



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: Mrs. Melissa Holtz

Official School Name: Wilton Manors Elementary School

Official School Name Mailing Address: 2401 NE 3rd Avenue, Wilton Manors, Florida 33304

County: Broward State School Code Number: 0191

Telephone: (754) 322-8950 Fax: (754)322-8990

Web site/URL: www.wiltonmanorselementary.com

E-mail: melissa.holtz@browardschools.com

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

 Date: 1/3/17

(Principal's Signature)



Name of Superintendent: Mr. Robert W. Runcie

District Name: Broward County

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


(Superintendent's Signature)

Date: 1/19/2017

I have reviewed

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 Pam Stewart

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



Date: 1/24/17

(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 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 and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Wilton Manors Elementary Highlight Report

The students and staff at Wilton Manors Elementary are authentically and wholly connected to the environment through our fully integrated International Baccalaureate (IB) curriculum, our environment-friendly school grounds, and our community-focused approach to sustainability. Global environmental topics are researched and taught throughout our interdisciplinary units of inquiry which are designed to encourage students to interact personally and intimately with their natural surroundings. Our school's grounds are a place where students can learn and work with native plants and natural processes. Our students, facilities staff and teachers embolden our school community to take ownership of their environs and take direct action in creating a functioning, sustainable and conflict-free world.

Environmental Impact and Energy Efficiency

Wilton Manors Elementary sets an example for sustainability, conservation, recycling and environmental preservation. Staff, teachers and students are mindful of how our actions influence our world and conserve through monitored and careful use of resources including energy, water and solid waste. Recently, for example, students and staff attended Water Matters Day hosted by NatureScape where they learned about conserving water and brought back drought-resistant trees native to the area to improve sustainability on our campus. Our commitment to environmental preservation is also shown in the following:

- Our Butterfly Garden was honored by the National Wildlife Fund (NWF) with the Eco-schools School Yard Habitat award. We have also been approved for the NWF Eco-Schools Pathways.
- Wilton Manors has received top three recognition twice from our county's hauling company (Waste Management) for promoting recycling through an Earth Day dumpster painting competition. Representatives visit to speak to students about their work and how we can contribute to waste reduction.
- This year we have undergone a massive overhaul of our courtyard space to eliminate grass and replanted the area with native shrubs and ground cover that minimize water use.
- Our students and staff created a mosaic project that covers twelve seven-foot-tall pillars in the courtyard. These walls will never require painting, saving cost and sparing chemical exposure to the grounds where our gardens are planted. This teaches students to think about ground water toxins that can defeat efforts to grow foods naturally that are healthy for human consumption.
- We have staggered our dismissal times and rerouted traffic to lessen CO2 emissions from vehicle idling. Busses now remain parked with engines off until parents pick up their students. In a recognition of these efforts, our school was the first elementary school in our district to win the P3 Eco Challenge award.

Healthy School Environment

Wilton Manors Elementary promotes healthy living and creates a community where students are encouraged to make choices that play a positive role in their wellness. Through our IB curriculum, students are taught how their choices directly impact their overall health and wellbeing.

Teachers lead their students in exercise, regularly engage them in active learning and frequently use GoNoodle and other brain break activities.

Murals, gardens and art pieces throughout the campus provide students with the opportunity to reflect and meditate. Through our gardens, students learn about agriculture and planting, and how

to care for and harvest homegrown foods.

We encourage students and their families to walk to school, which gets them active and reduces CO2 emissions. Saved parking spaces have been repurposed as a place for walking parents to wait safely in the shade for their children.

Our school participates in the American Heart Association's Jump Rope for Heart. We have a Family Fitness Night to educate students and families on healthy lifestyles. We also host a 3k Walk for Peace that promotes our school's mission of spreading peace and harmony throughout our community and the world.

Environmental Sustainability and Education

Our commitment to the IB curriculum, local partnerships, extracurricular activities and school-wide initiatives all support environmental and sustainability literacy. Every day our campus courtyard serves as an outside learning lab. Teachers have completed multiple trainings on how to run a class garden and teach their students how to garden for nutrition and the importance of local foods. All grade levels utilize the space by planting and maintaining garden boxes. Some grade levels have even created their gardens from upcycled materials, including old car tires and concrete blocks. The IB curriculum includes six in-depth Units of Inquiry related to the environment, including: Plants as a Natural Resource, Living Things, Plant and Animal Adaptations, and Man's Impact on the Environment. Students also have opportunities for off-campus, field-based environmental studies at Everglades National Park and Flamingo Gardens.

