Bright Futures Academy Green School Application 2018

Called

<u>Part C. Narrative Summary and Documentation</u> <u>I. School Grounds Enhancement:</u>

Outdoor Learning Labs/Structures:

EDU-Garden®: In 2010 Bright Futures Academy (BFA) began building an outdoor learning program after being inspired by a visit to the Cornell Children's Garden in Ithaca, New York. We took a "run-down" and underutilized soccer field and converted it into a 10,000 square foot educational garden/environmental program at our Palm Beach Gardens, <u>Riverside Campus</u>. Each year since inception, BFA has not only worked internally to create, maintain and improve the program, we have created community partnerships that have contributed greatly to the success of the garden.

The EDU-Garden® has changed and improved over the years. Each year we expand and improve various aspects of the physical space, as well as the learning component which is demonstrated in the pages of documentation. Currently students participate in the garden and environmental science program, using our outdoor learning labs/structures for a wide variety of educational experiences.

<u>Riverside Campus Improvements:</u> At the Riverside Campus in 2016-2017, BFA was able to make improvements to the animal areas and Covered Educational Pavilion using funds obtained from winning the Top Green School of Excellence Award. Gorilla's in the Mist, a local company that provides misting systems, agreed to provide free labor for simply the cost of the equipment needed, to install a misting system into these educational areas, improving the learning experience for the animals, students and staff! New tables were purchased for the pavilion area and new water safe drinking hoses.

During the 2017-2018 year, BFA consolidated to one campus, shutting down the Lighthouse Campus located in North Palm Beach. This consolidation of K-8 on one campus lead to new additions and changes to the Riverside Campus as listed below. A major mile-stone on the campus was the removal of a large cargo container located on the back of the property. Moving this provided space for a new outdoor learning area which we covered and assembled picnic tables.

- Habitat/Animal Observation Areas:
 - Pollinator Garden (new/improved 2016-2017 & 2017-2018)
 - Chicken Coop (improved/expanded 2016-2017& 2017-2018)
 - o Chicken Run added 2017-2018
 - Rabbit Warren (improved 2016-2017)
 - Bird Habitat Area added 2017-2018
 - Aquaponics/Hydroponics- the aquaponics/hydroponics program was temporarily discontinued due to Hurricane Irma.
 - Apiary area was temporarily discontinued due to the removal of the cargo container where the apiary was placed (described below) and Hurricane Irma.
- Soil Science:
 - Compost Area
 - o "Black Gold Mountain" area added in 2017-2018 for soil.
- Planting Areas:

- o Main Garden Area Raised Beds (on-going maintenance improvements)
- Main Garden Area Hill and Valley growing areas were removed and raised beds were added
- o Mist House
- o North Building Raised Bed Area added 2017-2018
- o Campus Wide Native Plant and Edible Landscaping added 2017-2018
- 8th Grade Succulent Garden added 2017-2018
- Outdoor Educational Areas:
 - Reading Carpet
 - North Building Planting Area Added 2017-2018
 - Covered Educational Pavilion (improved 2016-2017)
 - Outdoor Kitchen- the kitchen lost its covered area due to Hurricane Irma
 - Natural Play-scape added 2017-2018
 - North Building Learning Spaces added 2017-2018
 - Recycling Center added 2017-2018
 - New South Building Outdoor Learning Center added 2017-2018

<u>BFA Natural Play-scape</u>: Of all the campus learning area additions for the 2017-2018 year, the Play-Scape was our crown jewel. The idea behind this project was to provide students with a "natural" area in which to play and explore using their creativity and nature. With the closing of Gander Mountain, we were able to obtain large trees that we used as balance beams etc. Repurposed crates, kitchen & music items were added to provide play pieces. We purchased 8 dump truck loads of sand and native grasses to provide the base for the play area which we covered with large tarps. We incorporated an Oak Tree and picnic table into the area for natural shade. A rain water collection bucket was installed which students could use for water play. Recycled playground materials were used as well.

Habitat Improvement/Restoration:

Every year BFA seeks to improve an area of the school grounds that may have been diminished by human activity or use over time. As listed above, BFA has worked on several habitat projects detailed here:

- 1. Chicken Areas- Coop, Tractors & Run: Chickens require room to roam! BFA is constantly evaluating our animal areas to be sure that our animals are happy and healthy. BFA expanded the chicken coop area in 2016-2017 and 2017-2018, adding additional space. When supervised, the chickens are free to roam the garden; however, once planting begins, they cannot roam in the planted areas because they will eat the crops! This year students devised an additional way to give the chickens a run that leads to the compost area by installing a secure, but temporary fence. This fence also connects to the pallet fence, pollinator garden built in 2016-2017, that gets replanted annually to include crops for chickens. The chicken tractors, originally built in the fall of 2015, are continually maintained and used by the chickens when the ground needs aeration or "grub removal".
- 2. Birds- Bird Habitat Addition: In 2017-2018 a bird habitat area was added. Student gathered pallets from neighboring business and with the help of staff, they created a fenced area that contains bird feeders, bird baths, and native plants for attracting birds. The Audubon Society visited our bird area this year and wrote an article in their newsletter about their visit!



Natural Play-scape added 2017-2018

Recycling Center added 2017-2018

New and/or Improved Outdoor Educational Areas:

North Building Planting Area Added 2017-2018

North Building Learning Spaces added 2017-2018

New South Building Outdoor Learning Center added 2017-2018

Outdoor Learning Labs/Structures



A Cargo container was on the school property since 2009. We were able to have it removed by a company that reuses the containers.



Removing the container made a space that we turned into another outdoor learning/lunch area.

After container removal

New area

Granite shown here was taken from the container to create new recycling center sink

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New Recycling Center Area was created to accommodate this huge and amazing program. Natural Play-Scape

Outdoor Learning Labs/Structures





Through reading books like Asphalt to Ecosystems (shown above), BFA researched Natural Play-Scapes and started the project that will continue into the 2018-2019 academic year!









Outdoor Learning Labs/Structures

BFA Collected recycled items to create the Play-Scape.

Gander Mountain in PBG closed. We purchased real tree trunks from their display and used them for balance beams etc.

Principal Ashley Slone found tires for cheap or free!

 Loxahatchee, FL
18.4-26 tires, there are three of them with Dry rot and cracks 50\$ Mr. Randy removed the trunks and brought them to the schoolthey were HEAVY!!



Pictured here- Ms. Artusi, Ms. Bayer, Ms. Hanson, Mr. Glynn. After Hurricane Irma, Stumps were collected from our fellow Academica Supported School, Somerset Boca.

BFA Staff worked hard to create a fun play place!



Pictured here- Ms. Bayer, Ms. Clonch, Ms. Buddemeier, Ms. Colloca, Ms. Hanson, Mr. Glynn.



Play areas! Mr. Randy and Mr. Cade installed sunshades and made a play kitchen.





Habitat Improvement/Restoration

Student feeding chickens

- Habitat/Animal Observation Areas:
 - Pollinator Garden (new/improved 2016-2017)
 - o Chicken Coop (improved/expanded 2016-2017& 2017-2018)
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 - o Bird Habitat Area added 2017-2018
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The students at BFA LOVE the Chickens. Our Chickens like to have lots of room to roam so we are continually expanding their coop and we alternate the use of the Runs so that we can plant new crops for them to eat and ground to forage for bugs.

Students working on coop expansion.

Chickens eating pumpkins from student pumpkin project.

