

## **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 early learning to 12.
- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 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.
- 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.
- 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.
- 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.
- The school or its district has in place and is willing to provide a link to or a copy of a non-discrimination policy, upon request. The U.S. Department of Education reserves the right to disqualify a nomination and/or rescind an award if unlawful discrimination is later discovered.

U.S. Department of Education Green Ribbon Schools	
Name of Principal: (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)	
Official School Name:	
(As it should appear on an awa	ard)
*Private Schools: If the information requested is not applicab	le, write N/A in the space
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.	
Laura P. Permenter	Date:
(Principal's Signature)	
Name of Superintendent:	

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



#### District Name:

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

Maria F Vazquez Digitally signed by Maria F Vazquez Date: 2024.01.11 14:51:35 -05'00'

Date:

(Superintendent's Signature)

## **Nominating Authority's Certifications**

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

- 1. The school has some configuration that includes grades Pre-K-12.
- 2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency:

Name of Nominating Authority:

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

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

Don Whitehead

Digitally signed by Don Whitehead

Date: 2024.01.19 10:27:57 -05'00'

(Nominating Authority's Signature)

#### **SUBMISSION**

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

OMB Control Number: 1860-0509 Expiration Date: December 31, 2023

Date:

### **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.

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# 2023-2024 Florida Green Ribbon Schools Application

#### **Nominee Information**

School Name: Dommerich Elementary School

Address: 601 N. Thistle Lane City: Maitland State: FL Zip: 32751-3878

Twitter: DommerichES Facebook: Dommerich ES Maitland

Principal: Title (Mr./Ms./Mrs./ Dr.): Ms. First Name: Laura Last Name: Permenter

Email: <u>Laura.Permenter@ocps.net</u> Phone: 407-623-1407

Lead Applicant (if different) Title (Mr./Ms./Mrs./ Dr.): Ms. First Name: Amy Last Name: Shova Position/Role (Teacher/ Sustainability Director/ Facilities Director/Parent): District Sustainability Coordinator

Email: <u>Amy.Shova@ocps.net</u> Phone: 407-317-3900, ext. 2027685

## School Type and grade levels served:

Public School, K-5

#### Provide percentages, if any are relevant to your school:

Free and Reduced-Price Lunch/ (Economically

Disadvantaged(FRL) Rate: 21%

Limited English Proficient: 2%

Special Education: 20.8%

Minority: 29% SLD and Speech/Language= 10%

14% Hispanic Gifted= 10.8%

6% Multiracial (123 students= 59 Speech/Language and SLD and

6% Black 64 Gifted)

3% Asian Graduation Rate: N/A
Attendance Rate: 99%

## **Provide the following:**

Total Enrolled: 591 students as of 11/15/2023



## **Documentation of Sustainability Achievement**

## Summary Narrative: An Overview of Work Encompassing All Three Pillars

There has been immense work done this past year at Dommerich Elementary School to focus on sustainability to help children learn their role as monitors in this important initiative. This was forefront in our planning this year. We have several energy-saving efforts in place at Dommerich. Most teachers use a "job chart" throughout the entire year. One job is an energy monitor. That student conserves power by turning off the lights and Smartboard when the class exits several times a day. Energy conservation lessons were integrated into all grade levels. They all look a little different and progress in depth as the students grow.

There has been outstanding work this year at Dommerich Elementary to enhance the use of our beautiful school gardens to help children intrinsically know the importance of taking good care of our land so that what we are growing is healthy for us but that it also helps sustain the insects and birds and animals in the area. We want children to value the work that goes into growing food and we want them to want to eat fresh vegetables. We are working hard to create opportunities and experiences that provide firsthand exposure for children and their families.

