



## 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.
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. Kirsten New

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

Official School Name: Ocean View Elementary School

(As it should appear on an award)

Official School Name Mailing Address: 350 West Government Avenue, Norfolk VA 23503

(If address is P.O. Box, also include street address.)

County: Norfolk State School Code Number \*:

Telephone: 757-531-3105 Fax:

Web site/URL: E-mail: [knew01@nps.k12.va.us](mailto:knew01@nps.k12.va.us)

\*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.

Date: February 5, 2020

(Principal's Signature)

Name of Superintendent: Dr. Sharon Byrdsong

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records) District Name: Norfolk Public Schools

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



Date: February 9, 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: Virginia Department of Education

Name of Nominating Authority: Dr. Anne Petersen

(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.



Date: February 5, 2020

(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: 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](mailto: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: An Overview of Your Work Encompassing All Three Pillars**

Ocean View Elementary School (OVES) is a Title I School with 67.9% of our students qualifying for free or reduced lunch. We strive to provide opportunities for our students and our community by partnering with organizations to have students achieve healthy, well-adjusted, social, and resilient lifestyles through various outreach programs. These programs include partnering with the Food Bank for the last 3 years to provide 54 families with nutritious meals once a week through the “Backpack Program”. The OVES PTA has initiated another exciting partnership with the Food Bank. This new pilot program provides free, locally grown fruits and vegetables to families who attend PTA nights. Our first event was the PTA Bingo Night this winter and more events will be scheduled for the rest of the year. We have also been partnering for many years with the YWCA “For Kids” Program in which we provide after school meals, enrichment programs, and transportation for our homeless and transient population. In addition, we support and provide a site for the “Youth Earn and Learn: Jobs-For-Kids” Program in which students work at mobile fresh produce stands that provide fresh and affordable produce to the neighborhood.

Teachers and staff recognize the importance of rich opportunities for OVES students to immerse themselves in literacy based activities. Singing or playing alphabet and word games; or writing, drawing, and reading aloud to students provide engaging opportunities for a good literacy foundation.

Children of lower socioeconomic status (SES), such as those at Title I schools, know about 15,000 fewer words at school entry than their more affluent counterparts (Moats, 2001). Not only do children of lower SES come to school with fewer words than more affluent peers, they know less about each of the words that they know – that is, they have less background knowledge – than peers with more resources (Beck & McKeown, 2007). As a consequence, low SES students have significantly lower word reading and reading comprehension skills than middle income peers unless they are provided background information through interventions that level the knowledge playing field (Kaefer, Neuman, & Pinkham, 2015; Pearson, Hansen, & Gordon, 1979). The “brain-child” of an OVES first grade teacher entitled “Wind Down Wednesdays” (WDW) was created to provide a rich online, video, read aloud opportunity. OVES teachers and staff members read aloud a book every Wednesday. To date, 9 books have been read, 2 of which were read in Spanish and English for OVES ESL students, and hundreds of views have been posted. Our Instructional Technology Resource Teacher recorded the readings, posted them on YouTube and the OVES website. WDW are available for students to watch at home with their families anytime.

At the age of 28, one of OVES “super hero” teachers, Vicki Davis Sawyer, was diagnosed with the neurodegenerative disease ALS. The progression of the ALS disease has made it impossible for our “super hero” teacher to teach in the classroom but her indomitable spirit has so touched the OV community that a team of teachers has created a “Sawyer Spirt Team” to focus on helping Vicki live her life to the fullest. Fundraisers and activities include “cake walks”, potluck dinners, silent auctions, donations to wear jeans on Friday, PuraVida bracelet sales, and “suckers for Sawyer” lollipop sales. Almost \$1000.00 has been raised to date to fight for a cure and provide Vicki the support she needs on her courageous journey.

OVES has been proud to be part of the Girls on the Run (GOTR) program for 3 years. GOTR is a non-profit girls empowerment program that incorporates a fun, research-based curriculum into a creative running program. Since OVES has participated in GOTR, 60 female students and 6 volunteer coaches have been inspired to be confident, courageous, and connected to the community. GOTR culminates with a 5K race that all girls are encouraged, but not required, to participate in. Every year, most of the OVES GOTR teammates overcome difficult circumstances to bring a running buddy to the 5K and celebrate their energy, their endurance, their spirit and their “star power”. This year 12 of our 17 girls and their running buddies attended the 5K! This was the highest number we’ve had participate since we began GOTR three years ago.



