



2015-2016 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 2015-2016

Public Magnet School

Name of Principal: Mrs. Vered Roberts

Official School Name: Beachside Montessori Village

Official School Name Mailing Address: 2230 Lincoln Street, Hollywood, Florida, 33020

County: Broward State School Code Number : 2041

Telephone: 754-323-8059 Fax: 754-323-8090

Web site/URL: http://www.beachsidemontessori.com/ E-mail: mailto:vered.roberts@browardschools.com

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

Handwritten signature of Vered Roberts

Date: 1-6-16

(Principal's Signature)



Name of Superintendent: Superintendent Robert W. Runcie

District Name: Broward County Public Schools

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

Robert Runcie 1/15/2016 Date:
(Superintendent's Signature)

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.

Pam Stewart 1/21/16 Date:
(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 ed.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.

Beachside Montessori Village Summary

Connecting the child to the natural world is an integral component of Montessori education. Studies and practical life experiences in the natural world are imbedded into the curriculum at an early age. To further strengthen this connection, Montessori cherishes leadership by children. At Beachside Montessori Village, it is our intention to create an environment that inspires our children to take ownership of their surroundings and action for change towards a more peaceful and sustainable world. Reducing our environmental impact, promoting health and wellness, and integrating sustainability education accomplish this.

Our facilities staff, teachers and students collaborate to reduce environmental impact and costs. Creating an environment mindful of our carbon footprint is evident from the wide variety of programs and activities. To reduce energy, we participate in the Miami Heat's How Low Can You Go Energy Efficiency Challenge. Students from our sustainability elective visit classrooms to read and discuss environmentally themed picture books such as: Sandy's Shrinking Footprint and Where Does Our Garbage Go? In an effort to educate and standardize recycling, we have partnered with Recycle Across America. Our Recycle Rangers have placed recycling labels on all bins throughout the school to reduce contamination. Progressive Waste, our hauler, works with our team through conducting school-wide assemblies, recycling audits and art contests. Through a Green Team fundraiser, three filtered water bottle refilling stations were purchased, saving over 5,850 plastic water bottles since September. Additionally, the Montessori curriculum utilizes reusable manipulative lessons, student notebooks, and key experiences, reducing the need for single-use materials. To reduce CO₂ emissions on campus, we have a Green Car Pool, and our students have kicked off a No-idling program. With support from our partner, On Air Schools-Clean Air Campaign, the children collected data to measure the amount of CO₂ and air pollutants produced each week. The students then educated the parents and asked them to sign a pledge promising not to idle their vehicles.

Promoting health and wellness amongst students, staff and the community teaches our children to take ownership of their own health. As part of our peace education component, we begin our week with Mindful Mondays, a school-wide guided relaxation. Several teachers have certified yoga volunteers come in once a week for class; others use GoNoodle or other brain break exercises. We are also proud of the beautiful stone labyrinth our entire school community came together to build by hand. The labyrinth offers the children the opportunity to connect to their

inner selves through a walking meditation to clear and calm the mind. Our recess area is shared with a community park, so local residents also benefit from the labyrinth. As you walk through campus, upcycled murals, artwork and inspirational quotes create a positive, nurturing learning environment. Our outdoor environment reflects the same feel. We are a NWF (Northwest Florida) certified wildlife habitat. Through our classroom gardens and weekly gardening club, students learn about planting, maintaining and harvesting organic edibles. Beachside holds an annual Food Drive/Turkey Trot Walk for students and staff, while our PTSA organizes a community 5K. Staff members have an opportunity to participate in various activities from the Nike+ Challenge to competing on a community dragon boat team.

Montessori cosmic education, partnerships and extracurricular activities support our environmental and sustainability literacy. The Montessori curriculum teaches “cosmic education” to help students understand the connections between the world’s biodiversity and themselves. Interconnectedness of all things provides a way for children to be able to study math, science, nature and the universe. Our school is the first middle school in our district to offer a Sustainability Elective for students, which resulted from a partnership with ASU Sustainability Teacher Academy. Students have opportunities for off campus, field-based environmental studies at Everglades National Park and Pigeon Key. Off the Canvas, run entirely by parent volunteers, cultivates a sustained awareness and interest in art/craft, using of recycled materials and socially responsible practices through monthly classroom hands-on projects. The Warriors of Rainbow student green group provides opportunities for school leadership and service learning. They were chosen to attend Algalita International Youth POPS Summit and presented solutions to our plastic ocean pollution problem to the City of Hollywood’s Green Team, resulting in a partnership to work on this issue. Montessori Model United Nations (MMUN) students research and offer solutions for global environmental issues from climate change to affordable energy services. Resolutions are presented to ambassadors, as well as their peers at the MMUN conference held at the United Nations in New York. Passed resolutions are presented to the Secretary General.