Dommerich Elementary School has developed outdoor learning spaces and fields maintained by the school. They are used daily. Each time you go out to the fields and playgrounds and side landscape areas, you are bound to feel encouraged. In our open field to the sides of our PE Pavilion we have large fields for daily use. All classes visit PE 3x per week and attend recess each day. There are many zones of our recess field so classes may visit the main playgrounds or they may play and explore in the school garden area. Watering cans and shovels can be found under the teaching table and students are free to visit. 186 students visit the PE pavilion and surrounding running trail 2 times a week for Running Tribe on Tuesday and Thursday mornings from 8-8:30. Also, there is a fitness area behind the pavilion. There are golf, tennis, and sports classes outside for after-school classes that also use this area daily. Aftercare uses the big playground areas every day too. Other areas that get daily use are our three playgrounds. There is a huge planting bed right along the north side of the 3rd-grade classes and along the wall of the kindergarten hall for more planting. Further, there is a rock garden to the north side of the 1st-grade hall



that is refurbished each year. Six new 12-inch clay pot planters of milkweed were added along the beds outside the windows.

Sharing our Green School Identity within our community, the wider community and with other schools is a task we take seriously. Our Media Specialist helps us promote new programs, new books, planting days, Trash to Treasure Projects, and to highlight work done in these very important areas. Beautiful slides and news announcements help bring light to these very important topics we want to broadcast to our community. In addition, we have monthly school newsletters that feature projects, ongoing research, and ways to get involved. Further, we have a display area outside our cafeteria designated for Environmental Project displays and murals. In respect to reaching out to help others and in regard to getting help ourselves, we say "yes" when others ask for us to help them learn more about ways to be part of the OCPS Green Schools Community.

Our relationship within our school community as well as beyond has enriched our sustainable culture greatly and generated publicity for our school and the green culture we work so hard in growing. We have developed a great rapport with Towns' Garden Center in Maitland, Lowe's in Casselberry and Lukas Nursery in Oviedo for various garden supplies. We partnered with Vaughan's Horticulture to learn more about the plants we grow. The Orange Audubon Society educator program offers tremendous lessons, games and resources to share with students about the ecosystem we live. We work closely with their educator, Kathy Rigling as she frequently visits and speaks to our classes. Our school district has visited from the Environmental and Sustainability Department. The Maitland Police Department has helped in our safety, health and wellness initiatives. All of our efforts were noticed by local news. We were invited to contribute to an article about the history of our garden area and the way that our Garden/Eco Club encourages and empowers children.

We take pride in what we do. We are Dommerich Elementary School in Orange County Public Schools. We are invested in our students and the planet. Our goal in growing this culture is endless as we dream of more ways to limit our impacts. As one of the top three winners in the OCPS Green Schools Recognition Program, we have been identified and celebrated as a stand out Green School. We have been recognized by the State of Florida as a Green Apple School. We know we are doing amazing things and will continue pursuing more ways to reach students, our community and beyond.



## Narrative for Pillar I: Efforts to Reduce Environmental Impact and Costs

Dommerich Elementary School works very hard to limit their impact on their community as well as teaching the next generation why awareness is so important in creating desired behaviors that help grow a sustainable culture. Our Garden /Eco Club was transformed this year into not just a club that gardens but now has the purpose of adding lessons on waste reduction, habitat and energy conservation efforts. This has been a huge success with our after-school club and school-wide projects that have taken place after each focused meeting. DES has recycled bins, daily use of reusable water bottles and water filling stations, healthy snacks for each classroom, upcycled decorations and a place in the workroom for sharing resources among teachers.

Our school is digital and classes have access to tablets or laptops which makes a big impact on the need for the use of paper. Copy machines do double sided printing when possible. Upcycled paper is used in our school. For example, when learning about the use of money with a unit on Goods and Services, one class uses all upcycled paper in a store project where students make items for their own shops. In addition, in a 1st grade Arctic unit, their mural backgrounds and Arctic animal door collages are reused each year.