Our school's art club participates in a competition by the Wyland Foundation to promote learning about how human actions impact the environment. Students worked on a collaborative mural to highlight the beauty of the oceans and also created individual works. All pieces included a writing component by the students to be displayed around the school.

During their 5th grade year, students choose projects that address current environmental issues for their exhibition presentations. They engage in critical thinking to determine the necessary steps for forward action and create information products about conservation that can be disseminated throughout their local communities.

The nature of discovery and inquiry in the IB program, partnered with the connected, innovative and knowledgeable community at Wilton Manors Elementary creates a rich and unique environment for our students to ignite their passion and take direct action in protecting and caring for our planet.

Wilton Manors Elementary School

School Contact Information:

Principal: Melissa Holtz

Phone Number: (754) 322-8950

Email: melissa.holtz@browardschools.com

Address: 2401 NE 3rd Avenue Wilton Manors, Florida 33304

Lead applicant: Maria Schwartz

Phone Number: (754) 322-8950

Email: maria.schwartz@browardschools.com

Website: www.wiltonmanorselementary.com

District name: Broward

School type: Public/Urban

Level: Pre-K – 5

Does your school serve 40% or more students from disadvantaged households? Yes

Attendance rate: 96.3%

Total enrolled: 630

Percent receiving Free or Reduced Price Lunch: 80%

List your school's participation in a local, state or national school programs or other which asks you to benchmark progress in some fashion, such as EPA ENERGY STAR Portfolio Manager, Eco-Schools, USDA Fuel for Schools, USDOE Wind for Schools, Project Learning Tree, etc.

Program(s) and Level(s) achieved:

- P3 Eco Challenge – 1st Place Overall School Winner 2015-16
- Florida Green School Award 2016
- Miami Heat How Low Can You Go Energy Efficiency Challenge

List your staff or student body awards for facilities, health or environment. Award(s) and year(s)

- P3 Eco Challenge- 1st Place Overall School Winner
- PEP Grant Recipient 2015-2016
- Waste Management Dumpster Challenge- 2nd Place 2014 3rd Place 2015
- Golden School Award for Volunteer Participation 2010-2016
- State School of Character 2008
- National School of Character 2008

Pillar 1: Reduced Environmental Impact and Costs Energy

Can your school demonstrate a reduction in greenhouse gas emissions? Yes

Percentage reduction: 23.95% ***Over:*** (06/2008-06/2016)

Initial GHG emissions rate (MT eCO₂/person): 1286

Final GHG emissions rate (MT eCO₂/person): 978

Offsets: Automatic sensors to shut off lights, staggered dismissal times, closed parking spaces to encourage walking and biking to school

How did you calculate the reduction? School district's energy analyst and utilities department provided data

In what year was your school originally constructed? 1999

What is the total building area of your school? 92,866

Can you demonstrate a reduction in your school's total water consumption from an initial baseline?

Municipal water supplied by City of Wilton Manors

Timeframe was 2008-2016

19 gallons a day to 12 gallons a day for a 19% reduction

In 2012, had a 67% reduction in irrigation use (evaluation done at that time by Broward County)

Data sources include Schooldude, Florida Power and Light, and Broward County EPCRD records.

Please describe if your school's landscaping is considered water-efficient and/or regionally appropriate (e.g. Florida-friendly certified professional, percentage of water-efficient landscaping, sources used for irrigation etc.)

Our landscaping is both regionally appropriate and increasingly water-efficient. The campus is watered in the early morning, only two times a week. Reducing the number of days a week we water reduces the strain on local water supply and helps preserve our water by removing the demand from our city's water system. Our butterfly garden and courtyard consists of over 150 native and Florida-friendly plants, which both conserves water and gives students opportunities to connect with their local landscape.

What percentage of the school grounds are devoted to ecologically beneficial uses?

With the renovation project in our courtyard, dedicating the entire space to our school's ecological goals, approximately 45% of the grounds will be ecologically beneficial. Our school grounds have vegetable and flower gardens as well as abundant native plants and wildlife habitats.

Types of plants used and location: Some examples of plants are: Coontie, Simpson's Stopper, Passiflora Incarnata and Fire Spike. These plants are located throughout our school in our courtyard, as well as outside the campus.