Norfolk Public Schools (NPS) nutrition specialists and cafeteria staff not only provide healthy and nutritious meals to OVES students for breakfast, lunch, and after school meals they are also committed to partnering with OVES teachers to enable students to learn about making healthy food choices that will become a pattern of good life long decisions. Nutrition education specialists have developed a “Blender Bike” program in which OVES students discover the vitamin, mineral, and nutritional value of their favorite fruits and vegetables. They learn appropriate serving sizes, daily allowances, and healthy benefits of the chosen produce. They continue this healthy choice making by coupling that with exercise on the “Blender Bike” which mixes their chosen foods like kale, strawberries, bananas, oranges, and yogurt into a healthy smoothie to be enjoyed! Students become excited even about kale when diet, nutrition, and career choices become relevant, enjoyable, and meaningful. Similar partnerships with cafeteria staff include “Plant Parts” and “Nuts About Science” lessons in which students learn about edible plant parts and tasty “nuts” by identifying edible plant parts (like carrots as roots, celery as stems, tomatoes as fruits and seeds) and then enjoying them as crudité with delicious dipping sauces including “nutty” dipping sauces like hummus. When asked to identify seeds, roots, stems, leaves, flowers, and fruits from common grocery items during pre-assessments; students were able to accurately identify 0-2 plant parts per category (i.e. identify a peanut as a seed, a turnip as a root, rhubarb stalks as stems, collards as leaves, broccoli florets as flowers, and cucumbers as fruits). After students participated in various interactive programs and labs focusing on plant parts like “Blender Bike”, “Edible Plant Parts”, and “Nuts About Science”, post-assessments showed that students were able to accurately identify 3-4 plant parts per category. In addition, many students tried healthy and nutritious food options for the first time in their life, said they would ask to eat them at home, and continued accurately volunteering to name edible plant parts from each category that weren’t even included in the given assessments!

Ocean View Elementary School has been an influential member of the community since 1939 and a designated Maritime School due to the rigorous environmental programming included in our curriculum. OVES is within walking distance to the Chesapeake Bay, however, many of our students have only seen the bay and explored the beach during “Bay Days” at the end of the school year. So, it has become very important to OVES to engage students in the natural world around them, to provide opportunities for students to consider the environment and conservation as a participatory adventure, and to inspire them to action. This is achieved through experiential learning that includes participating in several collaborative and ongoing projects. Over twenty years ago, OVES began Oyster Gardening with various community partners that include the Virginia Institute of Marine Sciences, the Chesapeake Bay Foundation, Oyster Reefkeepers of Virginia, and Nauticus. The entire school participates in citizen science by monitoring, collecting data, and releasing oysters onto the Lynnhaven River Sanctuary. OVES is responsible for introducing over a million oysters onto the Lynnhaven Oyster Reef Sanctuary! TREX is an eco-friendly company that manufactures composite materials for construction that utilize reclaimed wood and plastic film. They have also made a commitment to employing earth-friendly manufacturing processes that reclaim factory waste and eliminate the use of harmful chemicals. OVES has been partnering with TREX for many years to collect plastic film to reduce the harmful single-use plastics that make their way into our environment.

Since working with TREX, OVES has collected thousands of pounds of plastics that are re-purposed and contribute to making this world a better place. Most recently, OVES is the proud recipient of the Mid Atlantic Marine Educator’s Association (MAMEA) grant that will enable Aquaculture in the Maritime Lab for 2020. Fish and plants will be raised in the Maritime Lab where innovative, project-based curriculum will provide meaningful and relevant applications of the Virginia Standards of Learning. In an effort to foster career-oriented and 21<sup>st</sup> Century skills, OVES has established a Maritime Ranger program for fifth grade students who are interested in science, technology, engineering, and math (STEM). Maritime Rangers apply for the position, become mentors to other students, and facilitate many of the engaging educational projects OVES offers throughout the school year.

A new, green, state-of-the-art school building opened its doors to students in September 2017. The engineering and construction of the building incorporated the newest green technologies. Landscaping and design were created to effectively utilize our natural resources; to reduce the negative impact of stormwater run-off and flooding; and to

establish and create a natural habitat for local wildlife.