The Montessori philosophy coupled with strong partnerships and a passionate school community create a unique environment that inspires our children to become protectors and guardians of our planet.

Beachside Montessori Village

Principal Name: Vered Roberts
Phone Number: 754-323-8059
Principal Email Address: vered.roberts@browardschools.com
Address: 2230 Lincoln Street, Hollywood, Florida 33020
Facebook page: Beachside Montessori Village PTSA & Beachside Montessori Booster
Lead Applicant Name: Elaine Fiore
Website: <http://www.beachsidemontessori.com/>
State: Florida
School Name: Beachside Montessori Village
Lead Applicant Email: elaine.fiore@browardschools.com
Phone Number: 954-635-8803
District name: Broward
School Type: Public & Urban
Level: K-8
Does your school serve 40 percent or more students from disadvantaged households? No
Attendance Rate: 97%
Total Enrolled: 768 students
Percent of students receiving Free or Reduced Price Lunch: 26%

Green School Initiatives

List your school's participation in a local, state or national school programs or others 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:

Miami Heat How Low Can You Go Energy Efficiency Challenge – 2nd year- 16% reduction; School Dude – monthly benchmarks; On Air School Clean Air Campaign- Phase II School Student Energy Audit; Caught You Green Handed Teacher Incentive Program; Fitnessgram – levels not applicable; Go Noodle- levels not applicable

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

American Heart Association Gold Fit Friendly School – 2012-2015 Carol M. White PEP Grant Recipient – 2014-2016
Cooper Institute Grant for Fitnessgram testing software – 2014-2016 Lego Robotics Florida First Lego League Regional Competition – Theme Water- 2014/2015
ASU National Teacher Sustainability Academy – BMV teacher selected 2015
Algalita International POPS Youth Summit – team selected to attend in California 2015
Golden School Award – volunteer award – green team/gardening 2011- 2015
Whole Foods Garden Grant – 2012-2015
Broward Farm Bureau – Garden Grant 2011
RecycleBank Grant – irrigation for gardens 2014-2015
Pets in the Classroom Grant – 2015

Pillar I: Reduced Environmental Impact and Costs Energy

Can your school demonstrate a reduction in greenhouse gas emissions?

Yes

Percentage reduction: - 4.66%

Over (mm/yyyy - mm/yyyy): June 2013- July 2015

Initial GHG emissions rate (MT eCO₂/person): 891 MT/ 848 = 1.05

Final GHG emissions rate (MT eCO₂/person): 849 MT/848 = .992

Offsets: Automatic sensors to shut off classroom lights

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

Has your school reduced its total non-transportation energy use from an initial baseline? Yes

Current energy usage (kBTU/student/year): 5561.

Current energy usage (kBTU/sq. ft./year): 35.98

Percentage reduction: -4.18%

Over (mm/yyyy - mm/yyyy): June 2013-July 2015

How did you document this reduction? School district's energy analyst and utilities department provided data.

Facilities and Construction

What year was your school constructed: 2010

Total constructed area: 119161 sq. ft. under A/C

Has your school developed a program or made progress toward reducing the heat island effect with cool roofs, reduced pavements, or reflective coatings on pavement?

The use of xeriscaping, reclaimed water and native plants has contributed to reducing the heat island effect. Our landscaping consists of USDA Zone 9-11 drought tolerant and pest resistant plants. Extensive use of raised organic gardening beds reduces pavement usage. Each Earth Day our students plant trees around campus. Our school also has been recognized as a National Wildlife Federation Certified Wildlife Habitat.

Water and Grounds

What is your school's drinking water source? City of Hollywood, city (municipal) water

What is the average baseline water use (gallons per occupant): 910 gallons/year

b. **Current water use (gallons per occupant):** 82280 (school) gallons this month

848 faculty and students combined

97 gallons per occupant/month

Percentage reduction in domestic water use: 50%

Percentage reduction in irrigation water use:

The school uses reclaimed water from the City of Hollywood.

Time period measured (mm/yyyy - mm/yyyy): 01/2013-01/2015

How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, utility bills, school district reports) (100 words or less)? Using School District Reports in conjunction with utility bills.

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

Our landscaping is both water-efficient and regionally appropriate. The campus is watered in the early morning, three times a week with reclaimed water. Using reclaimed water for irrigation helps to preserve our supply of drinking water by removing this demand from our potable water system. Mulch in landscaping areas and the use of USDA Zone 9-11 drought hardy plants further reduces the need for irrigation. Our butterfly garden consists of many native and Florida-friendly plants which beautify while conserving water.

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

Approximately forty percent of the grounds are ecologically beneficial. There are vegetable and flower gardens, and wildlife and native plant habitats. An onsite detention pond helps reduce peak runoff rates and prevents movement of dissolved pollutants from surface water to groundwater sources.

