a few.

Pillar III: Effective Environmental and Sustainability Education

Highland Elementary's Green Team provides environmental education through hands-on STEAM activities including gardening, upcycling, and recycling. For example, our enhanced butterfly garden is full of native and naturalized flora that is a huge boon to the local pollinator population. In spring, students will be able to observe native pollinators such as Goldenrod Soldier Beetles and Chimney Bees, as well as unique bee species such as Leafcutters and Mason Bees. A bevy of butterflies and moths are also visible at this time, such as the famous Monarch, Cloudless Sulphur and Silver Spotted Skipper. Highland also received a \$1000 grant for weekly STEAM club that engages students in an interdisciplinary approach through project-based learning with the use of recyclables and environmental education. All STEAM experiences include literacy, math, social studies and project-based learning. For example, students used recycled construction paper to learn about X-rays by creating one of their hand bone structure and skeleton.

Our Green Team provides students with the opportunity to not only plant edible foods, but to also harvest the crops we plant and take them home to share with their families. Our students and staff members have worked with local families and the surrounding community to create backyard gardens so that our local families can sustain planting and harvesting edibles that easily grow in students gardens. Our Green Team provides our members with seeds so we can study the various shapes, sizes and types. As a result of this academic experience, students are able to explain why particular birds have specific beaks and feet. In addition to our butterfly garden, our students are able to observe the birds that visit our garden and are able to transfer the outdoor experience to academic tasks in science, literacy, and mathematics. In fact, Environmental and Sustainability Education has become so popular that the Green Team has expanded into two additional STEAM (science, technology, engineering, art,

and mathematics) clubs: "Ground-of-APaws" for grades 2-3 and Full Steam Ahead for grade 5. Examples of club projects done this year include: _

- "Ground-of-APaws" created PAWSitive PAWesome PAWtles made from recycled bottles to
 promote positive behavior and meditation. The PAWtles are used school wide in each
 classroom's Paws Places, areas where students can go to calm down when feeling angry or sad.
- Green Team, "Ground-of-APaws", and Full Steam Ahead organized school wide participation in the "Unwrap the Waves" contest by Loggerhead Marinelife Center. Students made posters to publicize the contest and collected candy wrappers for the Loggerhead Marinelife Center to recycle into pencils and other products. Students learned that candy wrappers were utilized to create upcycled products, such as school supplies like pencil pouches.
- Green Team, "Ground-of-APaws", and Full Steam Ahead used DVD cases to create upcycled spinners, pencil cases, picture frames, and mini board games on the go.
- Green Team students are in charge of the school wide recycling program. They collect and dispose of classroom recyclables at least twice a week. On Fridays, the Green Team works with the head custodian to physically transfer recyclable materials to receptacles outside and sort them into the proper collection bins. This provides hands on, service learning for our students.
- Green Team maintains our vegetable garden while engaging in outdoor education lessons.
- Green Team creates their own upcycled projects such as holiday wreaths made out of materials that would normally end up in the landfill.

Highland Elementary, also, includes environmental and sustainability education school-wide. For instance, Highland organizes a bi-annual event called Drop Everything and Reduce (DEAR). Every single staff member and student walk the campus in search of trash, litter, or debris. Our most recent DEAR event enabled us to teach, as well as show our students how waste reduction can attract unwanted pests and cause an unhealthy environment for the natural flora and wildlife that resides on Highland's campus. Highland documented a whopping 800 pounds of disposable waste that was removed from the campus that day. Not only did we create mathematical lessons involving conversion of weight, but also a lesson in Social emotional learning. Students learned that their own actions can either damage, or enhance the environment and what they do makes a difference. They also learned a lesson in character education: Teamwork leads to success.

Another example of environmental and sustainability education being implemented school wide is our Green Champ program. Student Green Team members are identified as Green Champs by wearing badges; identified as, "Solid Waste Authority", "Classroom Custodians", and "Energy Savers." The Green Champs provide the following daily services to the school:

- Recycling
- Turning off lights and other electronics
- Picking up disposable waste found on the floors
- Cleaning desks
- Sweeping
- Maintaining an orderly classroom environment

Green events and recognition for environmentally responsible choices made by staff is recognized and highlighted in the weekly bulletin sent by the principal each Friday.