Sharing and reusing are big initiatives at DES. We also have a food program at DES. Students may visit the small refrigerator right at the cash register area and are free to take things. In addition, during our holiday driver we collected gently used clothing for children and adults. When parents came to pick up the "wish list" items for their children, they also shopped for clothing items for the whole family. In the same fashion, there is a space where teachers can place used clothing or school related things in the work room for people to reuse or take for themselves. Recently someone rehomed 6 previously used school staff shirts, another teacher rehomed a box of school supplies, and another shared Produce. In regard to reusing supplies, upcycled paper is used for many occasions in our school. In addition, for the first grade unit on the Arctic, their mural backgrounds and animal door collages are reused each year. Similarly, second grade reuses their immigration murals and handmade Charlotte's Web door creations each year as well. In addition, for the first time this year, we held a Trash to Treasure Contest that was highlighted at our annual Family Garden/ Day. We had 32 students enter this first annual contest. We had innovative creations like a putting green, a hanging planter, animal sculptures, and a space robot. All creations were made from trash.



This year we renamed the event "Family Garden/Eco Fair Day". We had two hundred attendees and Thirty-two children participated in the Trash to Treasure contest receiving Earth Day related prizes. In addition, we are on the journey of working to build a composting program. Two of our Garden/Eco Club lead teachers, our Principal, our Cafeteria Manager and two of our students scheduled a walk through with a wonderful composting company. We learned a lot. We talked about the logistics of what food prep items could be collected for compost and where the bags would be kept until picked up. Dommerich has had some great success with composting from the front of the cafeteria in the past through a system of collecting food waste by class and taking it to the composters by the garden at recess or on the way to PE. However, we quickly get more than we can house in our two composters, but we liked the collection system with the children thinking about what in their lunch waste could be composted. This is a budget focus goal for us and we are hoping that we can move forward next year with a second trial run of some type for our school. And finally, Garden /Eco Club was transformed this year into not just a club that gardens but now has the purpose of adding lessons on waste reduction, habitat and energy conservation efforts. This has been a huge success with our after-school club and school-wide projects that have taken place after each focused meeting.

Water Conservation has been a new push for us this year at Dommerich! We really used our G/E Club to meet great guest speakers and shared each initiative with the whole school on several school wide conservation projects this year. All classes use reusable water bottles. Where to place them and where to refill them at our 3 refilling stations is part of procedural training at the start of each year. Children take them with them through the day. Below are some district-wide initiatives that Dommerich participates in:

- District monitors energy usage through Energy CAP and addresses suspicious spikes in consumption.
- LED lights are used in some areas and motion is sensed to initiate lights in the building.
- ENERGY STAR rated equipment including printers and smartboards.
- Walk or Bike to school day.
- We have monthly "Walk and Roll" campaigns and parent volunteers greet the children and pass out a monthly prize for participating.
- District monitors water consumption through Energy CAP and addresses suspicious spike.
- Low-flow toilets and auto shut off faucets in restrooms.
- Water assessment conducted by the District.
- Garbage bins are located in every classroom and office. The Custodial Crew picks up garbage bin contents
  regularly and empties them into the garbage dumpster. Our dumpsters have 4 garbage pickups per week by
  Waste Management.
- Hazardous waste is collected separately and picked up by the District's Environmental Compliance Department, who then properly recycles or disposes of those items through respective vendors.
- Water bottle refill station to encourage the use of reusable water bottles as opposed to single-use bottles.



- Clothing and shoes donation drive in the parking lot.
- Recycling posters in classrooms.
- Our conservation cards for water and light usage posted near our faucets and light switches this year. The slogan for the water card starts with Dommerich Cares About Water Conservation... and we do!

This year we've continued our trash to treasure participating in Rubicon's candy wrapping recycling program.

## Narrative for Pillar II: Efforts to Improve the Health and Wellness of Students and Staff

Health and Wellness is very important to our school district. It is a focus in all we do. Nutrition and outdoors physical activity are incorporated into much learning at Dommerich Elementary School starting even before the first day of school. Community is welcome throughout and seen as enrichment in all of our practices.