The last remaining sand dune in the city of Norfolk resides adjacent to Ocean View Elementary School in a heavily vegetated Maritime forest that locals call Monkey Bottom. Deep within this primeval forest lies a giant, 400 year old live oak tree that, thanks to the interest of OVES students, was placed on the Virginia Tree Registry as the sixth largest of its kind in the state. The Maritime Forest is also home to a National Champion buckthorn bumelia tree that is registered on the Virginia Big Trees database as one of the largest trees of its species in the entire country. This tree was identified thanks to the efforts of the staff, students, and volunteer Master Gardeners who visit the Maritime Forest several times a year during ongoing forest clean-ups. Maritime Forest exploration and field studies have played a pivotal role in the rich scientific history of OVES.

The OVES Maritime Rangers presented at the Elizabeth River Project's First Annual Resilience Expo in 2019. The Maritime Rangers focused on OVES' Oyster Gardening Program and received the Resilient River Star School Award for our environmental stewardship. Resilience Expo organizers and judges stated that OVES "may very well be the first public school in all of Hampton Roads to have started oyster gardening and our long-term commitment to conservation is inspirational!"

### **Narrative for Pillar 1: Efforts to Reduce Environmental Impact and Costs**

Ocean View Elementary School (OVES) has received an "Energy Star Certification". An "Energy Star" certified property meets strict energy performance standards set by the EPA and uses less energy, is less expensive to operate, and causes fewer greenhouse gas emissions than its peers. Attributes that contributed to OVES becoming "Energy Star Certified" include the following: OVES is a LEED Certifiable facility. The school building's design was conceived to maximize energy efficiency and to assure that the end product met the highest standards of quality, while being capable of exceptional longevity. The sustainable concepts incorporated into the design of the school include: daylighting, site placement to maximize sun exposure, incorporation of onsite wetland areas into the curriculum, and a self-contained energy efficient HVAC system.

The day-lit school is a major component of the optimum learning and working environment of OVES. The natural lighting strategies provided in the structure represent very cost-effective and energy saving techniques. The building elements of the school are oriented on the sites to take advantage of the east-to-west path of the sun. The learning community area is stretched out in an east-west direction to maximize natural day-lighting and solar gain control strategies. Clerestory windows and white primary roofs, work in concert to provide natural light to the classrooms, art room, gymnasium, cafeteria, and media center as well as other high-use spaces. This application supports the green friendly design of "When the sun is up, the lights should be off".

Additional sustainable design features of Ocean View Elementary School to maximize the energy efficiency of the building include:

- Exterior vision and day-lighting windows sized and positioned to create the perfect balance between natural lighting and maximum energy efficiency for the school
- A highly-insulated building envelope, including appropriate roof insulation and insulated air barrier at exterior walls and low U-Value glazing systems
- High indoor air quality achieved through the use of low VOC and non-toxic materials
- The school building utilizes a white PVC roof membrane to help reduce heat island effect
- The insulated PVC roof also reduces energy cost for air conditioning
- The school building roof drains and parking areas are all connected to a BMP for storm water management. A BMP is a structural, vegetative or managerial practice to treat, prevent, or reduce water pollution and reduce water runoff. This keeps storm water from buildings and parking areas on site rather than running directly into the city's stormwater system.

- As part of the site work, additional trees were planted on the site to replace any existing trees that were removed. Two new trees were planted for every one tree that was removed. Approximately 90 trees were planted as part of this project.
- Native plants and bushes were planted to insure habitat and food for local species that include pollinators, seed dispersers, and unique maritime species
- When the old building was demolished, the crews minimized the volume of debris sent to the landfill by implementing a carefully structured and strictly managed program of separation and recycling
- Light colored roofing materials were used to reduce solar heat gain and reflect sunlight into windows for daylighting where occurring
- In all primary-use rooms, occupancy sensors are used to turn off lights and save energy

### **Use of Alternative Efficient Transportation**

Norfolk Public Schools (NPS) will be among 16 school divisions throughout Virginia selected to receive electric school buses through an innovative program by Dominion Energy. NPS will receive a total of four buses with the first one being delivered in August in time to transport students back to school in September. The remaining three will be delivered in the fall.

The new electric buses will join the current NPS fleet of 326 diesel-powered buses. Each electric bus will cost approximately \$104,000 compared to a regular diesel bus cost of approximately \$96,000. However, the electric buses will save money in the long run by eliminating the use of diesel as well as reducing operation and maintenance costs. Dominion Energy will pay for the installation of charging stations that will be required to operate the electric buses.