Student feeding chickens in new coop expansion.





The Aquaponic/hydroponic area has been put on hold for 2017-2018 due to storm damage.

BFA Chickens also got new lights to help them lay!





A new Bird Habitat was added, but the apiary was removed due to location issues.



Part C. Narrative Summary and Documentation

II. School Sustainability: Bright Futures Academy (BFA) prides itself on providing sustainable education. For BFA, a sustainable education means that we incorporate practices throughout the school that can be sustained, year after year and that will continue to impact the world around us for years to come. Part of the responsibility of the BFA Global Competency Director is ensuring that the staff and students are reminded to participate in these school wide sustainable practices. **Utilities-**

Energy: All of the following were sustained for the 2017-2018 academic year.

<u>1. School Wide Electrical Use:</u> BFA documented energy usage as made available by Florida Power and Light. We are excited to report our electric bill reflects a decrease in expenditure of over 3,100 Kwh from the 2016-2017academic year to 2017-2018 academic year as reflected for the months of August-January. We have implemented power down Tuesdays and replaced airconditioning units with more efficient units. See chart in documentation.

Water: All of the following were sustained for the 2017-2018 academic year.

Water conservation is part of the BFA school policy. Unfortunately, this year BFA had several water leaks that were financially credited back to the school and fixed; however, the water was lost. The school is putting in place measures to catch water leaks sooner so that the problems can be fixed! BFA uses low volume water toilets; signs; hand watering our garden; water barrels and drought tolerant, Florida native plants are used for landscaping when possible.

Solid Waste: All of the following were sustained for the 2017-2018 academic year.

Solid Waste is perhaps the best place to put to use the Re-think, Re-use, Re-duce and Re-cycle program. The BFA school community is continually re-thinking of ways to limit the amount of waste that goes into the landfills.

Recycling:

<u>General Recycling Program</u>: In 2015-2016, student volunteers kicked off our school wide recycling program on November 15th, National Recycling Day. In 2016-2017, these students were all re-named BFA Earth Ambassadors, to more reflect our environmentally conscious campus, and they received t-shirts and were given the responsibility of school recycling for the entire year.

During the 2017-2018, BFA Ambassadors took the recycling program to a new level! Currently, 47 students (over 20% of the entire student body population) in grades 4-8 are Ambassadors. The students meet daily from 2:30 - 3:00 PM, or until the job is done, helping with carline, distribution of garden goodie bags, and recycling. Ambassadors pick up paper & plastic from the classrooms and around campus and they collect milk cartons from the designated classroom recycling containers. BFA Ambassadors, led by Ms. Savannah Artusi, collect at least 20 gallons of plastic recycling and about 200 milk/juice cartons EVERY DAY. Multiply this by the 180 days of school and it can be estimated that BFA will recycle 3,600 gallons of plastic and 36,000 milk cartons!

<u>Caps of Love Program</u>: This program was discontinued by the originator in 2017-2018. **Re-use & Re-cycle**:

<u>Re-Use Materials</u>: BFA has a policy that requires the school to use recycled materials as a first priority, rather than purchasing new materials.

<u>Building:</u> For the 2017-2018 year, pallets were collected to make new fences, habitats and to build play structures in our Natural Play-scape. We purchased tree trunks from Gander Mountain to use for the play-scape that would have been otherwise discarded and we recovered trees from another Academica supported school, Somerset Academy Boca, to create this playground wonderland! BFA re-uses all cardboard for weed control. During the 2017-2018 academic year, BFA installed new carpet. The old carpet was used as a weed barrier for the garden.

<u>Furniture:</u> Instead of purchasing new desks, tables and file cabinets, BFA visits the school district re-distribution warehouse and utilizes items that have been discarded by other schools. We often refurbish the items and can use them, good as new! During the 2017-2018 year, BFA closed it's Lighthouse Campus. Instead of simply disposing of the items, which consisted of a full campus of desks, chairs, curriculum materials etc., BFA contacted several organizations and re-distributed/donated the items, to include a school in Islamorada that was devastated by Hurricane Irma, Palm Beach Cancer Society, and Resource Depot.

<u>Composting</u> is another way to reduce waste in landfills. BFA has a comprehensive composting program that includes collecting compostable materials from classrooms daily. Additionally, in 2017-2018, the School Food Service Program has agreed to allow the school to use the compostable, left-over food that would have otherwise been disposed of, for the compost. BFA has also historically picked up compostable food marked for disposal from Whole Foods. Perhaps the most unique program adopted this year is the Pencil Shaving program. Students and teachers have learned about pencils; where they come from around the world; how they are made; the materials that are used to make a pencil; and how the shavings can benefit the soil by adding magnesium! Each classroom has a goal of collecting 6 quarts of shavings this year.

<u>Clothing:</u> At BFA, we re-sell or redistribute for free, old uniforms. In 2017-2018, BFA coordinated with Fun Raising Dollars to obtain a clothes collection bin. This bin is kept in the school parking lot area where parents, students and staff have access to drop off items. The school earns money and the clothes are recycled!

<u>Animal Feed Bags:</u> In 2017-2018, BFA teachers were encouraged to make "sit-upons" out of the animal feed bags from the garden. Each sit-upon, which students use when doing field observations, use 1 feed bag. The Global Competency Director has been keeping these bags for several years to be used for projects such as this, which due to its implementation success, used over 100 bags! The plan is to use the remaining bags to fashion table cloths and tote bags.

<u>Animal Husbandry Hay</u>: Animal hay needs to be replaced regularly to ensure that the pens are clean and dry. During the 2017-2018 year, the Global Competency Director implemented a program to re-use the hay around the non-food, campus plantings instead of mulch. The hay is great ground cover!

<u>Plastic Grocery Bags:</u> Students use grocery bags to cover their shoes when working in the garden. This not only protects their shoes, but it reduces that amount of contamination in the animal areas and in the classrooms.

Re-duce:

<u>Composition Books</u>: In 2017-2018 Smart TVs were installed in every classroom which further reduced the use of handouts and has significantly reduced the need for copies. BFA was able to eliminate the use of one copy machine and paper purchasing.

<u>Re-usable Water Bottles</u>: BFA asks that students bring re-usable water bottles to school to eliminate plastic waste. Most students follow the policy and those that do not, their water bottles are recycled. BFA also sells environmentally friendly re-usable water bottles with the school logo as a fundraiser.

<u>Green Fundraising: All of the following were sustained and expanded for the 2017-2018</u> academic year.

<u>Green Fundraisers:</u> BFA has adopted green fundraising as a part of the school policy. We raise funds for our special programs through community outreach events to include the following: EDU-Garden® Day educational event; Holiday Show/Talent Show using recycled materials; School Book Projects where students to develop story boards, complete a story line and include illustrations in the final product that goes to publication; Year Books; BFA also contracts with Tree Ring Year Books. This company is committed to planting a tree for every book sold and has currently planted 1,953, 507 trees. <u>https://www.treering.com/</u>

<u>Community Support:</u> BFA has developed a working relationship with a network of entities that support the school. Whole Food/Whole Kids Foundation; Trader Joe's; Mounts Botanical Gardens; The Center for Social Change provide resources to BFA that help support our school. <u>Health and Well-being: All of the following were sustained and improved upon for the 2017-2018 academic year.</u>

As part of the BFA charter and our school policies, BFA incorporates the following into our program:

<u>Physical Education and Recess:</u> All BFA students receive physical activity for at least 50 minutes every day.

