

#### **ELIGIBILITY CERTIFICATIONS**

#### **School and District's Certifications**

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. In no case is a private school required to make any certification with regard to the public school district in which it is located.

- 1. The school has some configuration that includes grades early learning to 12.
- 2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
- 4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
- 5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
- 7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

## U.S. Department of Education Green Ribbon Schools

Public Charter Title I Magnet Private Independent Rural	
Name of Principal: Mrs. Cheryl D. Pulliam	
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records	5)

Official School Name: Oakland Terrace Elementary School

(As it should appear on an award) Official School Name Mailing Address: 2720 Plyers Mill Road Silv er Spring, Maryland 20902 (If address is P.O. Box, also include street address.)

County: Montgomery State School Code Number \*:

Telephone: 240-740-4880 Fax: 301-929-6910

Web site/URL: https://www.montgomeryschoolsmd.org/schools/oaklandes E-mail: Cheryl D Pulliam@mcpsmd.org \*Private Schools: If the information requested is not applicable, write N/A in the space

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

Date: January 23, 2020

(Principal's Signature) Name of Superintendent: Dr. Jack R. Smith (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

ED-GRS (2019-2021)

U.S. DEPARTMENT OF EDUCATION

# GreenRibbonSchools

## District Name: Montgomery County Public Schools

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. Date: January 23, 2020

(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: Maryland State Department of Education

Name of Nominating Authority: Dr. Carol A. Williamson

(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.

Caul a. Willimon

Date:February 5, 2020

# SUBMISSION

(Nominating Authority's Signature)

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

OMB Control Number: 1860-0509

Expiration Date: March 31, 2021

#### **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

# Summary Narrative: Oakland Terrace Elementary School, Montgomery County Public Schools, Maryland

Oakland Terrace is very excited to be in our second year as a Dual Language: Two-Way Immersion school. Students receive 50% of their content instruction in English and 50% in Spanish. Additionally, we have a Preschool Education Program (PEP), full day Pre-Kindergarten program and a new Social Emotional Special Education Support (SESES) program. This program supports students with social/emotional and behavioral challenges. As a Green School, that just received our first recertification in 2019, we have successfully engaged all of our students, staff, families and community in programs and activities that promote stewardship to improve the health of our planet and make learning more relevant for children.

At Oakland Terrace we incorporate environmental literacy and lessons for improving the planet and human health into instruction and activities within the traditional classroom at every grade level and outside of school, too. Included as venues for environmental literacy experiences are the schoolyard garden/ outdoor classroom, the specials (Art, Music, PE and Media Studies), field trips, recess, lunch, before/after school activities and clubs. For example:

- Our Pre-Kindergarten classes take nature walks, observe animal life and discover their community.
- Our Kindergarten classes go outside into the wooded areas, around our school, to observe animal tracks. Through their observations, they make deductions about animal types, behavior and habitat.
- In Grade One, our students visit the Montgomery County Recycling Center to better understand the recycling process, identify what can be recycled and ways they can increase recycling at home and in their community.
- Our Grade Two students continue to participate in the Audubon/Whole Foods, Salad Science Program. We have been receiving instruction and support from these programs for the past two year's, and are currently in the third year of implementing the program on our own. Students plan the garden, plant seed, tend the garden, and harvest salad greens. The culminating activity is a salad party for students to enjoy the fruits and vegetables of their labor.
- Our Grade Three students create woven art pieces using materials that they dye with plants collected outside. They collect nuts in the fall and plants in the spring that they use to make dyes. A variety of dye procurement processes occur that would have been available to North American indigenous and colonial peoples.
- Grade Four students study the flow of energy within an ecosystem. They explore interactions of organisms with each other and develop an understanding of the basic needs of plants and animals. They relate these discoveries to their environment and the ecosystem it supports.
- Currently, students in Grade 5 learn how North American indigenous peoples and colonists used plants for food, flavoring, medicine and personal hygiene products. They learn techniques such as companion planting and natural ways to increase yields. They work together to design, grow and plant seedlings in our schoolyard garden. Through reflection activities, they develop an appreciation of the resources needed to care for the earth and for survival.
- In Art, students address environmental literacy through projects such as making and designing hand-made paper using recycled materials, as well as designing and implementing the creation of a reusable canvas tote bag with environmental or social issue messaging.

• In Music, students participate in "Listening Walks" outside to help them understand how to distinguish between different sounds, thus helping them isolate the various instrumental sounds in music.

Oakland Terrace has several Green Team Programs happening throughout the school house. The grade two students design, create and display water conservation educational posters to encourage water conservation throughout the school. Our 3rd grade TREX (plastic film) Recycling Team manages the plastic film program. Our 4th grade Paper Recycling Team manages our paper recycling program. The students in 3rd and 4th grades collect materials from classrooms, offices and centrally located reciprocals and make sure the items get to the appropriate recycling vendors. Our fifth grade Green Team Leaders manage the care of our schoolyard garden and outdoor classroom, as well as, the education of the students regarding energy and water conservation. They also encourage recycling via morning announcements and created an Energy Patrol Group.