In addition to lower operation and maintenance costs, the electric school buses will have a positive environmental impact by reducing the carbon footprint. Dominion Energy estimates that one electric bus reduces carbon dioxide emissions by 54,000 pounds per year.

OVES values the importance of walking or bicycling the school. The school has sidewalks, safety patrols, and bike racks to encourage safe routes to school. Currently 120 participants or 22% of all OVES staff members and families walk their students to and from school. This enables quality time to prepare the students for the day or check to see how their day went, engage in cooperative play in the adjacent playground, and meet-and-greet OVES staff to effectively communicate daily activities, progress, and behavior. This is not only helping to support strong community involvement, health and fitness, but also helping to decrease our carbon footprint. According to the Environmental Protection Agency (epa.gov, 2018), the average vehicle emits 404 grams of carbon dioxide (CO<sub>2</sub>) per mile. Other greenhouse gas emissions released are lower than 404 grams per mile, however, the impact of methane, nitrous oxide, and hydrofluorocarbon emissions are incredibly significant because they have a higher global warming potential than CO<sub>2</sub>. So, if every OVES walker is saving at least 5 miles of CO<sub>2</sub> per 180 days by walking to school, that is 363,600 grams of CO<sub>2</sub> alone that is not contributing to global warming!

### **Storm Water Quality**

Under Part IIc criteria for the City of Norfolk, the building site was designed to provide no net increase over existing phosphorus loading. A retention pond was fitted with a ten foot hydraulic bench and provides treatment for four times the water quality volume. According to the CBPA calculations, 4.87 pounds per year of phosphorus will be removed by the BMP, which exceeds the required phosphorus reduction. In addition, native grasses, plants, and vegetation have been planted to create buffers to reduce storm water runoff and nutrient pollution. According to the Environmental Protection Agency (epa.gov, 2019), nutrient pollution is one of the most widespread pollution types and is responsible for many costly and overwhelming environmental problems. Nutrient pollution from runoff is one of the major factors affecting the health of the Chesapeake Bay. According to the Chesapeake Bay Foundation (cbf.org, 2020) it is responsible for 40% of the nitrogen and 50% of the phosphorus entering the Chesapeake Bay. Too much phosphorus in

the ecosystem can cause algal blooms, oxygen deprivation, PH balance issues, toxic bacteria growth, and parasite infestation. Animals and people can experience liver, heart, and kidney problems; osteoporosis; skin burns, lesions, and necrosis. The phosphorus reduction due to the “green measures” employed with the new construction has been observed to have a beneficial impact on the amphibian population at OVES, more frogs and toads are being seen and heard than ever before! In fact, so many more frogs and toads are hopping and jumping in the habitat around the bus loop that staff and students are picking them up and relocating them to safer areas. One fifth grade student even created a campaign in the spring to insure the safety of the newly morphed amphibians. He developed a Power Point Presentation about amphibians, created signs and posters labeling and marking off the “Amphibian Zone” and encouraging students and staff to take caution!

### **Storm Water Quantity**

The building, parking lots, bus loop, and courtyard flow to the onsite retention pond through a system of inlets and pipes. The outflow represents a reduction from the pre-development peak flow for both the two and ten year storm events. This is helping the area deal with effects of flooding and climate change. There are also several schools in the district that have “Rain Water Gardens” on their campuses. These are schools where there were high levels of stagnant water after rainfall. The gardens have not only beautified the grounds, they have also absorbed a significant amount of water and have helped prevent erosion.

### **TREX and Paper Recycling**

OVES has been working with TREX over the past few years to help keep single use plastics out of our waterways. The school has 5 boxes placed throughout the building to collect plastic bags and wrappers. Every week, the boxes are emptied and the plastic bags are taken to a recycling center. Each year, OVES collects hundreds of pounds of plastic that is recycled. Trex has awarded the school several benches and the school has obtained the status of a Gold Star School for the Elizabeth River Project.

There are also bins set up in several locations where paper can be placed for recycling. To assist with decreasing the amount of paper used, teachers opt for Google Classroom lessons and/or other methods of formative assessments that do not require paper products.

### **Green Cleaning Custodial Program**

The school is cleaned using products that are biodegradable, nontoxic, and cold water activated. All cleaning supplies are either “Green Seal Certified”, “EPA Safer Choice” or “Ecologo”. Because we are a school with young children, it is imperative that surfaces are clean but safe from toxic chemicals. Custodians also recycle any cardboard, paper, plastic, or glass from the school.