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

Hollywood is a flat, low, ocean-adjacent, built-out urban community with many storm water challenges. Measures used to reduce run-off include:

- Landscaping around buildings is mulched to reduce water runoff
- Extensive grassy swale systems designed to collect and percolate storm water into the soil.
- One-way flap gates on eastern storm drains to prevent sea water from intruding during high tides.
- Educational efforts including bi-annual flyers to all 75,000+ water customers.
- Restrictions on irrigation and required sprinkler rain sensors with automatic shut-offs.
- Use of raised gardening beds utilizes rain water efficiently

Describe how the water source is protected from potential contaminants (e.g. programs you have in place to control chemical contamination, lead or heavy metals in drinking water, etc.)

School gardens do not use pesticides/fertilizers that would leach into the groundwater. Drinking fountains have filters.

Hollywood has programs to protect our source water (aquifers) from pollutants including:

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

Waste and Recycling

What percentage of solid waste is diverted from land filling or incinerating due to reduction, recycling and/or composting?

This year, 4,499 tons of recyclable materials diverted from landfills/incineration, including:

plastic, paper, cardboard, metal, batteries and glass. Due to recycling practices doubling, we upgraded from a 4 to an 8 cubic/yd. dumpster. Installation of water bottle refilling stations increased usage of reusable water bottles.

An estimated 3,000-ton reduction in waste due to: paperless office practices, student/community education, and a school culture favoring reducing and recycling. Our Montessori curriculum emphasizes reusable manipulative lessons, student notebooks, and key experiences, reducing the need for worksheets and single-use materials. Additionally, technology like Promethean boards, document cameras, ActivExpressions, and laptop carts significantly reduces paper.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected):

6 cubic/yds. x 25 x .70 = 105 cubic/yds.

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 cubic/yds. x 4 x 1.00 = 32 cubic/yds.

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):

12 cubic yards x 0.5 x 0.10 = 0.6 cubic yards

Recycling Rate = ((B + C) ÷ (A + B + C) x 100):

(32 + 0) / 138 x 100 = 23%

* please note: our recycling dumpster doubled in size from 4 cu/yd. to 8 cu/yd. 100% full

Monthly waste generated per person = (A/number of students and staff):

152 cubic yards per month/848 people = 0.1792 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 our office/classroom paper content is 30% post-consumer material and acid free.

List the types and amounts of hazardous waste generated at your school (e.g. corrosive liquids, flammable liquids, mercury, other toxics, etc) and how are they disposed of properly:

We do not generate hazardous waste materials, corrosive liquids, flammable liquids, mercury or other toxic chemicals.

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

Solid waste production is reduced through single-stream recycling. Through a partnership with Recycle Across America, we have placed stickers on all recycle bins to standardize proper recycling procedures. Our Recycling Rangers program pairs 2nd/3rd grade students

with middle school students to take ownership of and recycle classroom waste. The “Caught You Green Handed” teacher incentive program, recommending bulk snack purchases, use of reusable plates, cups, and napkins and ParentLink (an automated phone call system), all help reduce our solid waste production. Additionally, the SOMAT system reduces solid waste from cafeteria.

What percentage of cleaning products used at your school is green certified?

20%

Alternative Transportation

What percentage of your students’ walk, bike, bus, public transportation, or carpool to/from school?

Percentage of students who:

- Walk: 28 (3.6%)
- Bike: 5 (0.6%)
- Bus: 300 (38.5%)
- Carpool: 35 (4.5%)
- Car Riders including After School Program (ASP): 440 (56.4%)
- Public transportation: 0

How is this data calculated?

Our School Resource Officer has gathered data for community meetings regarding our school’s heavy traffic patterns. The timing has been perfect for our school to implement a variety of programs to reduce traffic including carpool, Flash Valet and no idling. In addition, parents must communicate transportation methods for their children.

Our school has implemented the following: Designated carpool parking stalls; a well-publicized no idling policy that applies to all vehicles (including school buses); vehicle loading/unloading areas that are at least 25 feet from buildings, air intakes, doors and windows; safe pedestrian routes to school or safe routes to school; and secure storage (such as lockers, racks, or rooms) is provided to encourage human-powered modes of transportation to school.

- New this year is a designated carpool area on the opposite end of campus to reduce traffic and idling.
- Our school district has a no-idling policy for all buses. A three phase no-idling plan for parent cars has recently been implemented. See below. Students measured traffic generated by our carline using a survey from the Clean Air Campaign. Baseline data indicates parents currently emit 3209.5 lbs. of air pollutants per year and spend an average of \$412 per year on gas while idling in the car line.
- The school was constructed with the vehicle loading/unloading areas 25 feet from buildings, air intakes, doors and windows.
- Our school participates in a "Safe Routes to School" program. Our School Resource Officer has designated safe pedestrian routes to school, which is distributed to parents and posted in our office.
- Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
- Bike racks are provided to encourage human-powered modes of transportation. Additionally, students who skateboard can store their equipment in the front office.