The Oakland Terrace PTA offers afterschool programs that promote environmental stewardship, STEM and wellness for students. The PTA makes scholarships for families in need. Some of the programs include, but are not limited to The Audubon Nature Club, The Great Adventure Lab, Basketball Club, Dance Yoga classes and Tiny Chefs classes.

We have partnered with nearby and walkable Brookside Nature Center to provide professional development for teachers and coordinate field trip planning. This ensures that field trips to Brookside Nature Center build on what the students are learning in class. Each grade level experiences different field trips at the nature center.

In addition to the very green programs listed above, we also want our students and staff in good health. To that end, we have a variety of fitness groups for students and staff, including a Girls on the Run Program, a boys Let Me Run Program, student Walking Club and a staff Softball, Kickball and Fitness Challenge Club.

Oakland Terrace Elementary School is the recipient of multiple awards for energy conservation, increasing recycling participation, and for entering various contests.

1. <u>System wide Energy Conservation Award:</u> Between FY10—FY19, Oakland Terrace ES received 33 quarterly awards for energy conservation. Schools achieving top energy cost avoidance as compared to their baseline usage are eligible to receive these monetary awards. The baseline for each school is an average use of their prior five school years for the same quarter. Oakland Terrace ES has consistently reduced the energy use by ensuring that the lights are turned off in classrooms when they are not occupied. Many teachers use task lamps at the desk instead of the overhead lighting when the classrooms are not occupied. The staff and students monitor to ensure that the doors and windows are kept closed to avoid outside air from entering.

2. <u>System wide Quarterly Recycling Award:</u> In FY15 and FY16, Oakland Terrace ES received two Recycling Awards. The quarterly recycling awards are given to schools that recycle above the average pounds per person recycling. Although the number of top-performing schools may vary from year to year, typically schools that recycle among the top 25% will be eligible for consideration of this award. Oakland Terrace ES has been in the top quartile two times between FY15 and FY16.

3. <u>Maryland Green School certification</u>: Oakland Terrace ES is the recipient of the Maryland Green School certification in 2015, successfully completed the requirements for the first re-certified in 2019 and maintaining its good standing.

4. <u>Drive for Supplies</u>: Drive for Supplies is a campaign that teaches students that they can have a direct, positive impact on their communities by donating their reusable school supplies to local, national, and international schools and organizations. It teaches the importance of recycling and reducing solid waste. Oakland Terrace ES participated in the campaign in FY12 and was awarded the first prize for collecting the most supplies among all elementary schools in MCPS.

#### PILLAR I: REDUCED ENVIRONMENTAL IMPACT AND COSTS

#### ELEMENT 1A: ENERGY and BUILDINGS

Due to a defective natural gas meter at Oakland Terrace during FY2019 we were not able to make a comparison. However, utility records for electricity show there is an 8% reduction in kWh usage from a 2015 baseline.

Oakland Terrace ES was built in 1949 and additions to the original building were completed in 2001 and 2003. ADA site improvements were completed in 2015 and several rooms were modified in 2019 to meet the growing use needs of the students and staff. Energy and water efficient features were installed in the newer additions.

Oakland Terrace ES is equipped with 32 LED exit signs, there are approximately 10 task lamps that are placed in the school for staff use to avoid the use of overhead lighting. The rest of the classroom and hallways are fitted with T8—25 watt fluorescent lamps except for the gymnasium where HID lamps are used.

The students and staff at Oakland Terrace ES take significant measures to conserve the use of water because of their commitment to natural resource conservation and preventing wastage. The grade two students designed, created and displayed water conservation educational posters to encourage water conservation throughout the school.

Average baseline water use (gallons/occupant): 757 Current water use (gallons per occupant): 436 Percentage reduction in domestic water use: 42% Percentage reduction in irrigation water use: N/A% Time period measured (mm/ivy - mm/ivy): 07/2013—06/2019

#### ELEMENT 1B: WATER and GROUNDS

The students, staff, and building service staff constantly monitor faucets and pipes for leaks. When leaks are detected, a work order is generated to complete the necessary repairs. No irrigation system installed. Information pertaining to types of plants used is not available.

Montgomery County Public Schools (MCPS) implements U.S. Environmental Protection Agency (EPA) technical guidance for flushing protocols. In addition, MCPS also complies with regulations issued by the Maryland Department of the Environment (MDE) and Montgomery County Council including periodically testing of all drinking water outlets on a three-year cycle. MCPS regularly monitors the results of water quality testing done by our three water providers (WSSC, City of Rockville and Town of Poolesville). Additionally, any drinking water outlet with test results above the Montgomery County lead action level will be taken out of service.