<u>Pesticide/Herbicide Organic ONLY campus:</u> the entire Riverside Campus is organic pesticide and herbicides only, as part of our school policy. We use an environmentally friendly pest control company and use only natural substances such as soap and vinegar in our garden. NO WEED KILLER is allowed anywhere, by anyone on campus. We also require the use of bee keeper removal, not extermination. In 2017-2018, BFA hired Mr. Randy for maintenance at the school. Mr. Randy is licensed for pest management and only uses organic materials.

<u>EDU-Garden® Educational Program</u>: this program is the heartbeat of the school and students learn about healthy food choices, water safety and conservation, the effects of using pesticide and herbicides on the environment and numerous other health and wellness related issues.

<u>Cooking Club:</u> BFA hosts an after-school cooking club that has been sponsored historically by Whole Foods. This club is held in the spring, in the garden, where students learn about using fruits and vegetables to make healthy food.

<u>Garden Day events:</u> In 2016-2017, BFA transitioned from hosting two annual garden events, to one that will be incorporated into "Who Will Stand Up for the Earth Week". This is a community wide event where we partner with local chefs and conduct cooking demonstrations and talk about healthy eating, local organic food growers and sustainable exercise for all. Each Garden Day has a theme, 2017-2018 theme is going to be "Bringing Back the Family Dinner."

<u>Mindfulness</u>: In 2015-2016 BFA partnered with the Center for Social Change to bring mindfulness training and programs into our school. In 2017-2018 BFA implemented the Mindful Meals program which encourages students to be mindful during lunch.

<u>Staff Development:</u> BFA conducts extensive staff development which includes healthy lifestyles. Staff learn about nutrition, exercise, disease and are required to be CPR, AED and Epi-Pen trained.

Transportation: All of the following were sustained for the 2017-2018 academic year.

BFA no longer has a bus, it was returned to the district.

BFA tracks the number of walkers and bike riders and provides a safe place for students to store their bikes.

School Sustainability- Energy:						
increase due to l	BFA had a water usage increase due to leaks which have been fixed. See below		6	BFA lowered electric bill a here.		n
<u>School Su</u>	<u>st</u>	<u>ainabi</u>	<u>li</u> 1	<u>ty- Wat</u>	<u>er:</u>	
Gallons of Water Usa	ge	2017-2018		2016-2017	Differe	nce
July		174,00	00	18,000	-15	6,000
10350 RS		16,00	00	7,000		9,000

Gallons of Water Usage	2017-2018	2016-2017	Difference
July	174,000	18,000	-156,000
10350 RS 🛛 🧡	16,000	7,000	-9,000
August	79,000	21,000	-58,000
10350 RS	24,000	12,000	-12,000
September	47,000	56,000	9,000
10350 RS	18,000	13,000	-5,000
October	88,000	50,000	-38,000
10350 RS	28,000	16,000	-12,000
November	79,000	46,000	-33,000
10350 RS	25,000	30,000	5,000
December	79,000	26,000	-53,000
10350 RS	21,000	32,000	11,000
January	87,000	26,000	-61,000
10350 RS	22,000	32,000	10,000
TOTAL	787,000	385,000	-402,000

Ms. Artusi and the	BFA Ambassadors!
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2017-2018	2016-2017	Difference
9938	11180	-1242
9840	10860	-1020
7818	9144	-1326
7740	9180	-1440
9360	8460	900
8467	7392	1075
8280	7440	840
6630	5381	1249
4980	6660	-1680
3895	4307	-412
6120	6480	-360
4735	4427	308
87803	90911	-3108
	9938 9840 7818 7740 9360 8467 8280 6630 4980 3895 6120 4735	99381118098401086078189144774091809360846084677392828074406630538149806660389543076120648047354427

Reducing the Carbon Foot Print- Reduce, Reuse, Recycle			
Recycling Calculation	Per Day	180 Days	
Plastic	20 Gallons	3600	
Milk Cartons	200 Cartons	36000	
Compost	5 pounds	900	
Electronics	Recycled	3,224.67 Pounds	
Carpet Remnents	Re-used	50 yards	
Wood	Re-used	1,100 Pounds	
Student Desks	Re-distributed	275	
Student Chairs	Re-distributed	300	
Book Shelves	Re-distributed	15	
Teacher Desks	Re-distributed	5	
Books/Curriculum	Re-distributed	620 Pounds	
Music Equipment	Re-distributed	35 items	
Granite	Re-used	2000 Pounds	
Animal Feed Bags	Re-used	100	
Plastic Grocery Bags	Re-used	up to 7200	
Clothing	Re-cycled	844 Pounds	
Candy Wrapers	Re-cycled	2 Large Bags	
Scrap Metal	Re-cycled	13,000 Pounds	
Music Equipment	Re-used	30 pounds	
Pallets	Re-used	85	

Perhaps the most successful area of sustainable practice at BFA is reducing our carbon foot print. We rethink how we can reduce, reuse and/or recycle items.

BFA participated in a candy wrapper recycling collection drive through the Loggerhead Marine Life Center and collected two large bags of wrappers.

BFA Ambassadors pick up paper from classroom collection boxes every day. In addition to recycling the paper, we try to reduce through the use of journals.

0955829

BFA reuses plastic grocery bags to cover shoes!

BFA will recycle over 880 pounds of shoes and clothes this year using our on-site recycle center

Ms. Savannah Artusi runs a 47 student Ambassador program. The Ambassadors are responsible for picking up all recycling and compost daily, as well as distributing food goodie bags, helping with trash pick-up around campus, etc. To be an Ambassador at BFA is a privilege that students are eager to earn.

> Everyday Ambassadors must collect the carton buckets from all classrooms, wash the cartons and fill up the recycle bins for pick up. Over 3,200 cartons will be recycled at BFA this year.

Ambassadors picking up plastic



collection buckets.





Rethinking Hay 02/15/2018 Description:

Central to the management and sustainability of our EDU-Garden[®] here at Bright Futures Academy are our three compost bins. We house 5 rabbits and 9 chickens in their own respective living areas and the maintenance and sanitation in these areas is most important. We use Coastal Hay for bedding in the animal areas and depending upon weather conditions (rain, humidity, etc.) and the length of time these animals are confined and unable to free range ,dictates how often the hay is removed and replaced, which is usually 3-4x weekly. This creates volumes of hay in the compost bins, where it must decompose for a minimum of 120 days, (organic guidelines), before we can use it on our edible crops. Mountains of unusable hay!

What can we do?

Rethink, reuse, recycle! We can put this hay on our ornamental flower beds, roses, muhly grass and newly planted beautification areas. Problem solved! No expensive mulch to purchase, free fertilizer, esthetically pleasing and best of all good for the soil!



Students here are using recycled plastic table clothes to lay/sit on while reading, while others are seated on recycled music risers.



Carpet remnants for ground cover





Bright Futures Academy School- Sustainability 2018

School Sustainability- Solid Waste:

Chickens love getting in the compost and eating snacks. Pictured here is a supply of corn from the District Food Service that would have been thrown in the garbage.



h s r a t s c

New this year, BFA started recycling pencil shavings which adds magnesium to the compost. Here a student dumps shavings.

Pictured here, district food was being thrown away. We asked the district if we could serve our student left over food, as 79% of BFA students receive free or reduced lunch.