Describe alternate water sources used for irrigation.

Our campus has a 50 gallon rain barrel used for collecting water. The water is used for irrigation.

Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces.

Wilton Manors is a flat, low, built-out urban community that is plagued with many storm water challenges. Measures undertaken to reduce run-off include:

- Landscaping around buildings is mulched to reduce runoff
- Education efforts lead by students and teachers to inform the community about water conservation

- Restrictions on irrigation
- Playgrounds covered in sand instead of concrete to reduce number of impermeable surfaces
- Use of raised gardening beds to use rain water efficiently

Our school's drinking water comes from: (x) Municipal water source (x) Well on school property

Describe how the water source is protected from potential contaminants.

The mosaic project on our courtyard pillars has eliminated the need for repainting which reduces amount of toxins and chemicals our plants are exposed. School garden spaces do not use pesticides/fertilizers that would leach into the groundwater. Drinking fountains have filters. Wilton Manors has programs to protect our local aquifers from pollutants including:

- Drain devices and storm drain cleaning
- Construction requirements and inspections
- Commercial facility inspections / pre-treatment programs

Describe the program you have in place to control lead in drinking water.

The City of Fort Lauderdale (which provides water to the City of Wilton Manors) routinely monitors for contaminants in drinking water according to federal and state laws, rules and regulations. Water tests include daily bacterial and chemical tests on finished water, weekly bacterial quality tests of water in the distribution system, quarterly testing of water supply wells, and annual tests of all regulated and unregulated drinking water parameters.

Quantify solid waste that is diverted from landfilling or incinerating due to reduction, recycling and/or composting?

Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): 72; 6 cubic yards x 20 x .60 = 72

Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): 44

$$6 \text{ cubic yards} \times 4 \times 1 = 24; 20 \text{ cubic yards} \times 1 \times 1 = 20$$

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): 42

$$3 \text{ cubic yards} \times 20 \times .70 = 42$$

$$\text{Recycling Rate} = ((B + C) \div (A + B + C) \times 100): 54$$

Monthly waste generated per person = (A/number of students and staff): .1011 cubic yards per person per month

What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free?

100% of the paper content is fiber from forests certified as responsibly managed. Sustainable Forestry Initiative (SFI) is on the packaging label of all paper ordered for the school.

Describe other measures taken to reduce solid waste and eliminate hazardous waste.

Our school cafeteria uses a waste reduction technology (SOMAT) that students discard their waste into, which limits the amount of solid waste produced by our school. We also have a school wide recycling program that equips each classroom and office with at least one recycling bin. Printer cartridges and other electronics are also recycled.

What percentage of green cleaning custodial products used at your school are green certified? 20%

What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school?

Walk- 39/617 6%

Bus- 38/617 6%

Carpool (2+ students in car)- 150/617 24%

Single Car- 211/617 33%

After School Program- 89/617 14%

Van- 111/617 17%

How is this data calculated? Filemaker Pro Database monitors the way students arrive and dismiss

Our school has implemented the following: A well-publicized and enforced no idling policy that applies to all vehicles; we have staggered our dismissal times to minimize idling wait time, and busses and daycare vans that pick up students wait for parent pick-up to end before collecting students to eliminate their potential emissions; all vehicle loading areas are at least 25 feet from building air intakes, doors and windows; safe pedestrian routes to school including crossing guards on our two major intersections; and secure storage (bike racks) provided to encourage students to walk or bike to school.

- Our school has two pick-up and drop off zones to minimize car traffic and idling
- Our Safe Routes to School program includes two crossing guards, as well as our School Resource Officer that supervises student pick up and assists in directing traffic
- Busses and vans that pick up students do so after parents who pick up their children have left; this eliminates their CO2 emissions due to the idling during that time

Describe how your school transportation use is efficient and has reduced its environmental impact.

Our school has reduced environmental impact by, in addition to the bus loop, creating two pick up loops for parents who drive to pick up their students, minimizing traffic and idling. By requiring busses and vans to wait for parent pick up to finish, we have eliminated the environmental impact from these vehicles that would otherwise be emitting CO2.