During the first week of August 2022, our Kindergarten teachers offered Home Visits to all incoming students. With similar goals, our 1st grade team of 6 teachers organized Park Visits at Maitland Community Park. Each family received a sign-up genius link with available times to meet in the pavilion with their teacher to discuss a before school assignment, to learn a little about the teacher and upcoming year, and to have a cool treat. Meanwhile, the families and children played on the playground and walked on the nature trails while they waited their turn. We have 120 students in this grade and met with over 80% of them on this day. The park sponsored this time as a gift to our school. Later in May, our 5th grader go on a Bike Ride to this same park and around the city of Maitland as an end of year tradition.

Our plentiful outdoor learning environments are used daily. In September, our first Garden/Eco Club of the year was to update the soil in the garden to weed out the weeds that had grown up over the summer and add nutrients to our soil through Black Cow and high-quality Topsoil. Our neighborhood garden shop, Towns Garden Center, was only a phone call away. We used money from our Green School Awards account, and they delivered Black Cow and high-quality topsoil right to the beds. The children worked hard to till it in and get the beds looking great.



Planting week takes place twice a year at Dommerich and the first planting week was the week right after Labor Day Weekend. During planting week, all plants were displayed on the teaching table and suggestions of seeds were there for each grade level. Beautiful pollinator gardens are planted at the ends of each garden bed and new flowers were updated where needed. The following seeds were planted: Pre-K: beans, K: peas and carrots,1: cucumbers and dill,2: radishes,3: broccoli and cauliflower,4: peppers,5: tomatoes.

Further, after our December Garden Eco Club, when Dommerich Media Specialist and Storyteller, Marcy Aydt, read the Caldecott and Newbery Honor book, <u>Watercress</u>, we bought three hydroponic systems and all six garden club groups planted Watercress and Green Bean seeds and watched this crop grow hydroponically. It was so fun and yielded beautiful produce.

In addition, for our second growing season after Valentine's Day, the process was repeated and we had: Pre-K brussels sprouts and broccoli and strawberries, K - a bumper crop of peas volunteer from the fall, 1- the dill continued to prosper and when it went to seed we collected these, 2 -we added green onions, 3rd - a full bed of cabbage, 4th - basil and peppers, and 5th a beautiful bed of Romaine lettuce. We have never seen such beautiful lettuce! This all led to the invitation for classes to harvest a salad - a little of this and a little of that. We grew absolutely beautiful produce, and it tasted so good. We use no pesticides. An after-school cooking class started in mid-April. And families were invited to harvest green onions and dill seed at Family Garden/Eco Fair Day on April 22nd.

Dommerich is a leader community physical fitness and health education. PE, Running Tribe, 5K, Afterschool Sports, and community sports are huge for our students. Our coaches, Coach LeBoeuf and para—Coach Meewes give a very high-quality PE experience with each class attending 3 times a week in addition to art, music, and library. Our after-school classes are busy with golf, tennis, team sports, piano, art, and cooking throughout the school year.

Running is a big deal at Dommerich. Our parents and teachers help oversee the Tuesday/Thursday Running Tribe. At this time of the year, the goal for so many is to be in the 100 Mile Club. These students are showcased on the morning announcements as it happens. We participated in the FAST START track and field event on February 20, 2023 - an event which was founded by a former Dommerich Dad, Scott Millson. In addition, we had our Dommerich 5K, "Chief's On The Run", in March 2022, which is a successful recurring event in the community. We have a beautiful "Fun Day" right before Spring Break.

This year, on January 10th our coaches kicked off a 5-week Kids Heart Challenge through February 10th. The coaches gave heart healthy lessons in class and promoted this fundraiser. This year, our school was recognized as having now given over \$100,000 to this organization.



Well-being is overseen by our school counselor extraordinaire, Jessica Fratrik. We start the year off with "Start with Hello" Week from September 19-23rd. This year she gradually scheduled each one of our entire staff to go to Youth Mental Health First Aid classes and made sure we all got in. Around Valentine's Day, she creates Random Acts of Kindness Week. This year, the mural that was made with all 650 students creating a feather with how to show kindness written on it created the most beautiful angel wing photo wall that you could ever imagine.