Describe how your school transportation use is efficient and has reduced its environmental impact. Focus on innovative or unique practices and partnerships.

To reduce CO2 emissions, a three-phase program is in place. First, to reduce the afternoon carline, we implemented a carpool. Next, we partnered with KleverLogic to create a pilot program using their FlashValet App to expedite afternoon parent pick up. Once parents stop in the designated zone, they text for their child. Due to the intensive heat in South Florida, the final phase is the no-idling campaign. Partnering with the Clean Air Campaign to collect data and emission levels, students are kicking off the no-idling policy timed with reduced traffic and cooler temperatures to generate increased buy in.

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

Environmental Health

If you have an Integrated Pest Management (IPM) plan, describe your efforts to reduce use and identify your school contact.

Our Head School Facilities Team, Robeisy H. Bello in conjunction with Broward County Schools, implements an Integrated Pest Management Plan. Preventative measures such as spot-checking and treating problem areas (kitchen/cafeteria) are done on a monthly basis. We focus on keeping pest populations under control through maintaining cleanliness of building and minimizing unnecessary exposure to harmful pesticides. Pesticides are used on an as needed and very limited basis. Staff members are not allowed to use independently purchased products.

Our schools employs the following practices to minimize exposure to hazardous contaminants:

[X] Our school enforces a policy that prohibits all tobacco use by students, staff and visitors on all school-owned property and at school-sponsored events.

[X] Our school enforces a policy that prohibits smoking by students, staff and visitors on all school-owned property and at school-sponsored events.

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

[X] Our school does not have any fuel burning combustion appliances

[X] Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.

[X] Our school has a chemical management program that includes: chemical purchasing policy (low-or no-volatile organic compounds (VOC) products), storage and labeling, training and handling, chemical inventory, hazard communication (cleanup and disposal), purchasing policy for less toxic products including less toxic art supplies, and selecting third-party- certified green cleaning products.

[X] Our school has a healthier or green cleaning custodial program.

Specific examples of actions taken for each practice above.

- Our school enforces a policy that prohibits all tobacco use by students, staff and visitors on all school owned property and at school sponsored events.

- Our school enforces a policy that prohibits smoking by students, staff and visitors on all school owned property and at school sponsored events.
- Non-Smoking (Tobacco) School – Our school posts signs that inform parents, staff and visitors that tobacco products and smoking are not permitted on our campus or at events. Students are informed through the Broward County Code of Conduct booklet and video that tobacco products are against school rules. Students also learn through health education about the dangers of tobacco and smoking.
- Our school does not have elemental mercury and prohibits its purchase and use in the school.
- Our school does not have any fuel burning combustion appliances
- Our school was purchased and built without adding any fuel burning combustion appliances.
- Beachside was built with radon resistant construction features that were then tested to confirm levels below 4 pCi/L.
- We do not have any wood playground equipment or any other structures that contain chromate or copper arsenate.
- Our chemical management program is facilitated through our District's Risk Management department
- We use All in One H₂O₂ Cleaner (Green Seal Certified).

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

Beachside's comprehensive air quality management program is consistent with Indoor Air Quality Tools for Schools, the National Asthma Education and Prevention program Asthma Friendly Schools guidelines, and meets ASHRAE standard 62.1. We are also in phase II of our no-idling program, which will improve air quality in and around our building. In addition, we participate in Broward's AQI FLAG program, which provides daily outdoor air quality index (AQI) data, shared with students and staff daily on the morning announcements.

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

Since our school building was constructed in 2010, building codes in place at the time provide for adequate humidity control. Our exterior doors utilize weather stripping to control humidity inside the building. Guardian windows with gaskets prevent moisture from entering. Additionally, our school has moisture resistant materials/protective systems installed (i.e., flooring, tub/shower, backing, and piping).

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 facilities staff visually inspects all HVAC and ventilation structures on a monthly basis to ensure they are free of mold, moisture, and water leakage. Filters are replaced every 6 months.

Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, that are consistent with state or local codes, or national ventilation standards.

Our ventilation system is designed and built according to ASHRAE Standard 62. All A/C units pull air in from outside.

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.

Our district policy includes implementing EPA IAQ Tools for Schools to provide periodic indoor air quality safety inspections and reports featuring recommendations for action. Beachside's comprehensive air quality management program is consistent with Indoor Air Quality Tools for Schools, the National Asthma Education and Prevention program Asthma Friendly Schools guidelines, and meets ASHRAE standard 62.1.

The following indoor environmental standards are employed at our school.

[X] The classrooms in our school have good acoustics (less than 45 dBA) [X] The classrooms in our school have good day lighting and high-quality electrical light when needed.

[X] The classrooms in our school have good relative humidity control (ASHRAE 30-60%).