Pictured here, students shovel compost

AVA T





Monthly Global Tenet: February- Question prevailing assumptions

Monthly Environmental Focus: Preservation of National Parks Objective:

• I can recycle.

• I can reuse items that can be recycled.

Introduction :

• Watch- Reading Rainbow Video about the recycling plant.

• Watch Kidvision Virtual Field Trip to the Rethink and Reuse Center. Guided Practice (We Do):

• Make situpons

• Pass out chicken feed bags. (bags are cut in half)

 \bigcirc Tape the bottom of each bag.

 \bigcirc Pass out a small square cut out of reusable shopping bags.

 \bigcirc Have students tape square to bag. This will be used as a pocket.

 \bigcirc Have students put newspaper or magazine pages into the bags.

 \bigcirc Seal the bag with duct tape.

 \bigcirc Add a ribbon as a handle.

 \bigcirc Have students sit on the situpon when done.

Pictured on this page, Ms. Nelson's Kindergarten class made sit-upons. Her lesson outline is shown here as well.



umbles 🦽

Bright Futures Academy School- Sustainability 2018



Students are watering using cans to reduce waste.





Pictured here is new Bahia, drought tolerant grass.

Transportation:





BFA returned 2 buses to the district for redistribution

Pictured here, students use square foot gardening and a student here is using his reusable water bottle.

Health and Wellness:

BFA uses many different approaches to avoid using dangerous chemicals.

- 1. Cover Crops are used to naturally remediate the soil.
- 2. Native plants are purchased for naturally hardy plants.
- 3. Compost is made to augment the soil.
- 4. Crop rotation is done among the fields.
- 5. No GMO seeds are used.
- 6. No pesticides are used to protect bees and other pollinators.
- Companion planting is used for natural insecticides, as well as no monoculture growing.
- 8. If fertilizer is used, it is only organic!
- 9. Mosquito control is done naturally through Brian Morris Pest Management. He uses a Mosquito barrier approved by OSHA and manufactured by Garlic Research labs, it is simply garlic and citrus oils- works great!
- 10. No VOC Paint

BFA only uses Low or No VOC paint. The entire campus was painted with this paint over the summer.

At BFA Students learn to plant vegetables and we have found, if they plant it, they will eat it! Pictured below is a student picking a radish.





PRIMER IN CAS

Students eating salad!



GARDEN OF

DUNTY

BEACH



Part C. Narrative Summary and Documentation

III. Curriculum Integration: Bright Futures Academy (BFA) uses an integrated approach to incorporating environmental concepts into the curriculum across disciplines as follows: **Interdisciplinary Approach:**

- 1. Core Class Integration: As a part of BFA's charter agreement with the School District of Palm Beach County, BFA uses an around the world in 180 days program. In this program, our students I travel around the world studying the continents of the world. Paired with these continents are themes that are associated with concepts that involve agriculture and the environment. For example, students learning about Europe in their social studies this year participated in a Roman Aqueduct project and learned about the importance of water as a resource. Our calendar and associated concepts are provided in the documentation section. During the 2017-2018 each grade adopted a continent, with Kindergarten adopting "the world". This allowed easy implementation of the monthly environmental topics discussed below.
- 2. <u>Special Area Class electives:</u> as a part of our school electives wheel, students in grades attend classes in the EDU-Garden® and environmental studies. Additionally, students receive a minimum of 50 minutes each day in outside physical activity. Additionally, Spanish is incorporated into the special area classes.
- 3. <u>Home Team:</u> In past years, BFA used a home team period; however, during the 2017-2018 year, the school eliminated home team and decided to incorporate mindfulness during the day and implemented a "mindful meals" program (described below). Although the programs were successful, the use of home teams will be brought back for 2018-2019.
- <u>4.</u> <u>Nature Walls:</u> Nature Walls are used along with nature based photos are used in the classrooms to create a feeling of calmness and to bring nature inside when the students cannot be outside.
- 5. <u>Social Issues</u>: Students are educated regarding compassion and tolerance. BFA students care for animals and learn about taking care of each other. During 2017-2018 BFA implemented a monthly tenet program which is provided in the support section. This program allowed teachers to focus on specific tenets to live by each month, while practicing all of the tenets throughout the year.

Environmental Topics/Issues:

- 1. <u>Monthly Environmental Topics:</u> New in 2017-2018, BFA adopted monthly environmental topics to be explored through all subjects. These topics and explanations are provided in the documentation pages.
- Environmental/Agricultural Studies Program: The following is list of topics covered from K-8: K-4 Junior Master Gardener-; 5th 8th Grade- Farm to School Program. 6th Grade-Soil & Composting- Symphony of the Soil; Scientific Classification; Photosynthesis; Cells & Heredity; Crop Rotation; Water; Pollination; Propagation; Animal Science; Fish; Aquaponics; Entomology; Botany; Organic Food Movement; Sustainability. 7th Grade- Agriculture, Environmental Studies & Human Geography Around the World. 8th Grade- Project Based Learning.

New for 2017-2018, students in grades K-4 attend class with Mrs. Ancona in several specially designated areas that allow for outside learning that naturally incorporates environmental/agricultural topics.

Students in grades 5-8 enjoyed a new "refrigerator question" program. Ms. Artusi posted various pictures on the classroom fridge and students were asked to figure out who the person is and what has their contribution been or they have to determine where the picture is and what it means to the environment etc. Also, the garden class enjoyed in class field trips, to include a visit from the Loggerhead Marine Center where student learned about Sea Turtles and their importance to our ecosystems.

- 3. <u>Classroom Tables:</u> For 2017-2018, the garden room re-furbished old science tables that were collected from the school district re-distribution warehouse. The tables were sanded, painted and decoupaged. Each table was covered with pictures from several categories, to include: Plants, Fish, Amphibians, Birds, Mammals, Ocean Mammals, Farm Life, etc. These tables are used for classroom instruction and projects.
- 4. <u>Web-Cameras:</u> During the 2017-2018 school year, BFA added smart TVs to each classroom. Teachers play the web cameras from around the world of various wildlife areas, zoos, etc. This provides students with a visual reminder of what is happening around the world with the environment.
- 5. <u>BFA Earth Ambassadors:</u> The BFA Ambassadors did an amazing job during 2017-2018. Led by Environmental/Agricultural Science/Spanish teacher, Savannah Artusi and Global Competency Director, Pat Rentz, the Ambassadors implemented a school wide recycling and composting project that led to the recycling of thousands of milk cartons and composting of left-over food. Additionally the students took on various school conservation projects and distributed garden goodie bags. Students in grades 4-8th meet every day after school to participate in the program and learn about the value of these activities.
- 6. <u>Recycling Matters:</u> At BFA recycling matters and it takes a whole team to be sure that everyone understands recycling. In grades K-3, students have fun with various projects, such as recycling crayons and they help the Ambassadors. Ambassadors collect paper, milk cartons, plastic bottles and compost. During our "Stand Up" week, we collect ink cartridges, batteries, cellphones, etc. collection so that parents can get involved as well.