The following are District-wide initiatives that are in place at Dommerich:

- Asbestos free (inspected by contractor July 2013).
- MERV 13 air filter replaced every 90 days.
- Bipolar ionization system that reduces the entry of outside allergens
- Facilities Department adheres to a <u>Maintenance and Repairs policy</u> to properly maintain facilities to fulfill the life cycle intended including the HVAC system.
- Custodial Department follows the Custodial Job Procedure Frequency and Work Plan that involves information for the following areas of the school: garbage and recycling collection and removal; ceilings and ventilation vents; walls, windows, doors and lockers; classroom cleaning; restroom cleaning; floor care and maintenance; drinking fountains; clinic, showers, and locker rooms; administrative office, lobbies, and entrances; stairways; patio areas; cafeteria and dining areas; media center, gym, and auditorium; and custodial closets/storage.
- Properly label and store all chemicals.
- No visible mold or mildew, and if an issue were to arise, the Environmental Compliance Department works with other Departments and vendors to resolve issue in a timely manner.
- 100% smoke-free.
- School medical emergency plan includes information about asthma/allergies, and staff are provided information on what to do in those emergency situations.
- Occupied hours temperature ranges between 68 and 72 degrees in heating mode, 74 and 77 in cooling mode. Unoccupied hours temperature is 50 degrees for heating and 85 for cooling.
- Daily garbage pickup.
- Maintenance Department follows the Integrated Pest Management Protocol to protect human health by suppressing pests that vector diseases, to reduce losses from pest damage, to reduce environmental pollution, reduce human exposure to pesticides, particularly that of children, and to reduce the costs of pest control.
- The City of Maitland monitors water quality for Dommerich Elementary School. Florida participates in SWAPP stands for Source Water Assessment and Protection Program. This program is meant to ensure that your drinking water is safe, not just at the tap, but at its source. The Florida Department of Environmental Protection (DEP) is initiating the SWAPP as part of the federal Safe Drinking Water Act (SDWA).



- Food and Nutrition Services Department follows USDA guidelines for nutrition in the cafeteria, and follows strict sanitation rules to meet health inspection requirements.
- Our PE Department not only meets the District, State, and Federal requirements for PE minutes and activities, we also go above and beyond by having activities such as Field Day, karate PE, and Mission Fit lessons for certain grade levels.
- The goal of the Orange County Public Schools IPM is to protect human health by suppressing pests that vector diseases, to reduce losses from pest damage, reduce environmental pollution, reduce human exposure to pesticides, particularly that of children, and to reduce costs of pest control. In IPM programs, treatments are not made according to a fixed schedule; they are made only when and where monitoring and preventive maintenance visits have indicated that the pest will cause unacceptable economic, aesthetic, or medical injury or damage.
- District has 2030 health and wellness goals for outdoor activities, school gardens, healthy meal options, and limiting IAQ concerns.
- District staff training provided by Federal Grant (Energy CLASS prize) on energy and indoor air quality.
- Recognition from the US Dept of Energy for Notable Achievement in Energy Efficiency Plus Health 2023.
- Recognition from the US Dept of Energy for Strategic Planning in the Efficient & Healthy Schools 2023 cohort.
- Exhibits high standards of the Whole School, Whole Community, Whole Child model through the School Health and Wellness Advisory Committee, which provides feedback and reviews the local health services plan, and supports school wellness programs. It is composed of parents, school, health, and community leaders such as the FL Department of Health in Orange County.
- Our school has an outdoor seating area for family members to come each lunch with their child. There is a beautiful mural along the back wall.
- In the past, we often plant marigolds at the end of the beds as pest control. Now we find that keeping a large variety of pollinators in the same beds impacts the well-being the bees and the plants.