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

Describe your school's Integrated Pest Management efforts, including IPM/green certifications:

Our Head Custodian, Beverly Andrews, in partnership with the Broward School District, implements an Integrated Pest Management Plan. Our school primarily combats pests through monthly preventative measures such as spot-checking and treating problem areas. Our community takes pride in the cleanliness of our facilities which plays a significant role in minimizing our pest population and minimizing the need for toxic pesticides. We do not use pesticides when students are present and staff regularly try organic alternatives such as vinegar or planting flowers that act as natural insect repellents. Last year we

successfully combatted our aphid infestation by purchasing lady bugs, their natural predators, in lieu of using pesticides.

Our school employs the following practices to minimize exposure to hazardous contaminants?

- Our school prohibits smoking and tobacco use on campus and in public school buses, staff and visitors on all school-owned property are prohibited from smoking
- Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school
- Our school does not have any fuel burning combustion appliances
- Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.
- Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.

Describe actions your school takes to prevent exposure to asthma triggers in and around the school.

Wilton Manors Elementary school is a fragrance-free zone to eliminate this potential trigger for asthma attacks. No teachers are allowed to use any fragrance creating items such as candles or plug-ins. We have limited car idling in our pickup and drop off zones and custodial staff changes air filters for the AC once a month.

Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found.

Our school building was built in 1999 and adheres to all the relevant building codes in place to provide us with adequate humidity control. Teachers and staff are vigilant and attentive to sites for mold and potential mold sites then report them immediately to custodial staff. Our school regularly has workers from the district custodial staff who patrol to ensure that mold and extra moisture is removed immediately from our school site.

Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action.

Our district policy includes implementing EPA IAQ Tools for Schools to provide periodic indoor air quality safety inspections and reports featuring recommendations for action.

The following indoor environmental standards are employed at our school:

The classrooms have a significant amount of natural light in addition to the electrical lights, our office and classrooms have views of trees, nature and outdoor landscapes.

Other steps our school takes to protect environmental quality:

Wilton Manors Elementary has taken many steps to protect the quality of our school environment. We are a National Wildlife Federation (NWF) certified school-yard habitat and provide all our students with outdoor hands-on learning labs. Students plant and harvest in their classroom gardens and use the theory of crop diversity to ensure healthy soil for the students using the space after them. After attending Water Matters day each year, we plant the free trees donated to our school from the event. Planting of native plants has increased the amount of wildlife attracted to the area including important pollinators and insects that help support the health of our school's ecosystem.

A description of our school's coordinated health model:

In addition to their year-round learning in health education, students are taught the Child Safety Matters curriculum which provides safety education through a program lead by our guidance counselor, Ms.

Edwidge Antoine. Through the integrated in-depth IB units of inquiry, students are taught about mental, spiritual, physical and social health and how their choices impact their well-being. They are also encouraged to participate in school-wide health initiatives such as Jump Rope for Heart, the Walk for Peace and Family Fitness night. Students receive at least one 50-minute block of physical education each week which includes developing skills in sports, sportsmanship, coordination and overall athleticism. Students are regularly given the appropriate hearing, vision and overall health screenings that allow their families to be informed on their physical well-being. On staff at our school is a full time guidance counselor and a part-time psychologist and social-worker. Our counselor leads therapy groups for students struggling with various mental health concerns, and is highly active in the psychological well-being and health of our students. Integral to the International Baccalaureate curriculum is the concept and practice of peace and harmony among communities. Our school has an impeccable reputation for a strong sense of community where we regularly model and engage with positive social interaction. We participate in National Peace Week activities, and this year we were the only school in the United States that has engaged in an international anti-bullying project based on the book *The Invisible Boy*. Students and staff are regularly encouraged to be mindful and focus on the IB attribute of reflection, which is part of our preparation of students to be successful global citizens. We promote walking to school as well as providing our students with direct instruction on how to be active through our IB units of inquiry. This is in conjunction with events such as the Walk for Peace, which encourage families from our community and school to come out and be active.

Our school employs the following practices to promote nutrition, physical activity and overall school health:

- Our school has an on-site food garden. Many classrooms plant vegetables in their garden box that students observe and harvest for consumption.
- Our students spent at least 120 minutes per week over the past year in school supervised physical education. Students have physical education 1-2 times a week with our certified PE teacher for 50 minute blocks.
- At least 50% of our students' annual physical education takes place outdoors. The majority of our physical education takes place outside on our basketball court facilities or the expansive sports field. Students only move inside if there is inclement weather.
- Our school promotes physical activity opportunities above and beyond physical education
- Our school provides staff, students and families information on nutrition education and/or programs
- Our school provides all students with opportunities to receive instructional time in a school garden

Describe the type of outdoor education, exercise and recreation available.