Oakland Terrace maintains two rain gardens installed by the Montgomery County Department of the Environment, Rainscapes for Schools Program. These rain gardens help filter water that washes from the hardscape surfaces of our playground areas before entering the Kensington Branch or the groundwater. The school has one storm water facilities designed to reduce storm water runoff and/or reduced impermeable surfaces.

Oakland Terrace E.S. has a large internal courtyard that encompasses approximately one quarter of the entire green space of our property. That space includes an outdoor classroom, colonial subsistence garden, pollinator garden, aquatic garden, woodland and sensory garden. These areas are used by the students and teachers for classes, experiments, Fibonacci Garden, lunch bunch and movement breaks. Our Garden Green Team helps maintain the space throughout the school year. In addition, we have two large rain gardens at the base of our playground (approximately <sup>1</sup>/<sub>8</sub> of our green space), which help filter runoff water before entering the Kensington Branch or the groundwater.

#### ELEMENT 1C: WASTE and HAZARDOUS WASTE

Oakland Terrace is very proud of its 48.3% recycling rate.

MCPS does not use dumpsters to collect garbage from schools. The daily garbage at Oakland Terrace is placed in bags and stored in the school trash room. The monthly total tonnage of the garbage disposed of for MCPS is distributed to each school based on the number of building occupants (Staff and Students). Total tons of garbage distributed to Oakland Terrace ES for the school year 2018—2019 is 33.26 tons. MCPS requires the recycling hauling contractor to have "On-board Weighing Scale" on the trucks that service all MCPS sites. The weight of each dumpster at Oakland Terrace ES is weighed before and after servicing to capture the actual amount of material recycled.

98% of the paper purchased by MCPS is certified by the Sustainable Forestry Initiative. In addition, 12% of paper stock purchased by MCPS is 30% post-consumer waste. 98% of the paper purchased by MCPS is processed chlorine free.

- Our school has a hazardous waste policy for storage, management, and disposal that is actively enforced.
- Our school disposes of unwanted computer and electronic products through an approved recycling facility or program.
- Our custodial program has been certified to the Green Seal Standard for Commercial and Institutional Cleaning Services (GS-42), the ISSA Cleaning Industry Management Standard Green Building or an equivalent standard.
- Our school maintains current safety data sheets (SDS) for all applicable products used in the building.

#### **ELEMENT 1D: ALTERNATIVE TRANSPORTATION**

59% of students at Oakland Terrace walk to school. XX—Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows. Our school has established Safe Pedestrian Routes to school which are distributed to parents/guardians and posted in the main office, and provides a sufficient number of bicycle racks. Oakland Terrace participates in a Clean Air School Bus Program to retrofit our school buses and in a "Safe Routes to School" program.

Our school participates in the "Safe Routes" (National Center for Safe Routes to School) program. Information regarding pedestrian and bike safety for children is sent home to our families each year. As a "predominantly walking school, we have established Safe Pedestrian Routes to school which

guides students and their families to walk to the crosswalk where a crossing guard is posted. We also have patrols and staff members posted at the entrance ways to the parking lot. They hold signs to encourage safe driving, proper turning areas and reminders to not cross in the middle of the busy street.

Montgomery County government oversees the safe routes program. The MCPS Department of Transportation (DOT) works with Montgomery County government in order to ensure their recommendations are implemented in the design phases for school renovations and/or construction. The safe routes program operates directly with the school administration in order to design and operate the routes efficiently. In addition, MCPS and Montgomery County government collaborate, evaluate, and implement safe traffic patterns and solutions at all school. Montgomery County Department of Transportation (MCDOT) has a policy of doing traffic studies at about 30 percent of our schools every year. These are regularly scheduled observations and recommendations on how the traffic situation can be improved at each of MCPS schools. The MCPS Department of Transportation (DOT) is required by state regulations to replace its buses every 12 years. DOT has been renovating about 12 % of its fleet every year; as of 2018, 90 % of the bus fleet meets or exceeds EPA 2008 and 2010 Emission mandates. DOT has a yearly review program of all bus routes. During the review program, every single route is analyzed to identify opportunities to improve efficiency. These review processes have allowed DOT to absorb the annual growth in student population while reducing the amount of buses. This results in lower operating cost, reduced environmental impacts, and benefits to the health and well-being of our local and global community.

#### PILLAR 2: IMPROVED HEALTH AND WELLNESS

Sean Yarup, MPH; Environmental Team Leader; Sean\_R\_Yarup@mcpsmd.org; Responsible for managing the school's indoor air quality program, the Team Leader has 30 years of experience in environmental health and safety, primarily in the secondary and higher education field. Educational credentials include a B.S. Degree in Safety Sciences from IUP and a Masters of Public Health Degree from GWU.