### Narrative for Pillar III: Efforts to Ensure Effective Environmental and Sustainability Education

In this essay, we will outline the tremendous work that has been done this year at Dommerich Elementary to enhance the use of our school grounds to be the best it can be environmentally. We are working hard to create opportunities and experiences that provide firsthand exposure for children that focus on the importance of growing and eating healthy food, the importance of the biodiversity of the insects, birds, plants and trees in our area, and the connection to want to protect it for a healthy world. We will discuss the implementations in order of your list of the areas of Outdoor Learning Spaces and Habitat Improvement.

Use of our fields For Garden/Eco Club Uses: On September 1st, the G/E Club had its first meeting of the year with 120 participants and 6 teachers. Students visited stations in this area for planting herbs for home, making pizza garden planters gifts for new teachers, and worked to add new topsoil and black cow into the garden beds. During September 6-9, we had School Planting Week and all classes visited the garden to plant our fall garden on their way to PE. On February 2, the G/E Club rotated through a station in this green space taught by Orange Audubon as we began to learn about bird habitat before placing our nesting box. On February 7th, with two classes coming down at a time, 120 First Graders met Audubon Educator Kathy Rigling in the garden for a habitat story and then in the field for a read aloud and game involving signals for food, shelter, water. Researching animals is of big interest in first grade and leading them to think about the importance of habitat led this to be a

"high interest" outing. On March 23 at 3:00 PM and at 7:45 AM on April 11, Kathy Rigling from Orange Audubon helped a class of 20 learn to use binoculars to do a bird survey for a Biodiversity Project. Survey results were sent to Cornell Lab. Our school has a Dommerich Community Garden area with 7 raised bed school garden beds plus an area with a teaching table, pergola, and shed. This garden space has two main planting seasons in September and February for vegetables, but pollinator gardens are planted at the end of each bed for the entire year. The pergola has a screen top which allows for light but keeps it a bit cooler.

On October 6, 2022, our Garden/Eco Club, attended by 120 students in grades K-5, went on a virtual field trip to the Cylburn Arboretum in Baltimore, MD on the topic of Backyard Biodiversity with an emphasis on the information from the book, Nature's Best Hope by Douglas Tallamy, and the Homegrown National Park



movement. We watched slides showing what animals will disappear if certain insects and plants disappear. We learned about why a yard with just grass is empty for wildlife. We spread the message that front porches and yards are valuable habitats for our world. On December 2, 2022, the Garden Eco Club planted flowers along the end of the K building and the 3rd grade portables. This year, we have a new partnership with Kim Anders from Vaughan's Horticulture. She has given us annual and perennial pollinators. After our lessons with Audubon, we researched places to put two birding boxes. We learned about the direction each should face and the importance of having food sources nearby. This also led us to move and spruce up our bird bath.

In the spring, most K-2 classes observe butterfly life cycles and milkweed is a mainstay at our school. This was a great year for seed collection from our milkweeds and 1st-grade painted 12-inch clay pots to plant these important seeds outside the windows. One class had a planter on each table and their class released 15 Monarchs and one Queen Monarch. Ladybug larvae were purchased for life cycle exploration as well.

Energy and water conservation lessons were integrated into all grade levels. They all look a little different and progress in depth as the students grow. Here are three examples. A force and motion unit in first grade involved explorations using launchers, golf clubs made from recycled materials, and paper to learn that motion travels in forward, side to side and circle patterns. They also learned about the helpful vs harmful power of the sun. One way they explored the power of the sun was to create sun prints with construction paper covered with blocks that left a faded negative imprint on the paper. A unit on renewable energy in 2nd grade involved making and observing wind socks. Similarly, in third grade, they applied what they learned about solar energy into making and using solar pizza ovens.