Students regularly engage with their classroom or grade level outdoor learning lab, which may include their class garden or the school's NWF certified butterfly garden.

Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety? (x) Yes () No

Wilton Manors Elementary is the only public school in the city of Wilton Manors and has close ties within the community. The Student Council and Kiwanis K-Kids have initiated school-wide service learning projects. We also receive services from Share A Pet, PACE Center for Girls, Henley Center Behavior Health, Lenscrafter, Chrysalis Mental Health Center, and the Florida Department of Health Dental Program.

Does your school have a school nurse and/or a school-based health center? (x) Yes, part time

Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):

Wilton Manors Elementary School recognizes the importance of educating students in a safe, caring, and orderly environment. Students must develop higher-level values and attitudes to create and maintain this kind of atmosphere. Through the Passport to Peace (P2P), students learn, practice, and demonstrate 12 positive attitudes that form lifelong values: Appreciation, Commitment, Confidence, Cooperation, Creativity, Curiosity, Empathy, Enthusiasm, Independence, Integrity, Respect, and Tolerance. As they "travel" through the Attitudes with their passports, students develop as caring, peaceful shareholders in the school and become responsible citizens in the world.

In the Primary Years Program, it is believed that education must extend beyond the intellectual to include not only socially responsible attitudes but also thoughtful and appropriate action. Therefore, taking action is an essential element of the PYP. An explicit expectation of the program is that successful inquiry will lead to responsible action, initiated by the student as a result of the learning process. This action will extend the student's learning, or it may have a wider social impact. Wilton Manors offers all learners the opportunity to choose to act, to decide on their actions, and reflect on these actions in order to make a difference in and to the world.

Wilton Manors Elementary is also a cluster site for students with Autism. One common characteristic of autism is the inability to develop appropriate mental health and social skills. The 'Star-Pal' program was created to pair up general education students with special needs students to help promote self-esteem and encourage awareness and acceptance of others.

Pillar III: Effective Environmental and Sustainability Education

Our school employs the following practices to help ensure effective environmental and sustainability education:

Environmental and sustainability concepts are integrated throughout the curriculum. All students, pre-k-5, participate in the upkeep of the schools' gardens. In pre-k through first grade, students learn basic gardening skills. By second grade, the students have a strong foundation to learn about natural resources in more detail. They begin by learning about the variety of natural resources, their availability, and what we can do to maintain sustainability. Students create public service announcements for the school (posters and morning show announcements) to promote awareness and encourage responsibility for our environment. To create awareness within the community, students are working in partnership with a local grocery store by designing bags that state an environmental problem and solution. Second grade is also responsible for the school's compost, helping solidify the concept of sustainability. Third grade has established a clean-up crew to maintain the school grounds. Upcycling has become fourth grade's passion. In addition to learning the difference between upcycling and recycling, students take an unwanted product (gallon jug) and turn it into a new product (watering can) that has a positive impact on the environment. Our fifth graders are responsible for raising social awareness of environmental problems and solutions by choosing current global topics.

How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge?

Wilton Manors integrates the six IB units of inquiry with the environment as a context for science learning. Many units are focused around environmental issues. After delving into the unit, students then move to the action cycle and develop ideas and activities to improve or preserve the environment. Some topics are Plants as a Natural Resource, Living Things, Plant and Animal Adaptations, and Man's Impact on the Environment. Central learning goals include how living things grow, change and depend on earth; and how man's actions have a direct impact on the environment. Each grade level has a box garden in our outside courtyard. We have used these gardens to teach the science standards about observing living

things, identifying living things versus nonliving things, and identifying parts of a plant. The students record plant growth in a journal, which encompasses measurement math standards. Simultaneously students learn how things change over time and what innovations have been developed in agriculture and conservation. Reading and writing of informational texts are integrated as students engage in shared reading as well as individual leveled reading. Writing is integrated using student journals where they write explanatory texts in which they supply facts about plants.

How does your school use sustainability and the environment as a context for learning green technologies and career pathways?

Wilton Manors Elementary has a partnership with Waste Management. We participate in both field trips and the Earth Day celebration at the Waste Management site. In both instances students are given the opportunity to learn about the job opportunities available to them within "Green Initiative" careers.

We also have a partnership with Flying Classroom, a cutting-edge STEM plus learning adventure project, where grade levels participate in many units of study and activities that concentrate on green initiatives and sustainability.