MCPS Environmental Health program incorporates the following programs; Integrated Pest Management, Drinking Water testing, radon, lead paint, IAQ, and asbestos. Since 2014, the Mold Prevention Workgroup has monitored indoor environmental conditions at Oakland Terrace.

To manage and prevent indoor air contamination, the school's HVAC systems are equipped with MERV 8 air filters. MERV 8 air filters capture the majority of airborne particles (e.g., mold, pollen and dust) that pose a threat to indoor air quality. Air filters are changed on a quarterly basis to ensure optimum filtration and good indoor air quality. To manage excess moisture in the form of elevated humidity, portable dehumidifiers are provided where necessary to lower indoor humidity levels. Wi-Fi sensors that monitor temperature and humidity remotely may also be placed in areas where excessive indoor moisture has been documented. As part of the system-wide Mold Prevention Workgroup, weather alert email blasts are sent to school-based staff alerting them of key steps to take to prevent potential moisture and mold issues. Through communication and implementation of the MCPS Energy Policy, adherence to minimum setpoints during the cooling season has minimized indoor humidity levels. With regard to relocatable classrooms, buildings are inspected on an annual basis and repairs are made to ensure "good" condition. During unoccupied periods over the summer, Building Services staff conduct weekly inspections of relocatable units to identify and report any mold and/or moisture issues in a timely manner. To minimize VOCs, MCPS has adopted an environmentally preferred purchasing policy which establishes limits to VOC emissions.

As part of the proactive mold prevention program at MCPS, building service staff have been trained to contact the Indoor Air Quality Office in the event mold has been found. When indoor visible mold is discovered, professionally-trained personnel use the appropriate personal protective equipment and containment methods to remove the mold in a safe manner. After the mold has been removed, the source of the moisture is eliminated. In 2016, the IAQ Special Projects Team was formed for the purpose of remediating mold-related conditions as soon as they are discovered.

Formal building inspections, including inspection of ventilation systems are performed biannually by offsite Division of School Plant Operations (DSPO) building service supervisors. This includes inspection of filters, belts, lubrication, overall cleanliness of units, indoor air quality and temperature, record keeping, etc. The on-site school building service manager conducts daily inspections, maintains equipment logs, performs cleaning and monitors operations of ventilation systems.

MCPS has been testing for radon in schools since the late 1980s. Comprehensive system-wide testing of all MCPS facilities also was initiated in late 2015, and mitigation activities were completed during spring and summer 2016. Final post-mitigation testing concluded in fall 2016. MCPS conducts periodic retesting of all MCPS facilities on a five-year cycle. Testing and mitigation procedures complied with applicable U.S. EPA guidelines and industry best practices. Current and previous radon results for each facility are posted on the MCPS Division of Maintenance webpage. For facilities that have an active mitigation

system, retesting is conducted on a two-year cycle. Facilities with new construction or other capital projects (i.e., window replacement or large ventilation upgrades) are retested following guidance from the EPA and other experts in the field.

The Montgomery County Department of Health and Human Services, School Health Services (SHS), in partnership with Montgomery County Public Schools (MCPS), provides services to assure the health, safety, and well-being of students enrolled in MCPS schools. SHS collaborates with public and private partners to plan and implement prevention initiatives to address community-wide public health concerns, such as asthma. Teachers who will be caring for asthmatic students when a health specialist is not present (i.e. field trips) are provided training on asthma protocols by the school nurse.

SHS School Community Health Nurses (SCHNs) (registered nurses) and School Health Room Technicians (certified nursing assistants) who work under the clinical oversight of a SCHN, provide school health services to students during school hours and train teachers asthma care procedures for field trips. Developed by SHS, student families have access to the School Asthma Management Plan. Action plans for each student with Asthma is developed and maintained in accordance to SHS guidelines. EPI Pen training is provided in case of a very severe reaction.

At Oakland Terrace ES, the school has implemented a number of asthma trigger control measures. Through the implementation of an Integrated Pest Management (IPM) program, exposure to asthma triggers from cockroaches and other pests are reduced. Throughout the school, building service personnel routinely perform housekeeping and HVAC maintenance activities to reduce the exposure to dust mites, pollen and mold. To prevent allergic reactions to dust mites, MCPS replaces carpet with floor tile in classroom and common areas whenever possible. In addition, there are formalized indoor air quality (IAQ) investigation protocols to address IAQ complaints in an efficient and effective manner. Enforcement of No-Idling and No-Smoking Policies are also in place to minimize exposure to diesel fumes and tobacco smoke. Like other schools in MCPS, there is an environmentally preferred purchasing policy that is followed to ensure that only approved products are used.