Field Studies:

- <u>1.</u> <u>EDU-Garden®:</u> our school garden program is central to the school. During the 2017-2018 year, BFA consolidated to one campus, located at Riverside Dr., Palm Beach Gardens. The main garden is located on the south side of the campus and this year a smaller garden was built on the north side of the campus. Students are actively engaged in the garden every day where they learn about a myriad of subjects. Students in grades K-8 receive environmental/agricultural education daily for 50 minutes. The topics covered are listed above.
- 2. <u>"Who Will Stand Up for the Earth" Week</u>: During this week, students spend time engrossed in hands on activities and participating in earth/environmental programs. For the 2017-2018 we currently have scheduled the following:

Monday: Meatless Monday

Tuesday: Environmental/Agricultural Science Career Day- this is new for 2017-2018 and the school plans to invite local community members from Scripps, Max Plank, FPL, various Florida agencies and other local businesses to attend this event and will incorporate this into the classrooms by having students do research and dress up.

Wednesday: Water Awareness Day

Thursday: Re-use- Reduce- Recycle Day & Power Down Day

Friday: Procession of the Species walk-a-thon- celebrates species diversification and students dress up as their favorite animal.

Saturday: EDU-Garden® Day

- 3. <u>Beach Clean-Ups:</u> We encourage our families to take part in the monthly beach clean-ups that happen in Juno Beach or any beach in proximity, at the first of each month and to participate in the Great Coastal Clean Up!
- 4. <u>Field Trips</u>: Annually, the BFA administrative team creates a field trip calendar where each grade takes at least one arts related trip and one environmental trip. Our annual field trip list is as follows, additional environmental trips may be taken: Kindergarten: In house programs
 - 1st Grade: Loggerhead Turtle Museum & Theater Production
 - 2nd Grade: Hobe Sound Nature Center & Cultural Center
 - 3rd Grade: Benders Farm & Cultural Center
 - 4th Grade: River Center or Grassy Waters & St. Augustine (capstone trip)
 - 5th Grade: Mounts Botanical Gardens or Unbelievable Acres & Cultural Center
 - 6th Grade: Cultural Center & State or National Park (capstone trip)
 - 7th Grade: Palm Beach Zoo & University Sporting Event (capstone trip)
 - 8th Grade: Cultural Center & EPCOT (capstone trip)
- 5. <u>Animal Care Program</u>: All students that learn in the garden learn about animals, but a special group of students, particularly interested in taking care of our rabbits and chickens were selected to work with a local vet and Ms. Pat to get more in-depth instruction into caring for animals.
- 6. Solar Eclipse: The beginning of the 2017-2018 was an exciting time for BFA students as they geared up for the solar eclipse. Knowing that the eclipse would take place during the school day and that students were curious about the eclipse, BFA decided to purchase eclipse glasses for every student, BFA staff member and parent who chose to participate in the school wide solar eclipse event. Permission slips were obtained and parents were invited to attend. Students were allowed to view the eclipse with parental and/or staff supervision while wearing their glasses. Additionally, teachers put various animal cams on their Smart TVs so that students could observe animal behavior as the eclipse moved across the United States.
- 7. <u>February Back Yard Bird Count:</u> In February 2018, BFA students participated in the Back Yard Bird County. The Everglades Audubon Society came to the school with binoculars, educational posters, and books. The students were led around the school grounds and educated about the various bird sightings. One student from each class kept a log of the various species sighted and the logs were reported to the Cornell Ornithology Lab as part of the Nationwide Citizen Science Project known as the Great Back Yard Bird Count.

Interdisciplinary Approach: Core Class Integration

At BFA, teachers incorporate environmental concepts into all subjects. Below is the 180 days around the world calendar that provides teacher with a schedule for the year.

Interdisciplinary Approach Examples:

- Core Class Integration
- Special Area Electives
- Nature Walls
- Social Issues

Pictured here, students are enjoying a salad after a farm to table lesson that included nutrition.

CALENDAR DATES		ġ
Aug 15-Sept 9	EARTH/WORLD	ð.
Sept. 12-Oct 14th	SOUTH AMERICA	1
Oct. 17th- Nov. 25th	NORTHAMERICA	
Nov. 28-Dec. 16th	ANTARCTICA	-
Dec. 19- Dec. 22	HOLIDAYS AROUND THE WORLD	41. (w)
Jan. 9- Jan. 13	ANTARCTICA	3
Jan. 16- Feb 10	ASIA	100
Feb. 10- March 17	AFRICA	19.0
March 17- April 13/24-28	EUROPE	
April 17- April 23	EARTH WEEK	200
May 1-26	AUSTRALIA	
May 30- June 2	CHARTER SCHOOL WEEK	



Students are required to use composition books that help them when using field journals. The use of composition books and field journals is an English lesson as well. This is Ms. Artusi's board from August.





Interdisciplinary Approach: Core Class Integration

Students completed a pumpkin lesson, which included counting seeds. After the lesson was complete, the students went to the garden to feed the pumpkins to the chickens.



Kindergarten students picked beans from the garden and then used them as counters in for a math lesson!



Interdisciplinary Approach: Special Area Elective



Information is communicated in both English and Spanish.







Ms: Pat. our EDU-Garden" director, load told Mis. Ancorna that if we could find a suitable place for them, we could build the garden bedy at our Lighthouse Campus. So: after the second, thod, and fourth gade students did an initial vite assessment, together we determined that the playpround would be the best pomble site.

in planted aren per

BFA student participate in a book project each year. These books are sold as a fundraiser and are educational in nature. The books shown here are an example from the 2016-2017.

Interdisciplinary Approach: Nature Walls & Social Issues





Nature Walls are required in each classroom. Student bring in items to contribute to the walls. Next year our goal is to have NO plastic on our Nature Walls!



At BFA Mindfulness & Social Issues are an important part of the educational process. The school community adheres to the following Global Tenets.

Monthly Global Tenets:

August/September: Maintain an expectation for excellence.

October: Show yourself and others unconditional kindness and compassion/have humility.

November: Use clear communication/be and active listener.

December: Value multiple perspectives/work collaboratively.

January: Question prevailing assumptions.

February: Remain open minded and flexible to change.

March: Commit to lifelong learning.

April: Demonstrate resilience.

May: Take responsibility for your actions.

Environmental Topics/Issues

Environmental Topic Examples: Monthly Topics Classroom Tables Environmental/Agricultural Studies Web Cameras Earth Ambassadors Recycling Matters



Monthly Environmental Topics are themed throughout the school. These topics are as follows:

August: Earth Ambassadorship- what does it mean to be an Earth Ambassador at BFA and the community at large.

September: World's Oceans & Garbage-International Coastal Clean Up

October: Feeding the World- World Food Day

November-December 5: Soil Conservation

December- Peace- Holiday Show Peace

January- Preservation of National Parks-UNESCO World Heritage Sites. Deforestation, habitat preservation.

National Literacy Week.

February- Citizen Science

Great Backyard Bird Count

March- Water Conservation

World Water Day

April- Sanitation and Health & Earth Day!!

World Heath Day

May: International Day of Biodiveristy

Pictured here, Ms. A and Ms. Pat after collecting garbage at the beach in Jupiter as a part of the International Coastal Cleanup.





Pictured here, Ms. A teaching students seated at the tables. Ms. A had students do projects on various aspects of the tables throughout the year.



Pictured here are the science tables used as science lessons. These were old lab tables that we decoupaged, using taxonomy themes.



Bright Futures Academy- Curriculum Integration 2018

Kindergarteners learn what goes into compost in the classroom.



Composting is taught to every grade at BFA!

Environmental Topics/Issues

Ms. Clonch has a Bearded Dragon as a class pet. She did a compare and contrast lesson between the Bearded Dragon and the Chickens while doing a composting lesson. Her kids went to the garden to compost left over food from the Bearded Dragon habitat.