[X] The classrooms in our school have views of trees and nature.

Examples of actions taken for each practice above:

Since our school was constructed in 2010, we have good acoustics, effective lighting, and appropriate humidity control in our building. All classrooms are wired as "smart classrooms" and utilize built-in speakers and amplification systems for audio/visual displays. Most of our classrooms feature a wall of windows, including views of trees, gardens, baseball fields, and a neighboring park.

Other steps our school takes to protect outdoor environmental quality such as planting trees, etc.:

During our Earth Day celebration each year we plant trees donated by our local nursery. We are a National Wildlife Federation (NWF) certified wildlife habitat. Classroom and Gardening Club members participate in outdoor gardening. Our native plants and flowers, irrigated with reclaimed water, attract pollinators and beneficial insects to ensure the health of our local ecosystem.

Culture and Climate: Student and Staff Wellness

A description of how our school the coordinated school health model.

Health Education-Students are taught health education year-long as part of our specials program and also through integrated classroom instruction including physical, mental/emotional and social health.

Physical Education-Students receive physical education for 300 minutes on most weeks, during the 3rd week of each month Health Education is integrated for 120 of these minutes. Physical Education includes coordination skills, games, and sport instruction.

Health Services—At regular intervals, student’s vision, hearing, Body Mass Index, and preventive scoliosis screenings are administered. A private lice check service conducts school-wide head checks.

Counseling—Students have access to our school guidance counselor, social worker and familyhealth counselor, as well as peer counselors. Additionally, Peer counselors prepare and demonstrate skits to model healthy interactions amongst students and visit classes to read picture books and discuss character traits and environmental issues.

Psychological & Social Services—Our school has a psychologist and social worker on campus 2-3 days per week.

Healthy School Environment- Creating a healthy social and emotional environment is pivotal to our Montessori school where peace and respect are taught and modeled daily. We also participate in annual Peace Week and Anti-Bullying Week activities. Each week begins with Mindful Mondays on our morning announcements. This 3-4 minute guided meditation helps students start the week on positive note. Many teachers use this same type of meditation throughout the week in their classrooms.

Health Promotion for Staff—Beachside holds an annual Turkey Trot Walk for students and staff. Staff members have an opportunity to participate in the Nike+ Challenge, which encourages them to run or walk at their own pace to track their heart health. Additionally, staff and parents have formed a community dragon boat team to compete in a local race. An AED/CPR/First Aid certification class for staff is offered.

Parent and Community Involvement (related to wellness)—Each year, Beachside hosts Drawn to the Beach a 5K walk/run, which is open to students, parents, staff and the community. This year we have a team of staff and parents participating in our first Dragon Boat Race, held in December.

Describe your school healthy school team membership (e.g. administrator, parent, teacher, student, food service professional, school nurse, counselor), meeting frequency, goals and successes.

Our Healthy School Team meets monthly and is comprised of parents, school staff and administration. Its goals are to support programs that encourage healthy lifestyles and the behaviors associated with them. This includes making the school community aware of the choices they currently make regarding food choice, activity levels, and positive social/emotional health. Each Monday morning we have a school-wide meditation called Mindful Mondays. Yoga is practiced in physical education and as an option for classes during recess. Another example is the installation of a Helping Unite Man and Nutrition (h.u.m.a.n.) healthy vending machine for students, teachers and parents. Our school community voted to allocate \$25,000 of a District bond to purchase equipment for a student/staff fitness center. One of our partners, Crossfit ATP, has been a consultant in the development of our school fitness center.

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

Our school participates in the Alliance for a Healthier Generation's Healthy School Program.

Our school has an on-site food garden.

Our school promotes physical activity opportunities above and beyond physical

education (e.g. running clubs, archery, golfing)

[x] At least 50 percent of our students' annual physical education takes place outdoors.

[x] Our school implements a Comprehensive School Physical Activity Program (CSPAP).

[x] Health measures are integrated into assessments.

[x] Our school provides staff, students, and families information on nutrition education and/or programs.

[x] Our school provides all students with opportunities to receive instructional time in a school garden.

Examples of actions taken for each practice above including innovative or unique practices and partnerships.