MCPS schools and offices are prohibited from purchasing chemical products that are not approved for use by the MCPS System wide Safety Programs Unit or Division of Maintenance. Product approval is based on various safety, health, and environmental criteria. A list of chemical products that have been reviewed, with approval status, is maintained online at:

#### https://www.montgomeryschoolsmd.org/departments/facilities/maintenance/services/iaq-products.aspx.

A list of chemicals that are prohibited for science use is also maintained online:

#### https://www.montgomeryschoolsmd.org/departments/facilities/safety/chemicals.aspx#science

The school is required to maintain a chemical information list (CIL) and safety data sheets for all hazardous chemicals used or stored onsite. The school is required to send updates to the CIL and an inventory of science chemicals to MCPS System wide Safety Programs annually. School employees potentially exposed to hazardous chemicals are required to complete two online safety training courses to ensure they are knowledgeable in working with chemicals safely and to ensure compliance with Maryland Occupational Safety and Health regulations.

The school disposes of hazardous chemicals by submitting a work order to the MCPS Division of Maintenance or by contacting the MCPS Science, Technology, and Engineering (STE) Supervisor. The chemicals are picked up by a licensed hazardous waste contractor for disposal in accordance with applicable regulations. Chemical spills beyond an incidental release are treated by the school as an emergency and are addressed by the on-site emergency team. If necessary, the school is evacuated and county fire and rescue is contacted immediately. When needed, a licensed hazardous waste contractor is contracted to perform spill cleanup and waste disposal.

The Integrated Pest Management (IPM) program employs five Maryland Department of Agriculture certified pesticide applicators to conduct regular inspections to prevent pest damage. IPM staff identifies and corrects conditions that encourage pests by reducing food, water and shelter for pests, and by eliminating unnecessary pesticide applications. This integrated approach results in the most economical long term solution with the least possible hazard to people, property and the environment. Notification of the school's integrated pest management system is provided to parents at the beginning of each school year. The notice will explain the school's integrated pest management system and a list of any pesticides or bait station that may be used in the school building or on school grounds as part of the integrated pest management system. At least 24 hours before a pesticide is applied in a school building, or on school grounds, the Integrated Pest Management Supervisor will provide details of the pesticide application to the school principal who in turn will provide written notification to each parent/guardian and staff member. An IPM logbook of all IPM activities is kept in the main office of the school.

#### **ELEMENT 2B: NUTRITION and FITNESS**

MCPS Wellness Regulations, JPG-RA Wellness: Physical and Nutritional Health stipulates that each school has a local school wellness committee focused on student well-being. The wellness committee includes diverse stakeholders (school staff, community, parents, etc.) and contributes to the integration of wellness measures as an element of social-emotional well-being in the School Improvement Plan. This policy guides activities around the promotion of foods and beverages, marketing and advertising to students, celebrations and rewards as well as use of foods and beverages as behavior reinforces. The regulations also focus on nutritional contact of foods and beverages available to students throughout as well as incorporation of health and physical activity into the curriculum.

One of many assessments have been completed. MCPS encourages completion of the assessment provided by the Alliance for a Healthier Generation or one that has been created by the Director of Student Wellness Initiatives. Completion of the assessment provides information to schools around health and wellness requirements and demonstrates gaps in practices which serve as a guide for goal development and next steps.

The model that MCPS has adopted is the Whole Child, Whole School, Whole Community model created by the Centers for Disease Control and Prevention. Goals determined by each school reflect focus on at least 1 of the 8 critical areas. Oakland Terrace Elementary School implements the eight critical inter-related wellness components thus creating a healthy environment through a variety of programs. One of our primary health initiatives is centered on mental health through mindfulness education and practices. We celebrate and engage our students in an annual mindfulness week each school year. Additionally, we employ mindfulness techniques during all school sessions and individually in our classrooms.

As part of an initiative to help our students manage their emotions and mental health, our teachers employ a variety of brain-breaks in the classroom, including movement and meditation sessions depending on the needs of the students. Our emphasis on time spent outdoors, learning and participating in physical and mental health activities utilizes the many outdoor areas available to our students and staff. Any lesson for any grade can take place in our outdoor classroom, where we have a classroom cart with all materials needed to create an outdoor classroom. Teachers need only bring lesson specific materials. This space is also utilized for curriculum based lessons where students grow and tend edibles in our garden, which are consumed by the students once the produce is ready. Since students consume fresh fruits and vegetables we have an opportunity to expose them to healthy food choices and how good, healthy food can taste.

Oakland Terrace is connected to an adjacent county park. The school grounds are also surrounded by a wooded area and an open athletic fields. This provides ample space for regular physical education classes to be held outside and a special Field Day event each spring for all grades, as well as investigative environmental education learning in a woodland ecosystem. Our physical education program includes programming that teaches students how to exercise safely and how to care for their bodies through stretching and safe cardiovascular activities. Our two running programs help students experience the benefits of regular exercise on their mind, body and spirit while engaging with our community volunteers and at the 5K runs. These programs help instill positive self-image and confidence in our students.