### **Narrative for Pillar 2: Efforts to Improve the Health and Wellness of Students and Staff**

Students at Ocean View Elementary receive 90 minutes per week of instructional physical education and 20 minutes 5X a week of recess and more unstructured play. During physical education different physical fitness is addressed in age appropriate lessons:

#### **Kindergarten**

Participating in a variety of movement experiences to develop fundamental movement patterns is the primary focus of the kindergarten physical education curriculum. While children at this level vary in maturity across all movement skills, they should demonstrate continuous improvement in movement under very simple conditions. While developing fundamental skill patterns, students begin to learn key movement concepts that help them perform in a variety of educational games, dances, and gymnastics. They learn how their bodies react to vigorous physical activity. Students learn to use safe practices, cooperate with and respect others, and follow classroom rules. Experiences in physical education help them develop a positive attitude for leading a healthy, active lifestyle.

#### **Grade One**

Students in grade one refine locomotor skills and further develop fundamental non-locomotor and manipulative skills in

educational games, dance, and gymnastics. They continue to develop an understanding of key concepts and anatomical basis of movement principles and link these concepts and principles to their movement. Students explore and experiment with a range of movement experiences in a variety of environmental contexts, with the goal of becoming confident and competent movers. Students relate participation in vigorous physical activity to changes in the body, to enjoyment, and to improving their health and wellness. They further their understanding of the importance of physical activity and energy balance (nutrition) in their lives. As students increase their understanding of movement, they gain a deeper understanding of how the body moves. Students continue to develop socially as they work safely alone and in groups. The natural enjoyment of physical activity should be reinforced and complemented by a variety of educational game, dance, and gymnastic activities in which students learn and are successful.

### **Grade Two**

Students in grade two focus on mature patterns, not on traditional games, while participating in a variety of movement experiences to develop fundamental motor skills and patterns. They vary movement patterns and begin to combine skills in educational game, dance, and gymnastic activities. Student's progress in skill development and in understanding key elements of fundamental movement skills, including movement concepts, major muscles and bones, health-related fitness concepts, energy balance concepts, and the benefits of physical activity. Students work cooperatively and responsibly in groups and begin to build skills to meet movement challenges. They participate in physical activities at school and identify opportunities to participate in regular physical activity outside of school.

### **Grade Three**

Skill development remains a central focus for students in grade three as they begin to accept feedback from and provide appropriate feedback to others. Students refine, vary, and combine skills in complex situations and demonstrate more proficient movement patterns in educational games, dance, and gymnastic activities to become confident and competent movers. Students identify critical elements (small, isolated parts of the whole skill or movement) and apply them in their movement. They develop fitness knowledge and can relate regular physical activity to energy balance and health benefits. Students continue to build knowledge of body structures and systems. They know safe practices, rules, and procedures and apply them with little or no reinforcement. Students work cooperatively with peers and understand that there are many differences in movement skill and ability levels among their classmates.

### **Grade Four**

In grade four, students make continuous progress across all fundamental motor patterns. Proficient movement patterns are possible as students combine locomotor and manipulative skills in increasingly complex situations. Students create sequences in educational dances and gymnastics. They apply movement concepts and principles and knowledge of anatomical structures in individual movement performances, and tactical strategies in modified activities. Fitness assessment is appropriate at this grade level, and students interpret the results of their assessments and set personal goals based on the results. Student's exhibit appropriate etiquette, integrity, and conflict-resolution skills; and they apply proper rules and procedures.

### **Grade Five**

Students in grade five apply movement principles and concepts and knowledge of anatomical structures and functions to enhance their movement performance, personal fitness, and game strategy and tactics. They develop proficiency in physical activities, dances, and educational gymnastics. Students demonstrate specialized skills alone, with a partner, or in a small group. They access and use resources to plan and improve personal fitness as they exhibit a physically active lifestyle. Students continue to develop responsible personal and social behaviors as they work with others in safe and respectful ways.

### **Girls on the Run**

Girls on the Run (GOTR) is a nonprofit organization that is committed to creating a world where young ladies begin to see their true potential. One of GOTR key values is to "NURTURE our physical, emotional and spiritual HEALTH". GOTR focuses on the overall Health of each girl in the program. GOTR promotes girls being able to identify their strengths, differences, and limitless opportunities. This program promotes girls becoming positive leaders who are able to identify emotions and show empathy for others. GOTR teaches young ladies to find what truly makes them shine and embrace this as their "Star Power".