Describe students' civic/community engagement projects integrating environment and sustainability topics.

In partnership with the local Kiwanis Club, our student council reached out to the student body to collect and sort plastic bottle caps for the Caps of Love non-profit organization. Caps of Love receives payment for every tractor-trailer load of recycled bottle caps collected by our students and sent to their recycling plant in Kentucky. With the proceeds, wheelchairs are purchased for children with disabilities across the United States. We have reached out to other schools to help us collect caps in greater volume so we can have a more global impact on the program.

Describe students' meaningful outdoor learning experiences at every grade level.

- Kindergarten teaches a 6 week unit on the Importance of Plants where the students observe and grow plants, discuss them as a natural resource, and learn about the conditions plants need to stay healthy.
- First Graders participate in a unit about "Living Things" in which they focus on interdependence and life cycles and they observe the butterflies in our gardens.
- Second Graders focus on how "People Help the Planet" by taking care of its natural resources. They learn about recycling, build a mini landfill outside, and observe the rate of decomposition. They also maintain the compost bin for our school gardens.
- Third Graders learn about "Ways Plants and Animals Adapt or Respond to Environmental Conditions". The gardens are used as a lab to observe how plants respond to certain conditions like heat, cold, etcetera. The students also take nature walks.
- Fourth Graders participate in "How Conservation of the Environment is Dependent Upon Human Interaction" in which they rope off an area of the garden and observe it as a mini ecosystem. They go to the Everglades and learn about the positive and negative human impacts on ecosystems.
- Fifth Graders "compare and contrast animal and plant parts and structures" such as observing how water and nutrients travel through plants and compare that to how blood travels through animals. They are also responsible for maintaining their own gardens.

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

At the core of the IB curriculum is the connection between a child and their local and global environment. All IB units focus on students taking global and local action in order to be productive citizens of the world. Students of all grades utilize the outside courtyard area to connect real life examples of math concept as such as geometry, algebra, and measurement. Various cycles (water, butterfly, plant) are observed and journaled. Students go on nature walks throughout the year to identify man made/natural resources, living/nonliving things and evidence of weathering and erosion. Students take ownership of the outside environment by picking up trash and caring for plant life. Students have the opportunity to participate in the Jump Rope for Heart program which encourages awareness of healthy heart choices that are promoted by the American Heart Association. All grade levels participate in Field Day where students engage in physical fitness activities. A year-long school wide activity led by our art teacher had students cooperatively build murals around our courtyard area, which exhibits our character education “attitudes”.

Describe your partnerships to help your school and other schools achieve in the three pillars. Include both the scope and impact of these partnerships.

In an effort to beautify the courtyard at our school, administration elicited the support of NatureScape Broward, Home Depot, Lowes and Garden Works Nursery. Soil, plants and mulch were donated and manpower was provided. Members of the faculty and employees from Lowes worked together to prepare planters and complete the planting. Milkweed plants were provided so we could develop a butterfly garden. Students had the opportunity to observe each stage in the cycle of a monarch butterfly in a project that continues today. As a thank-you, each member of the student body signed a banner that was delivered to Lowes and is displayed at their local location.

Waste management has become an integral part of our second grade curriculum. Students and teachers take an annual field trip to the landfill to raise awareness about the problems of trash disposal and pollution. Our students created clean-up crews to pick up trash on school grounds. Students participated in the Monarch Hill Earth Day Celebration by entering our painted dumpster into their dumpster contest, and won.

Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships.

Students study their environment through outdoor investigations both on and off campus. On campus, we have a butterfly garden for observation and each grade level has a garden box with foliage and vegetables grown and cared for by students. Students visited Flamingo Gardens, a local natural botanical garden, in order to have genuine encounters with native plants and animals. Local plants on site include endangered and uncommon plants to permit students to understand how their environment has changed over time. This site includes a final learning activity in which students plant a seedling of a local plant that they are encouraged to plant in their home communities. A group of students visited the Historical Society, where they learned how Native American tribes used their surroundings productively and respectfully. At this location, students interacted with a Zamia Coontie plant, used by local indigenous peoples for many purposes. Students reflected on their experience with the rare plant and how it added to their understanding of their local environment. Students were fortunate to visit our local National Park, The Everglades. Through this off campus experience, students observed first-hand how climate change and development have impacted this delicate environment.