Ms. Clonch's class listening to a composting lesson.



Compost Journal hing CONNO X LINDS fried

Bright Futures Academy- Curriculum Integration 2018



Animal Web Cam pictured here. All BFA classrooms are equipped with a Smart TV and they host environmentally related web cams throughout the day.



<u>Above:</u> Ms. A and the Ambassadors. Approximatley 20% of BFA students are Ambassadors and they have great responsibilities at the school to include recycling, distributing garden goodie bags, and composting.





Bright Futures Academy- Curriculum Integration 2018







The BFA Chickens stopped laying eggs, so the students did research and thought that maybe they needed to extend their photoperiod. They then installed lights and placed them on a timer for night time and it worked!! They started laying eggs again! BFA student holding a bunny in the rabbit warren.

Students enjoy lessons in the field.



Students are looking for insects on the vegetable plantings.



Examples of BFA Field Studies: EDU Garden Who Will Stand Up for the Earth Week Beach Clean Ups Field Trips Animal Care Solar Eclipse Backyard Bird Count
Bright Futures Academy- Curriculum Integration 2018



Students recording bird sightings in their journals. This year BFA students participated in the Great Back Yard Bird Count. Vicki Rogerson visited the school and wrote this amazing article about her visit, published and copyright protected in the Everglade Kite





I often ack people how they got into birding. Some, Rice myself, came to it abit later in life. Others mention leachers or parents who introduced them to birding. There is no one pathway to an interest in birds just like there is no one type of birder.

I spent Wonday, Feb B), the last day of the Great Bady and Birt Count (GBBC), with a wonderful teacher and the 60 or so students from her classes. The GBDC is a collaboration between the Cornell Lab of Dmithology and the National Audubon Society. It is a difference project open to every one in the world. For four day's people are asked to satirit bird reports to estimation the Cornell Lab of Dmithology where the data is compiled for use in coentlific research.

Fain hoping that maybe one or more of the students at Bright Future: Academy, the acclaimed Green School, looks back, and says they remember the day their teather; Mr. A (Savannah Arhisti), took them out bilding arrend the school carrens with Mus Vidu from Audubion Everylades. Filer ellend reports were submitted with a total of 19 species for the day, A Gray Galbirdiand a Brown Thrasher refused to come out and be counted while our citizen scientists were around Each group of students saw from 7 to 40 blob. Best DRIE were the Blass headed Vice o and Vellow - two aled Wather Ret diama was wretter the European Starting or the Red-belled Woodbecker would prevail over the other tor met cavity owner this looking o on with from much we learned, and how much families had, but neally I would just like to say that this is very ment worth daing agait. See you nearly early

BFA Purchased eclipse glasses and invited parents to join the school during this special day!

Part C. Narrative Summary and Documentation IV. Community Involvement:

Partnerships within the School Building:

<u>EDU-Garden® Books</u>: Each year, students in various grades, through the elective program complete a garden book project. This project requires students to develop story boards, complete a story line and include illustrations in the final product that goes to publication. After these are published, the stories are used in the lower grades to teach the students about our garden and the environment.

<u>BFA Ambassadors</u>: Bright Futures Academy (BFA) developed a "BFA Green Ambassadors" program for students in grades 3-8 during the 2016-2017 year. This year, 2017-2018, the program was re-visited and further developed. Currently, 47 students (over 20% of the student body population) in grades 4-8 are Ambassadors. The students meet daily from 2:30 - 3:00 PM, or until the job is done, helping with carline, distribution of garden goodie bags, picking up paper & plastic recycling (and cleaning out the blue recycling buckets when necessary), collecting & recycling cartons (picking up buckets from classes, emptying cartons, squishing cartons, recycling the cartons--they also are the ones who count how many cartons we collect, cleaning the buckets, and returning the buckets to classes), trash pickup, collecting kitchen compost, and anything else the teachers/staff need, including helping out in the garden. Students attend an additional mandatory meeting every other Monday from 3:00-4:00pm. A schedule of student activities can be found in the documentation section.

Through this program, BFA has collected at least 20 gallons of plastic recycling every day and about 200 milk/juice cartons per day. In addition to the recycling program, the Ambassadors realized that there was an enormous amount of food waste being thrown into the garbage everyday through the school district food service program. Taking their understanding of rethink, reduce, reuse recycle, Ambassadors asked if instead of throwing the food away, if it could be re-purposed. As can be seen in the documentation pages, the food service staff agreed and anything that was marked for disposal and could be composted is being collected and placed in the compost bins. Other food that was marked for disposal, but not compostable, is used through the after school programing for snacks, as BFA currently has 79% free and reduced lunch students enrolled. This extra food has proven to be a huge help to the families in need.

As mentioned in this section, the Ambassadors distribute garden goodie bags. These garden goodie bags contain eggs gathered from the schools organically fed, free range chickens and organically grown vegetables from the school's garden. Providing our school's families with organically grown, healthy foods is greatly appreciated by our school families who many have stated that they could not otherwise have afforded.

<u>EDU-Garden Days</u>: BFA holds garden days where we provide free food and educational programs for our school families. After years of implementing this program, we realize that many families don't know how to prepare the produce that we provide. At the garden day, we provide recipes and cooking demonstrations in addition to environmental and agricultural themes.

<u>Thanksgiving Feast:</u> BFA provides a Thanksgiving Feast where school families can all come together for lunch. Whole Foods and Trader Joes have traditionally contributed food to this feast, as well as families and staff within the school community. Additionally, during this time we also collect food, cash and items that are donated to families in need.

Community Service Projects:

<u>Beach Clean-up</u>: every year BFA staff and school families participate in beach clean ups. This year we also participated in the International Beach Cleanup!

<u>Community Partnerships in School Activities:</u> The BFA administrative team, the Green Ambassadors and our Parent Volunteer network come together to discuss ways that BFA can most effectively and efficiently increase our Green Schools Project. Through these meetings and brainstorming sessions, we have created the following connections and partnerships. There relationships provide avenues for funding and educational support.

<u>Audubon Society of the Everglades:</u> This year we continued our connection with the Audubon Society to develop a bird habitat and to further educate our community about the importance of birds. <u>Mounts Botanical Gardens:</u> the BFA garden director, Pat Rentz, received her Master Gardener designation from Mounts and continues to attend their trainings and workshops. Pat brings her information back to the school where she educates our staff and community.

<u>Whole Foods</u>: Whole Foods and the Whole Kids Foundation has been an amazing sources of funding, support, food, plants and education. Throughout the year, Whole Foods provides us with Orchids which we use to educate our students, staff and families. Additionally, they have provided staff training and student educational programs regarding nutrition and cooking. This year, due to a company-wide staff reduction policy, BFA hired a former Whole Foods Nutrition Education specialist to work in our garden program and she was a wealth of knowledge. We participated in their 5% back day where we raised over \$7,000 and we received a \$2,000 garden grant. Whole Foods regularly supplies us with food for our garden events, cooking clubs and Thanksgiving Day Feast.

<u>Trader Joe's:</u> Trader Joes graciously donated turkeys for our annual Thanksgiving Day Feast and lunch for our staff trainings.