Ocean View Elementary School (OVES) has completed 3 fall seasons of GOTR. Each season the team of 20 girls quickly filled up- as students were very excited for this amazing program! Coaches for the OVES team are teachers and staff who volunteer their time.

A season for GOTR consists of 10 weeks of practices. The team meets twice a week for an hour and a half each time. The run time during each practice increases as the season progresses to build stamina and endurance in the girls. During the last few practices, the girls participate in a "Practice 5K" Girls, along with Running Buddies and coaches, push themselves to complete the 5K at school. At the end of each season, GOTR hosts a 5K event for all the teams in the area. OVES girls show up excited and feeling confident for this fun race.

Each practice begins with a healthy snack to fuel the girls and reinforce the importance of food choices. Next, coaches present a lesson from the GOTR curriculum. These lessons continue to remind the girls of self-worth, friendship, processing emotions, and teamwork. Directly after the lesson, the team begins a warm up activity that reinforces concepts from the lesson. After the warm up, girls begin the actual run time. During this time, the girls always have different activities to complete that allows them to put the daily lesson into practice. Once done with the allotted run time, girls are given time to reflect on the run and discuss many things to take away from the lesson of the day. Finally, Energy Awards (cheers) are given out to several girls who really shined during practice.

GOTR helps girls recognize the power and responsibility we each have in decision making. These decisions impact ourselves, friends, family, and communities. Each season the girls choose a "Community Impact Project" together as a team. The girls then are responsible to carrying out this service project together as a team. In 2017, girls on the team made holiday cards and gift baggies for Military connected students in OVES. The team wanted to make sure these Military students felt the love from OVES during the holiday especially if they had family who was not able to be present due to serving our country. In 2018, the team decided to serve the Preschool next door to OVES that many of our students come from. The girls took time to create flash cards and handmade cards for the students. The team then walked over the Sand Dune to deliver the gifts. While at the neighboring school, OVES girls took time to read to the young Preschool students. The GOTR team absolutely loved doing this! Because of the positive impact it had on both the OVES girls and neighboring school the 2019 team has decided to do a very similar project again this year. To celebrate the great work done this fall semester, the GOTR team voted to have a holiday party to celebrate and share all their accomplishments with each other and their families. The girls even wanted to bring all the treats for the party! The coaches were pleasantly surprised by all the healthy and delicious snacks the girls brought like fresh fruit, veggies, and nuts instead of the typical sugary treats. They told us that they discovered that eating those kinds of foods, especially before a run, makes them feel so much better! At the end of the season, girls gave coaches awesome cards saying things like, "I know now that I can do anything I set my mind to!", "GOTR brings out the best in me!", "I wish we could do GOTR all year!", "I'm so glad I'm only in 3<sup>rd</sup> grade, now I can do GOTR for 2 more years!", "GOTR taught me to appreciate my annoying baby brother!". GOTR is a valuable, confidence-building program that not only helps the overall health and wellness of OVES students but sets them up for success in many aspects of their life-learning process.

The teachers at OV get into fitness as well. For the past 4 years, there has been an OV DOLPHINS team competing in the Corporate 5K each spring in Downtown Norfolk. The group of teachers has grown from 7 to 15 over the years and it's a great way to build comradery and physical wellbeing. NPS also has several programs to encourage nutrition, fitness, and mental wellbeing. Teachers can sign up for friendly email reminders and tips to help them get through the hectic school year.

### Mental Well Being

OVES is fortunate to have a full-time school counselor and a part-time counselor to help students employ successful strategies to advance their social-emotional wellbeing. Counselors help give students coping skills to deal with

friendship issues, conflict mediation, anger management, and school success. Because our population consists of over 30% military families, those students have access to a counselor who helps with the unique stresses of being a military child, like the deployment of a parent, frequent re-location, exposure and awareness of military conflicts around the world.

### School Nutrition

The Ocean View Elementary cafeteria, or Café by the Bay, provides healthy, nutritious meals to support academic achievement and lifelong healthy food choices. We are a part of the Breakfast in the Classroom program, which offers free breakfast to all students to make sure their school day is off to a healthy start. Students are also taking part in the Fresh Fruit and Vegetable Program, which gives kids a chance to try new and different fruits and vegetables during the school year. For students involved in after school activities, there is a program for afterschool snack or supper. These students may receive a meal at no charge. The cafeteria works as an extension of the classroom with nutrition education like exploring different foods from different cultures, tasting seasonal fruits and vegetables, piloting growing microgreens, and in-class learning with the smoothie making bike! The cafeteria has a food safety plan (HACCP) and offers high quality foods. All food handlers are certified and inspections are periodically done to insure safety.