- Our school participates in the Alliance for a Healthier Generation's Healthy School Program and is creating a customizable action plan to integrate healthy habits into our school day.
- Beachside has many on-site school gardens, built with funds received from grants from Whole Foods and the Florida Farm Bureau. Through classroom gardens and our weekly gardening club, students learn about planting, maintaining and harvesting organic edibles.
- Beachside competes in the Middle School Athletic Association (MSAA) with other middle schools in Basketball, Soccer, Flag Football, and Volleyball. Additionally, we offer jump rope club & team, cheerleading, dance team, tennis, basketball skills and instruction, fishing club, and swimming club. More than 50% of our student's annual Physical Education takes place outdoors. Our Pre-K-5 grade students have P.E/Health for 5 hours a week (300 min/week). Health takes place outdoors two days a week and indoors three days a week. In addition, all Pre-K-5th grade students have recess for 30 min/day.
- Our school implements CSPAP through SPARK, CATCH, activity breaks in elementary/middle school and Go Noodle in the classroom.
- Health measures are obtained through bi-annual BMI, vision, hearing, and scoliosis screening. Fitness levels are measured through pre/post fitness testing with Fitnessgram software obtained through a grant from the Cooper Institute.
- Our school provides staff, students, and families information on nutrition education with monthly fresh fruit and vegetable tastings in our school dining room. All students have the opportunity to taste new fruits and vegetables that are not usually served in the cafeteria.
- Many teachers practice yoga during recess time, led by parent volunteers who are yoga instructors. Additionally, we have implemented a school-wide meditation and mindfulness education program called Mindful Mondays. We have an annual school-wide Food Drive/Turkey Trot fitness walk every Thanksgiving. All sixth- eighth grade students participate in the American Heart Association's 'Hands Only CPR' training and "Jump Rope for Heart". We have been awarded the American Heart Association's 'Fit Friendly' Gold Level for the past three years. Our PTSA organizes a community 5K on Hollywood Beach. Several of our teachers are participating in a program Nike+ App Running Challenge.
- Classes sign up for garden plots at the beginning of the school year to utilize the garden as a living classroom. Students with a passion for gardening may join the

gardening club, which meets weekly.

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

Participation in physical education, recess or both occurs daily. Our enrichment program includes: jump rope team, tennis, dance troupe, and basketball. Additionally, middle school students participate in interscholastic sports, including: soccer, basketball, volleyball, cheerleading, flag football and swimming.

Parent volunteers and community members created a paved Peace Garden, complete with a mural of a tree, landscaping and flowerbeds, which is used as an outdoor classroom space. Our labyrinth is an important part of our peace education component, offering children the opportunity to connect to their inner selves through a walking meditation to clear and calm the mind.

Pillar III: Effective Environmental and Sustainability Education Environmental and Sustainability Literacy

School or District Policies - Our school or district has:

A Partnership Agreement with a non-formal education provider in the community that supports environmental sustainability literacy.

Several partnership agreements support our environmental sustainability literacy, including:

- NatureScape Broward-container and water conservation, wildlife habitats
- Progressive Waste-recycle audits and assemblies
- Recycle Across America-stickers to standardize recycling
- Broward County Pollution Prevention-AQI flags
- On Air Schools Clean Air Campaign-No Idling program
- Project Perch- exploring habitat for displaced burrowing owls
- ASU Sustainability Teacher Academy-curriculum and support
- Growing Healthy Kids-support and materials for gardening
- SBHS Plastic Mermaids-peers speak to students about plastic pollution
- Algalita POP Youth Summit-students chosen to attend to learn scientific research, plan, mentor project
- City of Hollywood Green Team- collaborate to reduce plastics at our beaches
- EPA – Lorax energy curriculum

These partnerships provide speakers and lessons for students, assemblies, teacher trainings, school assessments, and resources to measure CO2.

School or District Academic Programs - Our school or district has:

An academic program that integrates environmental and sustainability concepts across the curriculum in a single subject

An academic program that integrates environmental and sustainability concepts across the curriculum in multiple disciplines

An environmental or sustainability elective course, including an AP Environmental Science Course, AP Marine Biology, Environmental Science, M/J STEM Environmental Science.

- [X] A school or district managed site or facility specifically for field-based environmental studies.
- [X] A green schoolyard program (e.g., Florida Friendly Landscaping; Gardening, Schoolyard restoration program) that is integrated in the curriculum
- [X] A way to assess student environmental and sustainability learning and achievement
- [X] Professional development in environmental and sustainability education for all teachers and staff
- [X] An environmental or sustainability student club, and/or a school Green Team that includes student representation and/or opportunities for student leadership
- [X] Field trips for students to study environmental education at outdoor programs, science museums, zoos, aquariums, parks, etc.
- [X] A school program that includes service learning projects that incorporate environmental topics
- [X] A way to use the buildings, grounds, and neighborhood to teach place-based environmental education and foster local ecological literacy in a hands-on manner

Examples of actions taken for each practice above.