Oakland Terrace ES participates in the Farm to School program. MCPS also promotes locally grown fruits and vegetables. Honeydew, watermelon, cantaloupe, broccoli, grape tomatoes, corn on the cob, and baby spinach are some of the MD agricultural products served. Students learn about where their food comes from, how it's produced and the benefits of a healthy diet. All classes use the outdoor space to hold classes when it is nice out. The Second-grade level grows produce to use for their salad party in the spring. The school safety patrol is in charge of helping to weed and the watering of the garden. They also make rainwater collectors out of old milk jugs to use in watering the garden. Additionally, the garden has a pollination garden to study insects. The second-grade level grows produce to use for their salad party in the spring.

There are several units embedded in the MCPS K-5 science curriculum that introduce young students to food/nutrition. In kindergarten, students describe patterns of humans need to survive; in grade one, students consider how parents provide food for their children; in grade three, students connect human food needs to body structures and functions.

In addition to the nutrition education being delivered in the classroom and physical education, and students receiving it through the cafeteria, using the My Plate program. Additionally, the cafeteria offers a variety of fresh fruits, fresh vegetables, salad choices, 100% of grains are whole grain, and milk is fat-free or 1% low fat and are indicated on the menu and labeled on the serving lines.

Oakland Terrace ES meals meet the USDA meal pattern requirements. Students are required to select fruit or vegetable with each breakfast and lunch. Menus and food specifications are based on the Dietary Guidelines for Americans without depriving students of their favorite foods. Our menus are planned by licensed, registered dietitians and analyzed by computer to ensure maintenance of dietary goals, such as 30% or less target for calories from fat over a week's menus. Purchased foods, recipe ingredients, and preparation techniques are reviewed carefully to ensure that menus are in compliance with nutritional guidelines. All foods offered at Oakland Terrace ES meet the smart snack guidelines. Vending machines are not accessible to students, they are located in staff lounges. Food that is sold as fundraisers is either in compliance with MCPS Wellness Regulations, JPG-RA, if available to students during the school day or 30 minutes after the school day.

Oakland Terrace ES participated in the National School Breakfast and Lunch Programs. These programs offer a wide variety of healthy foods while meeting the United States Department of Agriculture (USDA) meal regulations. A school breakfast includes whole grains, protein and fruit and/or 100% fruit juice. Students look forward to a nutritious meal to start the day off right, making them healthier, happier, better behaved, and more productive throughout the day.

Our students submit walking field trip permission forms at the beginning of each school year, so that whenever desired we can take students off of our school campus for field trips to our local creek, Kensington Branch; the woods surrounding our school for science and environmental education; our local park for trash free lunch-bunch picnics and trash pick-up; and local businesses like Giant Food Store that can provide a valuable learning experience about nutritional choices.

Oakland Terrace Elementary students participate in thirty minutes of outdoor recess every school day, except when temperatures are below freezing, there is a heat advisory or when precipitation is heavy. Many teachers award extra recess as a positive behavior reward for their classes.

A highlight in our school is our large outdoor classroom with a schoolyard garden that provides a wonderful space for outdoor learning in all subject areas, lunch bunch picnic space and movement breaks for students in need of the soothing atmosphere of a garden. Our outdoor classroom is equipped with a learning cart, which has all the supplies needed for instruction out-of-doors, including a library of books pertaining to the environment, ecology, identification books and fictional stories about nature.

Our PTA sponsors after-school classes in Basketball and Dance Yoga. The Audubon Nature Club also engages students in physical activity. School sponsored groups like Girls on the Run, Let me Run and our Walking Club encourage students to set realistic goals for improved fitness.

Each spring we organize a field day for all of our students which incorporates exercise, promotes teamwork and community building. We, also, have a Rockin' Recess to encourage dancing and music.

Students are provided a comprehensive health education curriculum from K through12. Instruction includes the following units of instruction: Mental and emotional health; nutrition and fitness; safety and injury prevention; alcohol, tobacco, and other drugs; personal and consumer health; disease prevention and control; family life and human sexuality. In additional to these core concepts, students receive instruction on the following health literacy skills: interpersonal communication, self-management, advocacy, accessing valid and reliable information, analyzing influences, decision making, and goal setting.

Students are provided physical education each year PreK-8 and a one-year high school graduation requirement. During these classes students receive instruction on the following measurement topics: movement skills and concepts, health related fitness, and personal and social responsibility. Students at Oakland Terrace ES are in structured PE 45 – 60 minutes/week, with another 30 minutes of recess a day.