Dr. Gillan: Garden director, Mrs. Pat made a connection with a local veterinarian that has been a wealth of information for our staff and students. Dr. Gillan has agreed to provide us with free vet services for our flock of 13 chickens and 10 rabbits. Dr. Gillan speaks with our students about being a vet and caring for animals. He felt so comfortable with our school environment; he donated his two pet rabbits to our program. On occasion, when space permits, BFA has also adopted other rabbits that needed a home. Center for Social Change: BFA works with Bill Burdette, director and founder of the Center for Social Change. Through this contact, Mr. Burdette was able to provide our school with a Wellness Coach and Counselor, Ms. Christina Pearce, to facilitate our mindfulness and mental health programs. BFA Alumi Program: BFA encourages former students to return and to volunteer to earn community service hours, these student work in the garden and through various programs in the school. Fazio Fertilizer: Fazio golf design has created an organic product that works great in our garden. Since BFA only uses organic substances, Fazio Fertilizer has donated their product to help our garden grow. Parks and Recreation: BFA partners with many of the local, state and national parks. Students attend field trips within the county and we hold staff development trainings in many of these locations, free of charge. FAU Green Ambassador Program: During the 2016-017 and 2017-2018 year, Ms. Pat volunteered to be an Ambassador to schools applying for Green School Status. She was appointed to assist several schools, and last year all of her schools applied and received recognition. In addition to the Ambassador mentorship, Ms. Pat and her garden team worked opened up the school garden for a day of exploration to visitors and provided information on how to start and sustain a school garden.











Every year BFA hosts garden day where we provide free activities and food for the entire family!

BFA Ambassadors harvest veggies and eggs, make goodie bags, and distribute them in the car line during dismissal.



Principal Slone and Kendall Artusi cooking a shrimp boil for garden day!

Every Year BFA hosts a Thanksgiving feast, featuring donated items and harvest from the garden. Families are invited to eat with their children/family members and any remaining food is donated to our school families in need.



Thank You to Our 2017 Green School Ambassadors! Ms. Pat is a Green Ambassador through the FAU Pine Job Program. Elaine Christian Linda Petuch She assists schools with their green Michelle Donahue school initiatives. · Patricia Rentz. Sara Green · Molly Sims Emily Guerra · Janet Stein Barbara Hadsell · Alicia Torres · Susan Toth Darcy Murray **Bright Futures Academy Charter School** EDU-Garden & Farm Est. 2010 Students giving tours BFA hosted FAU Pine Jog

BIA hosted FAU Pine Jog Learn Green Institute (LGI). We provided lunch, produced a "how to" manual, answered questions and students gave tours of the garden. Annually, BFA participates in the International Coastal Clean Up!

Below student go on a field trip and learn about environmental stewardship.



<u>Community Partnerships:</u> BFA collaborates with numerous organizations within the community to enhance the learning experience for our students, staff and families.





At BFA we get by with a little help from our wildlife friends! A family of Possums frequent our compost on the weekends and during vacation!

BFA hosts family restaurant nights. These two boys are enjoying Blaze Pizza Night.





BFA creates strong community. We have an annual "why I Love BFA" program so that kids can tell everyone how much they love their school!

BFA encourages mentoring. Here the older students work with kindergarteners in the garden.





Pictured here, a former BFA student returned to volunteer. BFA encourages Alumni to continue their involvement in our school and programs!

Crops grown in the garden are used in the cooking club!



BFA teachers host after school clubs. Cooking club is pictured here.



Green Schools of Excellence A.D. Henderson University School & FAU High School American Heritage School of Boca/Delray **Benoist Farms Elementary Boynton Beach Community High S** Bridges Montessori **Bright Futures Academy Citrus Grove Elementary Cypress Trails Elementary Diamond View Elementary** Eagles Landing Middle Scho Elbridge Gale Elementary **Equestrian Trails Elementary Everglades Elementary** Felix A. Williams Elementary

BFA won top Green School of Excellence in 2016, as well as the Golden Shovel Award. In 2017 BFA completed a full application and received Green School of Excellence! Also in 2017 our student, James Kelly seen below, was a Green Student Finalist.

2017 Green Student of the Year Finalists

Amani Atoki, Palm Springs Middle School Jonathan Chin Cheong, FAU High Ariel Johnson, Gove Elementary School James Kelly, Bright Futures Academy Brandon Runner, Boca Raton Community High



Part C. Narrative Summary and Documentation

V. Administrative Support:

School Philosophy and Culture: Bright Futures Academy, at the core, is a school that focuses on educating the whole child, to include the environment. The mission of Bright Futures Academy (BFA) is to provide families with an educational alternative to the currently available academic programs, for students enrolling in grades K-8, in accordance with the highest professional standards and in cooperation with school families, key stakeholders and community members; in an effort to foster individualized education in a safe, nurturing environment that focuses on core academics with an emphasis on international awareness, social tolerance, and environmental conservation while educating the whole child- mind, body and character.

Examples of BFA school policies are included here:

All classrooms must include a Nature Wall.

EDU-Garden®_BFA operates a garden program that is maintained by the garden department and the facilities department. The garden grounds are maintained using only organic pesticides/herbicides and/or fungicides. All outdoor equipment must be kept in good working order and the grounds must be free of garbage, debris and clutter. The garden also maintains a kitchen and classroom which must follow all of the above mentioned guidelines for facilities. The garden houses animals and grows vegetables for human consumption. With this being said, there must be adequate shade and a watering system for the plants and animals.

All compost bins are to be kept according to the highest standards to create healthy compost and to eliminate the potential for vector. The physical and structural integrity of the compost bins must be solid and secure. No processed foods, dairy products, weeds, yard trimmings or animal protein should ever be placed into the compost bins. Additionally, only biodegradable products can be deposited, which means there should be no plastic, metal, rubber, nylon, cloth or glass of any kind. Preferred items to be deposited into the compost bins are as follows (3:1 Carbon to Nitrogen Ratio); Egg shells (Nitrogen); Coffee, Filters & coffee grounds (Nitrogen); Fruit & vegetable peelings and other vegetative matter- NO SALAD DRESSING (Nitrogen); Shredded paper products (Carbon); dead leaves (Carbon); Hay (Carbon).

<u>Conservation:</u> BFA_supports conservation efforts through the use of recycling, reducing and reusing. When possible, BFA utilizes furniture that has been re-distributed through the School District of Palm Beach County or furniture that has been donated from local business entities. Bright Futures sets the example of conservation through incorporating school-wide recycling, turning off lights in rooms not in use, using bio-degradable and/or environmentally friendly cleaning products, utilizing materials provided by The Resource Depot, adopting a "no idling" policy for school operated vehicles, web-based information distribution, water-filling stations, using only organic fertilizers/pesticides and/or fungicides, using bio-degradable paper products, green carpet cleaning & eating utensils, and other practices of sustainability. For the 2017-2018 school year we were able to donate over 400 lbs of metal for recycling.

Professional Development:

BFA professional development is led by the school founder; supported by the administration; and attended by ALL STAFF, not just teachers. In return for their additional time, BFA staff are not required to work on teacher work days throughout the year.

Throughout the year, BFA staff attend on site trainings where we cover topics specific to our school programs. We continue to develop our trainings in mindfulness and meditation techniques in an effort to address the emotional/psychological needs of our students. Other trainings include the following: what does it mean to be a green school? The BFA garden program and living a healthy life style; parent communication techniques; reducing stress in the classroom; classroom management; bringing nature into the classroom, etc.

BFA understands that working in our school is quite different from most and can be a challenge; therefore, our administrative team has an open door, supportive policy to assist those in need. Additionally we have a staff teacher mentor that provides assistance with lesson planning, classroom management and the stress of working in a busy school!