- Science naturally lends itself to learning sustainability across one subject. Science courses from Pre-K to Honors Biology educate students on everything from botany, landfills, to our carbon footprint.
- The Montessori method teaches “cosmic education” to help students understand the connections between the world’s biodiversity and themselves. Interconnectedness of all things provides a way for children to be able to study math, science, nature and the universe.
- Our school is the first middle school in the district to offer a Sustainability Elective for students. ASU has shared the curriculum.
- Students experience field-based environmental studies at Pigeon Key and Everglades National Park.
- To integrate a green schoolyard we have classroom gardens and a weekly gardening club which involve students in planting native vegetation and attracting pollinators.
- Environmental learning and achievement is measured through project based learning in sustainability class, campus projects, PSA contests, etc.
- Staff development on our Green Initiatives, Breathe Initiative (peace education component, guided meditation, body movements, Labyrinth) takes place on campus. Off campus trainings such as: NatureScape and Everglades workshops and National Montessori conferences which the natural world is key component.
- Our school Green Team, comprised of parents and teachers meets monthly. The Warriors of Rainbow student green group provides opportunities for school leadership. They were chosen to attend Algalita and presented solutions to City of Hollywood Green Team.
- Field trips to MODS, environmental GABIE bus, Fairchild Tropical Gardens, Flamingo Gardens, Tradewinds Farm, SeaCamp, Everglades, Ropes Course Team Building.
- Service learning projects such as: beach cleanups, pop tabs for Ronald McDonald House, Mangrove restoration, recycle rangers, student energy audits.

- Buildings, grounds and neighborhood are used to teach place based environmental education and eco literacy. Montessori methodology is a combination of indoor and outdoor classroom-gardening, nature walks, labyrinth lessons, recycle rangers, student energy audits, solar ovens, portable classroom greenhouses, etc.

Science, Technology, Engineering and Mathematics

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

BMV was the recipient of a 2014/15 Recycle Bank grant focusing on irrigation, water storage and harvesting for our school gardens. This unique opportunity considers technology, engineering and the environment together. The children will learn about the combined techniques of innovative water harvesting technologies and low volume irrigation systems. Through hands-on participation in this initiative, children will start to understand the meaning of water security. Children will research, design and illustrate methods for passive rainwater collection utilizing shallow bioswales, terraces or paved areas to convey and disperse water directly into the garden. Water harvesting may also be achieved via condensate collection from water in the atmosphere. The middle school Lego Robotics Club developed condensation collection tubs for hurricane survival. It is this technology that shall be implemented as an everyday application in the school gardens. Lastly, subsurface, gravity drip feed irrigation that reduces evaporation and ensures efficient and effective watering practices shall be installed. Teaching these sustainable agricultural practices are important as the commercial production of foods results in the loss of this social capital critical knowledge. Children of all grade levels shall learn about the systems installed that provide clean water to irrigate our gardens, maximizing our produce yield.

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

Students recently took a field trip to attend Go SolarFest, a renewable energy fest promoted by Broward County, which provided the opportunity to speak, learn and be inspired from experts in the field. In addition to the professionals in the solar field, local high school students who develop and compete in a solar car racing team spent time sharing their experiences and motivating our students.

Throughout the year, guest speakers from a variety of green career pathways conduct assemblies, provide lessons and share resources about their professions, such as: the horticulturist from the local nursery, water conservationist, pollution prevention, and waste management, to name a few. On field trips, the children interact with park rangers, environmental protection specialist, and other naturalist.

As part of their yearly project Lego Robotics students developed condensation collection tubs as a green technology solution for natural disasters. The tubs create a method of cleaning/purifying water using materials found easily, especially post-hurricane.

Civic Knowledge and Skills

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

As a result of South Broward High School's "Plastic Free Mermaid Students" coming to speak to our marine science and sustainability elective classes, a group of our students applied and were selected to attend the Algalita International POPS (Plastic Ocean Pollution Solution) Youth Summit in California. The students created a plan to reduce plastics at our beaches in Hollywood and presented their ideas to the City of Hollywood's Green Team, which is an advisory board to promote sustainability and green initiatives in the City. At the Youth Summit the students will have the opportunity to work with mentor experts and peers from around the world to improve their projects next steps. Montessori Model United Nations (MMUN) students research and offer solutions for global environmental issues from climate change to affordable energy services. The students work collaboratively with peers from across the United States and from around the world, as far as China, to find resolutions to these global problems. They present their resolutions to ambassadors as well as their peers at the MMUN conference held at the United Nations in New York. All passed resolutions are presented to Secretary General, Ban Ki Moon.

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

The connection between the child and nature is an integral part of the Montessori curriculum.

At the primary level, children name and identify plants and animals in their environment and explore the natural world sensorially through: ladybug and butterfly releases, and tasting plants from the garden.

Elementary students explore the relationships between plants and animals in both their indoor and outdoor environments. Coveted classroom jobs include: botanist and zoologist.

Nature study takes place on school grounds and in the community. Classes take nature walks, collect leaves, discuss shapes, observe parts of plants and develop listening skills as they hear sounds of birds and other outdoor sounds. Montessori materials contain extensive botany and animal lessons.

Life cycle and food web lessons help children identify native and non-native species and the impact on ecosystems.