### Building Safety

Ocean View Elementary School's latest safety and health inspection scored the school 3.53 out of 4.0, which is a SUPERIOR ranking. This is due to the fact that faculty and staff are vigilant and trained to insure that all areas in the building are safe and secure. Norfolk Public School employees must review online videos yearly regarding OSHA regulations. We also practice fire drills, lock downs, and tornado drills to prepare for the event of an emergency. When visiting the EPA website, Ocean View Elementary School, was able to answer "YES" under all of the safety categories for facilities, healthcare, and managing pests.

### **Narrative for Pillar 3: Efforts to Ensure Effective Environmental and Sustainability Education**

Ocean View Elementary School opened the doors to the new, green school building in 2017 and part of the 21<sup>st</sup> Century planning included the Maritime Lab. All students in grades K-5 participate in engaging activities that inspire and spark scientific inquiry. It is the intention of all Ocean View staff to transform this lab into a room without boundaries.

The Virginia Standards of Learning for every grade level include objectives that focus on scientific investigation, living systems, water systems, ecosystems, natural processes, conservation, and sustainability. Science SOL scores in Norfolk Public Schools have continued on a downward trend in the past several years. In addition, the Virginia Department of Education reports significantly lower scores for black, economically disadvantaged, Hispanic, and students with disabilities (VDOE, 2018). These are the demographic groups that are represented in numbers greater than average at OVES. According to VDOE (2018), schools and school divisions are mandated to address these achievement gaps by developing and implementing plans that ensure that all students have the resources they need to succeed. In addition, VDOE's Superintendent of Public Instruction, James Lane, was interviewed by WTKR New 3 in which he states that by creating engaging opportunities for students, deeper levels of understanding can be achieved and, as a result, improved test scores (wtkr.com, 2018). Experiential learning in the Maritime Lab not only enables students to develop critical thinking skills but also inspires strategies that cultivate sustainability and social justice. Projects like Oyster Gardening; Aquaculture in the Classroom (raising fish and vegetables); Growing Submerged Aquatic Vegetation (SAVs in the Maritime Lab) TREX recycling program; Maritime Ranger Program; live animal observations; data collection; experimentation; creating a watershed; planting and caring for vegetation in the lab, on school grounds, and at home; design and construction activities; water quality testing; food preparation; and public speaking and presentations all provide relevant, real-world experiences that are not only laden with the scientific rigor that will achieve successful test scores but also foster stewardship, encourage empowerment, and inspire life-long learning. In the past two years since the new Maritime Lab's inception and the implementation of the accompanying meaningful, scientific, and experiential learning our SOL science scores have increased from a 64% passing rate in 2018 to a 71% passing rate in 2019! How has it happened? Let's look at our Objectives, Activities, Expected Benefits, and Evaluation.

## **Objectives**

- Develop curriculum for scientific activities for K-5 grades that provide meaningful, relevant, and experiential interdisciplinary applications of the Virginia Standards of Learning objectives.
- Targets: Oyster gardening, fish and vegetable aquaculture, TREX recycling program, Maritime Ranger Program, Growing SAVs in the Maritime Lab; live animals in Maritime Lab, Maritime Forest studies and exploration, STEM activities
- Future Targets: Butterfly garden, Vermiculture, Maritime Forest protection
- Implement project-based and work-based learning to develop confidence, mentorship, stewardship, and career oriented skills
- “Fill the gaps” of content knowledge by stimulating and advancing 21<sup>st</sup> Century skills
- Establish partnerships with educational and community organizations