Field and Academic Experiences

Over the past few years, Highland Elementary School has had an ongoing relationship with 'Friends of MacArthur Beach State Park." We have taken students of all ages and grades to MacArthur Beach State Park where the children have had the experience and opportunity to learn about the estuary, the intercostal and the ocean. These field experiences enabled our students to understand why it is necessary and essential to avoid littering, contamination, and to properly dispose of solid waste. Due to the fact that Highland is located along The Lake Worth Lagoon we had a perfect reason for our students to intentionally become conscientious of how they were disposing their waste. Our experience with MacArthur Beach State Park and its relative location to The Lake Worth Lagoon has provided Highland Elementary's students with significant knowledge of the ecosystem in which we are surrounded by.

Additional field and academic experiences begin with pretests to help teacher's determine the background knowledge students will require to actively participate and engage in the following experiences while following the Florida Department of Education Educational Standards, as well as follow the scope and sequence provided by The School District of Palm Beach County.

- 2nd and 5th grade students attended the Norton Sculpture Garden. This event allowed Highland students to be immersed in the natural world of agriculture, health, and wellness.
- Classes in 2nd grade attended a field trip to Grassy Waters Preserve to engage in outdoor learning for scientific discovery through dip netting and hiking trails.
- Highland's Beautification Committee has started an "Adopt a Tree" initiative inviting all classrooms to adopt a tree or green area on campus to beautify and use as an outdoor learning lab.
- Kindergarten students take annual field trips to Lion Country Safari and the Palm Beach Zoo to learn about the interdependence of animal species and the importance of habitat preservation through firsthand experience.
- As students are guided by their teachers through our natural campus based learning labs, all students in all grades participate in first hand observational and investigative field experiences leading to a further understanding of the environment.
- Pre-K, Kindergarten, and first graders participate in the ongoing study of the different plants, trees, and insects that reside in our garden.
- Students in Kindergarten and first grade have visited The Palm Beach Zoo which assisted the students in their further understanding of the various ecosystems found on Highland's campus.
- Grades Second- Fifth, embrace the study of nature and wildlife within Highland's natural environment.
- At various times of the day students can be found having field experiences on the campus by studying leaves, insects, vegetation, and the life-cycle of butterflies in the garden.
- Kindergarten visited Lion Country Safari to study animals in December.
- First grade classes learned about ocean ecosystems at Gumbo Limbo Nature Center in February.
- Second graders studied wetlands at the Grassy Waters Nature Preserve in November.

- Fifth grade students learned about STEAM at the Norton Museum of Art in October and studied mangroves at MacArthur Beach State Park in January.
- Fourth grade classes plan to visit the Kennedy Space Center to learn about the Earth and space in May.
- Students have expanded their thinking and begin researching environmental issues as they arise.
- An example of the most recent discovery and conundrum is determining which animal or insect has been gnawing on some of our vegetables.
- Student interest piqued, as Principal Villani's put all students on a mission to find out what the culprit is.
- Once the predator has been identified, teachers will prepare lessons to explain how to organically eradicate the pests using natural deterrents such as lemon-grass and jalapeño pepper seeds grow so that they can assist in the elimination the unwanted pests.
- All students in all grade levels are supplied with a post-test to determine whether the experience was successful and student benefit is evident within responses.

The most interesting piece of curriculum integration occurred when students in grades Kindergarten through Second grade noticed that we had many bumblebees in one of our garden areas. Teachers dug into the Florida standards to explain bee behavior, attractors, and human reactions to bees. Students in all three grade levels took virtual field trips to observe bees in their natural habitats. Students came to an understanding and consensus that bumblebees were necessary to sustain the flowers in our beautiful garden.

Highland Elementary School has a beautiful campus in addition to its kind and curious children. All stakeholders have expressed a sincere desire to do all that it takes to maintain, enhance, educate, and beautify our beloved school.