The goal of Pre K-12 physical education is to help students become responsible citizens who are both physically educated and health literate. Each student will set and achieve personally challenging goals in physical activity, apply higher order thinking skills to human movement, and design personal movement

and fitness plans. Students will be able to display the skills and practices of a physically active lifestyle, knowing the benefits of their choices to be involved in physical activity. They will be physically fit and have a mindset that values physical activity and its benefits in sustaining healthy lifestyles.

MCPS has partnered with several organizations to obtain grant dollars to support school wellness initiatives. Once schools have met the requirements of JPG-RA, Physical and Nutritional Health, they are able to create wellness goals unique to their school. Many purchases include physical education equipment, supplies supporting mindfulness and brain breaks, nutrition and trauma informed care.

- Let Me Run is a running program for 4th and 5th graders. It is used to counteract the negative
  pressures society places on boys, the program uses running as a vehicle to inspire, teach, and reach
  them. The program combines exercise with fun activities and lessons. Trained coaches (OTES staff
  and parent volunteers) inspire boys to be courageous enough to be themselves, build healthy
  relationships, and live an active lifestyle. This 12 week program prepares boys to participate in a 5K
  run. Offered in the fall and spring
- Girls on the Run is a positive youth development program that inspires third, fourth and fifth grade girls to stay true to themselves and live free from societal stereotypes. The 12 week program weaves training for a 5K run with lessons that empowers girls to celebrate their bodies, honor their voices and embrace their gifts by trained coaches (OTES parents and staff). Offered in the fall and spring
- OTES Ocelot Walking Club Run by School Nurse Technician and School Counselor The six week
  program uses walking as a vehicle to inspire, teach, and reach 3rd-5th grade boys and girls. The
  program combines exercise with fun activities and lessons. Coaches inspire participants to be
  courageous enough to be themselves, build healthy relationships, and live an active lifestyle. Offered
  in the winter and spring

The understanding of environmental and sustainability concepts is assessed in a variety of ways which include the elimination of all Styrofoam products from all schools. Compostable paper trays are used in the cafeterias for student meals. The Division of Food and Nutrition Services actively works on reducing our consumption of plastic through purchasing water bottles and other single-use items with thinner plastic. We have also eliminated the use of plastic straws (unless medically necessary) on our café lines.

#### PILLAR 3: EFFECTIVE ENVIRONMENTAL AND SUSTAINABILITY EDUCATION

#### ELEMENT 3A: INTERDISCIPLINARY LEARNING

Our school system has an Environmental Literacy Plan that provides a K-12 outline of where and how the Maryland Environmental Literacy Standards are being taught. The document helps to shape MCPS curriculum as new units of study are being created at several grade levels— with it, more Meaningful Watershed Educational Experiences are under development for integration across a grade level. MCPS also has an Environmental Sustainability Plan that embraces the physical plants and all the support for schools including transportation, food, energy, and recycling. Together, the ELit Plan and Sustainability plan impact what happens at OTES every day, in the classroom and outside of it. Both plans include a focus on schools achieving Maryland Green School certification through adoption of green practices.

The teachers at Oakland Terrace Elementary School have participated in a variety of professional development workshops over the past two years. In the fall of 2018, grade level teaching teams came to the schoolyard garden and outdoor classroom to learn how to utilize the various gardens and adapt the curriculum to outdoor learning. Additionally, during a staff meeting, all teachers participated in SERT Green School orientation to prepare for Green School recertification. This was a review of how teachers could increase environmental and sustainability learning in their classrooms and throughout the school. In the spring of 2019, we invited our local Montgomery County Nature Center, Brookside Nature Center, to host a workshop with each grade level team and special educators on how to link inquiry based projects in the classroom to the field trips we attend at Brookside.

The students at Oakland Terrace Elementary School are immersed in an integrated curriculum that connects to the love and care of our planet. Instruction occurs both indoor and outdoor. This understanding of connectedness and respect is ever present throughout each school day as teachers and staff align everything to our school motto: Love, Kindness and Respect for ourselves, each other, and the earth.

- In kindergarten, students begin to make connections between themselves and other living creatures through a month long observation of the life cycle of darkling beetles. They study the three stages of the beetle's life cycle, while making comparisons with their own growth process as humans.
- In first grade, our students visit the Montgomery County Recycling Center, where they learn how and what can be recycled. They look deeper into this topic through discussions about how purchasing choices can impact the amount of waste they generate and how to reduce that waste.
- Second grade continues to deepen students' understanding of the interconnectedness between
  themselves and the natural world by investigating pollinating insects. They learn through outdoor
  exploration and study how important these insects are to the success of ecosystems including those
  that we depend upon to pollinate our food. This lesson culminates with the design and construction of
  Pollinator Hotels to help support our native pollinators through the winter months.
- Third grade explores issues around water cycles and fresh water conservation. They design, create, install and maintain rainwater collection devices made from mostly recyclable or reusable materials. The water collected is used to water the plants in our colonial garden as a way to conserve freshwater usage. Additionally, this project serves as a platform for understanding how to create a S.T.E.M. project.
- Our fourth grade students participate in an inquiry project about reducing the impacts of Earth processes (i.e. hurricane, tornadoes, climate change) on humans and our environment. They research, develop and present a PowerPoint presentation about tsunamis, earthquakes, flooding, volcanic

eruptions and climate change. Included in the presentations are ways humans add to these earth processes, and, very importantly, various ways humans can minimize the impacts and design possible solutions.