## **Activities**

- Students work in small groups of 4-8 in Maritime Lab, at oyster stations, and whenever possible in classroom
- Work done by K-5 students will be presented at several family events throughout the year. This includes Math and Science Night and Spring Fling
- All students K-5 will participate in oyster gardening field trips throughout the year. Maritime Rangers will participate in a boat trip to Lynnhaven River to release oysters onto the oyster reef sanctuary
- Examples of activities for oyster gardening include cleaning oyster floats and collecting data to be incorporated into a national database. This data includes: measuring oysters; recording mortality; taking salinity, turbidity, barometric pressure, wind speed, and rain gauge measurements; water temperature; air temperature; living organism observations (i.e. animals associated with oyster float like sea squirts, oyster toad fish, grass shrimp); environmental; human-influenced conditions (i.e. debris in water)
- Examples of activities for aquaculture include observation, aquarium maintenance, water quality testing, feeding of fish, taking weights and measurements, planting and caring for vegetation, photo documentation, data collection, design and construction of aquaculture systems, nutritional analysis, food preparation and cooking, public speaking and presentations

## **Expected Benefits:**

The projected outcomes of this program are many and include:

- a greater interest and understanding of scientific method, tools, concepts, collection, and analysis
- development and enrichment of 21<sup>st</sup> Century skills
- stewardship for the natural world
- boosts in confidence, self-esteem, social and community awareness and responsibility
- improved test scores

## **Evaluation:**

- Pre and post assessments given to students and teachers. Student assessments focus on interests and opinions as well as content knowledge. Teacher assessments focus on evaluation of project design, planning, implementation, educational content, and student impact.
- Pre-assessments for Oyster Gardening included identifying oysters, barnacles, and sea squirts as living or non-living; identification of scientific tools; usage of scientific tools; how do oysters improve ecosystem; identifying a reef; identifying specific body of water we are raising our oysters in; knowing what “baby” oysters are called; knowing what and how oysters eat; identifying what type of water oysters grow in (fresh,



salt, brackish). Students during pre-assessments answered an average of 3-4 questions out of 10 correctly. After Oyster Gardening experiences and field trips students answered an average of 8-9 questions correctly!

- The Maritime Ranger Program has an application process that enables 5<sup>th</sup> grade students to write several essays that included describing how oysters benefit the Chesapeake Bay; what mentoring means to them; and how they can contribute to making a more healthy environment. During the first orientation and training for the Maritime Rangers, students were informally assessed on their knowledge of scientific equipment utilized during our Oyster Gardening data collections (i.e. secchi disc, refractometer, anemometer, rain gauge, barometer); Chesapeake Bay species that we would encounter (i.e. oysters, sea squirts, sea roaches, blue crabs, mud crabs, grass shrimp, oyster toadfish, mummichogs); and environmental issues that affect the Chesapeake Bay (i.e. overfishing/harvesting, sustainable practices, climate change, pollution). Rangers were able to identify 1-2 of the scientific tools and identify 0-1 of the uses for the tools; students were able to identify 1-2 of the Chesapeake Bay species, were able to give very little information about the role those animals played in their environment (i.e. how do oysters actually improve water quality), and were unable to give species-specific information (i.e. times of year found in the Chesapeake Bay, male and female characteristics). Students also had a very vague understanding of the Chesapeake Bay's environmental challenges (they would use words like "polluted", "in trouble", needs "saving" without understanding the specifics or any "cause and effect". Rangers after trainings and field trips are able to identify 7-10 scientific tools AND their uses; students are able to identify 7-10 Chesapeake Bay species and give at least 2 relevant facts about the role each of the identified species plays in its environment and give at least 2 relevant species-specific characteristic (i.e. claw color on blue crabs indicates sex with males having blue claw tips and females having red claw tips). Rangers now understand terms like "species decline", "estuary", "tributaries", "algal bloom", "oxygen depletion", "SAVs", "sediment" and "keystone species". Ranger knowledge base, skill level, and mentoring abilities increase dramatically throughout the year.
- The fourth graders were most directly involved with the planting of the submerged aquatic vegetation (SAVs) in the Maritime Lab. Pre-assessments showed that students were not aware of what SAVs are, the role that SAVs play in their environment, why SAVs are declining, and how SAVs can be restored. After various hands-on labs that involved planting the SAVs, monitoring their growth, creating model sea grass beds, and going on Oyster Gardening field trips and Elizabeth River Project Learning Barge field trips; the fourth grade students knew exactly what SAVs were, could list a minimum of 3 important roles SAVs play in the environment, could list a minimum of 1 reason for the decline of SAVs, and could list a minimum of 2 ways SAVs can be restored.
- Improvement in Virginia Standards of Learning science SOL scores. SOL 5<sup>th</sup> Grade Science scores went from a passing rate of 64% (2017-2018) to 71% (2018-2019) after integrating STEM projects throughout the curriculum.