This year Ms. Pat and Ms. Artusi attended the National Green School Conference in Atlanta and will attend again in May of 2018. They also attended a SC Agricultural Conference.

Staff Step Showdown: During the 2017-2018school year, Ms. Artusi implemented a competition among staff to encourage them to increase the number of steps taken every day. Each week staff are on their honor to send her their step counts and the winner receives a free garden goodie bag that includes fresh veggies and eggs.

Planning:

BFA sets goals every year with the objective of improving existing, discontinuing unsuccessful programs and replacing them with programs which will prove interesting and innovative to staff and students. The BFA administrative team consists of administrative personnel as well as lead teachers. Decision about programs are made by the team and then discussed with the entire staff during weekly meetings. Additionally, the Parent Volunteer Director is included in meetings and is a part of the staff email distribution. Some of the BFA goals for 2018-2019 are as follows:

- 1. Apply to continue to be a Florida Green School.
- 2. Apply for the Golden Shovel award.
- 3. Apply for the National Green School designation.
- 4. Improve the existing Garden Program Habitats.
- 5. Enlist additional school special program sponsors.
- 6. Continue to improve Mindfulness Program.
- 7. Develop more community partners and establish more outreach to strengthen our programs.
- 8. Hosting a Careers in Agriculture Day inviting local professionals.

Sharing Success and Lessons:

BFA hosts a website and Facebok page where we share our ideas with the world. We also work with schools locally and across the country to support efforts to bring environmental education to their schools. We are currently sharing ideas with a network of over 100 schools in 6 different states. Within our school, BFA teachers share ideas and lesson plans through Google Drive.

Bright Futures Academy- Administrative Support 2018



The mission of Bright Futures Academy is to provide families with an educational alternative to the currently available academic programs, for students enrolling in grades K-8, in accordance with the highest professional standards and in cooperation with school families, key stakeholders and community members; in an effort to foster individualized education in a safe, nurturing environment that focuses on core academics with an emphasis on international awareness, social tolerance, and <u>environmental</u> <u>conservation</u> while educating the whole child- mind, body and self.

Principal Slone & School Founder Kendall Artusi Cooking on Garden Day. At BFA, Administrative Support is pervasive. Our school Founder, Principal, Entire Administrative and Teaching Staff Support the school's environmental/agricultural programs!



Above, left to right, 3 generations working at BFA!:

Ms. Savannah Artusi, BFA Environmental Science Teacher Ms. Kendall Artusi, BFA School Founder Ms. Pat Rentz, BFA Global Competency Director

Bright Futures Academy- Administrative Support 2018



DiGiacinto cleaning up the school campus after Hurricane Irma.



BFA Staff working in the garden on PDDay, Ms. Allphin, Mr. Pierre, and Ms. Forsythe!

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ESE Coordinator, Ms. Bottenfield Painting a re-used bookshelf.



BFA founder, Kendall Artusi and Global Competency Director, Pat Rentz attended the SC AgiBiz Conference in January 2018.



Global Competency Director, Pat Rentz & School Founder, Kendall Artusi at the National Green Schools Conference

Part C. Narrative Summary and Documentation

<u>VI: Innovation:</u> At Bright Futures Academy (BFA), innovation and research are central to everything that implement in our school. We can't list everything here- there is not enough room! Below is a sample of our "Green School" living:

1. <u>Students</u> participate in meditation/mindfulness/stress reduction practices daily. 2. <u>"Who Will</u> <u>Stand Up for the Earth" week:</u> In 2016, BFA began a special week long celebration that culminated on Earth Day. During the week, the entire school community participated in a series of activities each day of the week. Meatless Monday: Power Down Tuesday; Water Wise Wednesday; Reduce, Reuse, Recycle Thursday; and The Procession of the Species Friday. Ideas for each of these days are distributed to all key stakeholders and posted on our website/Facebook page. On Saturday, we host a garden day to celebrate Earth Day. The procession of the species is particularly special because BFA teaches students and their families about the importance of species diversification and students dress up as their favorite animal.

3. <u>Foreign language acquisition</u>: Spanish is incorporated into all special area subjects, to include the garden and environmental studies. Annually we host a Spanish Festival for K-4 students in the garden which includes exploration and cooking.

4. <u>Nature Walls</u>: In 2016 BFA began a nature wall program which requires that each classroom have a wall dedicated to nature. This year, teachers asked students to collect items and bring them into the classroom which resulted in some unique walls!

5. <u>Sustainability Practices:</u> it is a policy of BFA to reduce, re-use and recycle. From the furniture that we receive as donations, to our use of "green" food service products, BFA is conscientious about waste. Our newsletters are not printed; they are published on our website, social media sites and circulated through our email system. Our students use journals and we discourage the use of reproducibles by teachers. We implement water conservation measures through the use of low-volume toilets, rain barrels and hand watering. We track our electric use. BFA used a new cover crop to remediate the soil this year, and we are revitalizing our pollinator garden with the help of buckwheat , clover and of course our chickens. Students also participated in many hands-on activities, like re-using crayons and garden students learned how to repurpose our used hay as mulch around campus. We are also experimenting with "No Till" gardening in some of our container beds, leaving our healthy crop refuse on the soil surface instead of removing it and we will plant through it. We continue to use cardboard for weed suppression and this 2017-2018 when we recarpeted our campus , the carpet remnants were used for the weeds and stored to use when no cardboard is available.

6. <u>Animal Care Program</u>: BFA implemented a comprehensive animal care program in 2016/2017 with the help our a local veterinarian and Ms. Pat the garden director. Students learn about animal behavior, food conversion rates, husbandry, and health care issues.

7. <u>911 program:</u> In addition to our above mentioned programs, BFA hosts a 911 program every year to educate students about this historically relevant day.

8.BFA hosts numerous in house field trips which reduce overall transportation expense, most recently Loggerhead Marine visited and taught the studendts about turtles and the conservation and care of the beaches that support them.

8. <u>BFA is an ORGANIC sustainable campus!</u> All organic cleaning products and pesticides/herbicides are used.

Bright Futures Academy- Innovation 2018

Unique Programs!

"Who Will Stand Up for the Earth" This year the Garden Party theme will be "Bringing Back the Family Dinner" The weeks activities last year and this year were/will be as follows:

Monday: Meatless Monday Tuesday: Environmental/Agricultural Science Career Day- this is new for 2017-2018 and the school plans to invite local community members from Scripps, Max Plank, FPL, various Florida agencies and other local businesses to attend this event and will incorporate this into the classrooms by having students do research and dress up. Wednesday: Water Awareness Day Thursday: Re-use- Reduce- Recycle Day & Power Down Day Friday: Procession of the Species walk-a-thon- celebrates species diversification and students dress up as their favorite animal. Saturday: EDU-Garden® Day



The Procession of the Species is about more than just dressing up, students learn about species

Nature Walls:

In 2016 BFA began using nature walls in the classrooms in an effort to bring nature inside. In 2017-2018, BFA worked to reduce any plastic on our Nature Walls.

Nature Wall



In House Field Trips! Pictured here are Turtle Skulls brought to BFA from the Loggerhead Marine Life Center.



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Unique Sustainable Practices:

At BFA we are always looking for unique ways to reduce our carbon footprint. At the Annual Garden Day celebration, students made ink footprints and wrote ways that they could reduce their carbon foot print. Here are some unique ways that we do this at BFA.



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