1st grade does a great unit on erosion at the beginning of the year using chalk in a jar. The children take turns shaking the jar and see first-hand what happens to the chalk which represents the land. Similarly, students do an interactive lesson with water pollution and see how oils and pollution that are dumped into the water table, go right into our aquifer and toward our watershed. To bring great attention to this indicator, Garden Eco Club invited our school OCPS school energy advisor, Helen Alder, to present to our Garden/Eco Club what water conservation is, why it's important, and presented how we can actively participate in the conservation process. She also provided handouts for the students to both work on at school and to take home to share with their families. After her visit, we planned a school-wide project called "WaterSense". Each grade level participated in a drive for a week to chart water usage, to time showers and teeth brushing faucet use, and watch for an improvement or decrease in minutes. We hoped to bring attention to our water usage and to instill a passion for wanting to become water administrators at school and home. The big logo and recording sheets were displayed in our hall outside the cafeteria for several months.

We will discuss 8 specific projects that integrated sustainability and community. First, 5th grader Juana Machado won first place at the OCPS Super STEM Saturday competition. With the environment as her subject, she shared concerns about the impact of Global Warming. In addition, the 5th grade worked on solar oven lessons. 2nd and 5th-grade human body lessons investigating the importance of clean air in assisting optimal breathing. Further, there was an integrated lesson between the fifth and first on Florida Mangrove forests and this delicate balance of life and safety from erosion. 5th grade students taught their buddies about the Mangrove forests, how they help



the ecosystem, and how they protect the coastal areas from storm winds, waves, and floods. Florida is home to 3 types of Mangroves. Students researched the animals, and their adaptations to this environment and built a replica of the intricacies of the roots and stem systems. Second grade worked in groups with water energy lessons by building water mills. In addition, all first graders attended a field experience on the importance of animal habitats with Kathy Rigling of Orange Audubon in our outdoor classroom and the field right next to the pergola. Integrated reading and science, they read the book, On Meadowview Street by Henry Cole and played a group game called "Oh Deer". The importance of having preserves, biodiversity, and thinking about the needs of all living things, and what we can do to help - were key ideas to this lesson. To celebrate Arts in our school month, Dommerich 2nd graders painted a two-sided banner that is currently hanging on one of the iconic acorn light posts in downtown Orlando. Students learned about Roy Lichtenstein and created a banner related to the local Mennello Museum sculpture garden using his style. Finally, Garden/Eco Club worked on 6 different individual projects in March and April and invited Orange Audubon to help with two of the projects: 1. Biodiversity at our school, and 2. Birds. Students used binoculars to survey our bird population. After a 3-4PM survey and a 7:45AM survey, reports were sent to Cornell Labs. This project included the students learning the definition of biodiversity, doing a survey of the plants, animals, and insects they could see in their yard, and beginning to look at the biodiversity of the birds we could count in our school yard and lake area. The other project topics were Habitat, Birds and Native Plants, Bees, Water Conservation, and Hydroponic planting. The project board presentations were on display at Family Garden/Eco Fair Day!



# **Photos:**

In September of the 2022-2023 school year (and every year), Students at Dommerich Elementary School replenish and amend soil in their raised beds to prepare for their 2 growing seasons during the year.





Our outdoor learning areas are used for more than just learning about where food comes from, what life needs to live, or the plant cycle. They are also utilized by our students for health and well-being of the body. Students are seen here practicing yoga in the garden.





In April of 2023, Dommerich Elementary School held a school-wide competition promoting awareness of trash to treasure. All grades participated and changed behavior towards how to reduce, reuse, and recycle. Recycling is a large part of their school practices and green culture.











Learning about our world and ecosystem is a top priority. We have many speakers, field trips, in school virtual field trips and real student research growing our sustainable knowledge. This picture is of a class taking observations during their turtle research. Students understand their impact on the world around them





Students use technology to help in taking field notes and observations. These Dommerich students are observing how bananas grow. Health and Well-being is largely incorporated into our classroom learning. The students spend a lot of time learning outdoors and taking their observations with them to class for more learning.





Family, teachers, staff, students and administration painted reusable pots in our learning garden to promote gardening a passion for all.