 The fifth grade students continue their Colonial Garden Project during the winter and into the spring by growing seedlings of the plants indigenous peoples and colonists would have needed most. Each Classroom is responsible for planting seeds and tending the seedlings until it is warm enough to transplant them into our Colonial Garden. They collect data during this process to help them assess the effectiveness of their care and the conditions under which the seedlings are grown. Care duties are evenly divided for this group project, so each class can assume responsibility for the plants they grow.

#### **ELEMENT 3B: STEM CONTENT, KNOWLEDGE and THINKING SKILLS**

The MCPS science curriculum for grades kindergarten through grade five provides frequent opportunities for students to explore the environment and sustainability as a context for developing science, technology, engineering and mathematics content knowledge, and thinking skills. Kindergarten students use models to find evidence that humans can change the environment to meet their needs, and design and build a structure to reduce the warming effect of sunlight on Earth's surface. In grade one, students ask questions about the needs of local birds and design a birdhouse to increase survival rates. Second-grade students conduct an investigation to compare solutions designed to slow or prevent erosion. In grade three, students analyze data from particular habitats to determine which organisms can survive well in each habitat. Grade four students engage in argument from evidence related to how environmental factors can influence the traits of plants and animals.

MCPS has K-12 pathway for developing mastery of the Maryland Environmental Literacy Standards. With that plan, students are introduced along the way to green technologies in the context of what students are learning. For example, in grade 4 students build a structure for collecting runoff, and then develop ideas to mitigate the schoolyard areas where runoff is an issue. They learn that scientists are measuring factors to create the Chesapeake Bay Report Card by measuring things like pH, dissolved oxygen, and turbidity of water. More importantly, students learn that they can contribute to a solution. Another elementary program is the Maryland Agriculture Education Foundation's mobile which visited our school and introduced the science of agriculture, farming practices that protect our land and water, and careers that various people have in the field of agriculture.

#### ELEMENT 3C: CIVIC KNOWLEDGE and SKILLS

We reach out to the community with a variety of student government programs. These include, but are not limited to a coat and winter clothing drive providing quality second hand items to those in need and ensures the reuse of items. Fundraisers for charities focused on childhood disease and wellness issues. Additionally, we support area organizations tackling the homelessness issue by partnering with them for our MLK Day of Caring event. Students, staff and their families make lunches for homeless centers, collect business clothing for A Wider Circle, a local non-profit organization that assists individuals trying to make a better life for themselves by providing the resources they need for success. We discuss how these efforts help those in need, as well as, protect our environment by reusing items rather than throwing them away.

As part of a kindergarten science unit, students investigate the warming effects of sunlight on the Earth's surface by collecting data in the outdoor schoolyard. They use the data to identify a schoolyard area in which this creates adverse effects on animals, plants, or humans, and collaborate to design a shade shelter. As part of a grade four-unit, students explore their schoolyard to identify areas of erosion, the impacts on plants/animals and apply science understanding to design a proposal to reduce the impact of erosion. At Oakland Terrace, we are very proud of our amazing outdoor classroom. It provides an environment for all of our teachers to bring their classes with gardens to dig in or study, art projects, sitting areas for sharing music or reading, and a full cart of books to assist teachers in using the space. Many of our special needs students find this space soothing and a good place to regroup.

Oakland Terrace is in close proximity to Brookside Nature Center where we have been going for many years on field trips. Brookside Nature Center has created themed field trips that align with the county curriculum. Last year, we started a partnership which included a teacher training session and meetings to select the most appropriate field trip for each grade. In addition, each grade participates in different field trips each year. Furthermore, teachers and naturalists work together to create an opportunity for inquiry based learning and project execution.

Although, we currently have a great recycling program, we want to make it more efficient by holding School Energy and Recycling Team (SERT) assemblies on recycling at lunch and around the school. Additionally, we will be implementing a student Green Team Education Program where students educate teachers and students on our recycling initiative and our green school programs. Finally, we also want to extend our Earth Day Celebration by extending our trash/recycling walk to our local creek, Kensington Branch. We want to organize a school community stream cleanup, to help improve water quality in this heavily impacted tributary of the Potomac River and the Chesapeake Bay.