Upper school students learn their relationship to their natural world by exploring our greater community. Connections to our coastal ecology are made through trips to the beach, snorkeling coral reefs on the Pidgeon Key field trip, and hiking in the Everglades. Part of our campus property is shared with a local park, so students are exposed local flora and fauna and the habitats they inhabit through campus walks.

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

Science through gardening is an integral part of the curriculum. Topics including; germination, pollination, photosynthesis, plant propagation, composting, soil science, pest control, weather, seasons, health, and nutrition are taught both in school and in the weekly gardening club. Experiential learning forms the basis of the teaching, where for example weather readings from the weather station are taken weekly and grafted at the end of the year. Different methods of propagation are learned through planting tubers, rhizomes and strawberry plants. Also, children take cuttings from succulents to be used

in the garden arts program. Experts enhance the learning experience, for example, a recent demonstration involved grafting with the 4th and 5th grade students. Reproduction via pollination and seed dispersal teach about the importance of nurturing the entire garden's ecosystem, which led to the creation of a butterfly garden. Natural pest control, egg shells and Neem oil, are used to control the slug, snails, and nematode populations, while remaining harmless to the pollinators and garden worms. The school community garden provides a focus for dialogue about our natural world. Children gain empowerment by their insightful observations and become acutely aware of how their world is interdependent with nature.

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

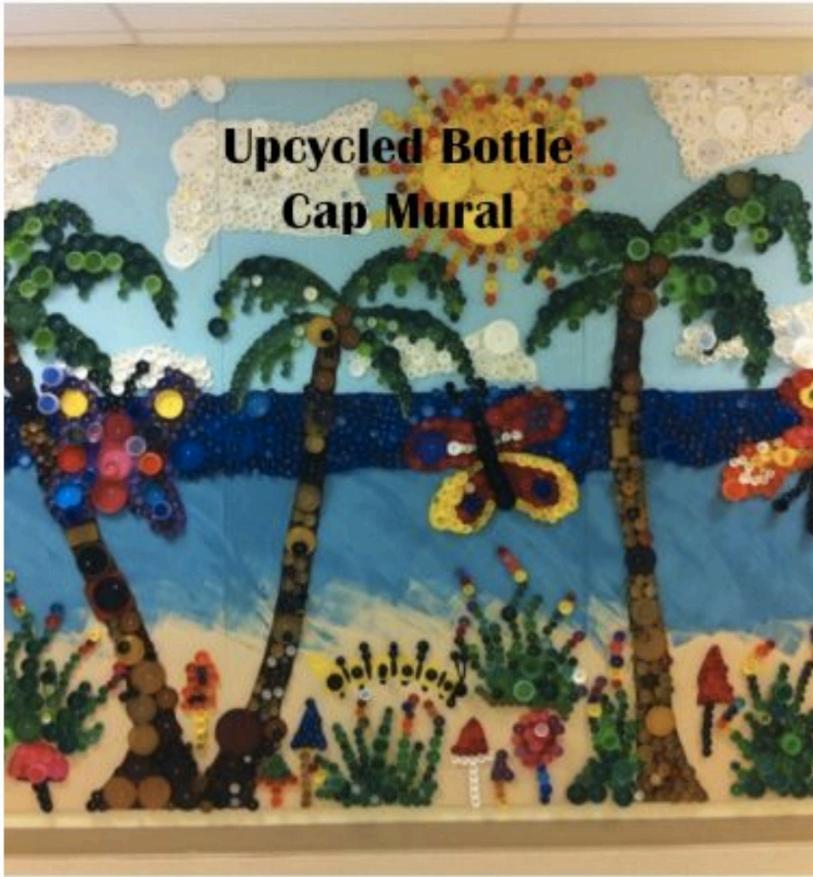
To reduce the impact our school community has on the environment, we have partnered with Progressive Waste, District Energy Conservation and Utility Management Department, and Broward County Environmental Planning for assemblies, hands on lessons and data. This partnership has helped to change the school culture and generate awareness.

To achieve a healthy school environment, teachers and students worked together to record Mindful Monday weekly meditations. Additionally, the school community came together to build our labyrinth, located in the common park area shared by the school and the neighborhood community. CrossFit ATP, American Heart Association, One Beat CPR, Sweet Tomatoes, Whole Foods also contribute to pillar II.

Pillar III partnerships include Arizona State University's Sustainability Teacher Academy. A sustainability elective course was developed based on the academy. Additionally, ASU conducted a mini teacher academy for teachers here in Broward County and offered grants to teachers to implement sustainability projects. Local resources and agencies were brought in to present and share resources with the over thirty teachers attendance.

Off the Canvas, (OTC) run entirely by parent volunteers, cultivates a sustained awareness and interest in art/craft, using of recycled materials and socially responsible practices through monthly hands on art or craft projects.

Partnership with South Broward High School regarding marine projects (beach cleanups)



Florida Green Ribbon Schools Application
2015-2016
Beachside Montessori Village

