

#### 2015-2016 School Nominee Presentation Form

#### ELIGIBILITY CERTIFICATIONS

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

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

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

#### U.S. Department of Education Green Ribbon Schools 2015-2016

Public Charter Title I Magnet Private Independent Rural					
Name of Principal: Mrs. Priscilla Joiner					
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)					
Official School Name: Kimberly Hampton Primary School					
(As it should appear on an award)					
Official School Name Mailing Address: 4503 Honeycutt Road Bldg B-7757					
(If address is P.O. Box, also include street address.)					
County: Cumberland County State School Code Number *: N/A					
Telephone: 910-907-0205 Fax: 910-908-1190					
Website/URL:www.dodea.edu/Americas/NC-FortBragg/FortBragg/HamptonPS E-mail: priscilla.joiner@am.dodea.edu * <i>Private Schools: If the information requested is not applicable, write N/A in the space</i>					
I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. Date: December 1, 2015					
(Principal's Signature)					
Name of Superintendent/Area Director: Dr. Renee Butler and Dr. Emily Marsh					
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)					

ED-GRS (2015-2016)



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District Name: NC-Fort Bragg - Americas

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

(Superintendent's	Signature)
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#### 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: Headquarters, Department of Defense Education Activity

Name of Nominating Authority: Dr. Linda L. Curtis, Principal Deputy Director and Associate Director of Academics (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 ab

Date: January 29, 2016

(Nominating Authority's Signature)

#### SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.

#### SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to <u>ed.green.ribbon.schools@ed.gov</u> according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509 Expiration Date: March 31, 2018

#### **Public Burden Statement**

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





**Kimberly Hampton Primary School** Headquarters Department of Defense Education Activity (HQ DoDEA) Nominee to U.S. Department of Education Green Ribbon Schools Program





Prepared by HQ DoDEA Facilities Branch January 2016

ADDENDUM TO 2015-2016 SCHOOL NOMINEE PRESENTATION FORM

As a unique Federal entity, the Department of Defense Education Activity and its schools (the Department of Defense Dependents Schools (DoDDS) that are located overseas, and the Domestic Dependent Elementary and Secondary Schools (DDESS) located in the U.S.) are not under the auspices of the U.S. Department of Education. However, DoDEA processes and procedures comply with all federal laws, including those concerning the investigation of civil rights complaints and complaint reviews, and the administration of the Special Education Program.



#### **DoDEA Application:**

#### 1. School Contact Information:

School Name: Kimberly Hampton Primary School Installation: United States Army Garrison Fort Bragg Street Address: 4503 Honeycutt Road Bldg B-7757 State: NC City: Fort Bragg Zip: 28307 School Website: http://www.dodea.edu/Americas/NC-http://www.dodea.edu/Americas/NC-FortBragg/FortBragg/HamptonPS/index.cfm Principal Name: Ms. Priscilla Joiner Principal Email Address: Priscilla.joiner@am.dodea.edu Principal Phone Number: 910-907-0205 Total school enrollment: 481 **DoDEA District:** Fort Bragg District **DoDEA** Area: Americas School type: Primary (Pre-Kindergarten-Second Grade) Percent Disadvantaged Background Population (Free/Reduced Price School Lunch): >19%

#### 2. Application Team Information.

Lead Applicant Name (who prepared the application): Dr. Laura Hussein Lead Applicant Title (e.g., teacher, principal): Assistant Principal Lead Applicant Email: laura.hussein@am.dodea.edu Lead Applicant Phone Number: 910-907-1149

	Name (First and Last)	Title/Department
1	Priscilla Joiner	Principal
2	Jason Shirley	Supervisor Facilities Manager
3	Mary Prevatte	Teacher
4	Traci Cooper	Teacher

#### **Application Team Members:** (Others who helped prepare this application)



#### Part II: Summary of Achievements.

#### **Summary Narrative:**

Kimberly Hampton Primary School is proud to be a Green school. Opening in the fall of 2014, Kimberly Hampton Primary School was designed and constructed to meet Leadership in Energy and Environmental Design (LEED) Silver certification standards. Its state of the art design promotes green awareness and STEAM instruction, and is both environmentally friendly and energy efficient. The building is used as a teaching tool for both students and the community through its exposed infrastructure "bones" and environmentally friendly features, to include solar panels, a wind mill, and roof gardens.

The school has a building automation system that is monitored at the district office that monitors energy use. Approximately 5% of the school's energy is produced from solar panels placed on the roof. Water is heated as it loops through solar panels on the roof and then is stored in a storage tank. This looping helps regulate the water temperature resulting in a 35% energy savings. Large windows allow natural sunlight in so the need for artificial light is minimized.

A 10,000 gallon in-ground cistern captures rain water to flush toilets in the group bathrooms. Rain water is also collected in barrels for irrigation for our rooftop gardens, and the landscaping around the school is composed of native drought tolerant plants and pervious pavers. In the future, a dashboard will be available for students to use to collect data on the energy and water usage at the building.

The design and educators of Kimberly Hampton Primary School promote STEAM instruction and learning. Classrooms are open "studios" that allow collaboration and discovery through the use of project based learning where students work for an extended period of time to respond to a complex question, problem or challenge. Teachers are committed to incorporating and emphasizing STEM and 21<sup>st</sup> Century learning skills in these project based units.

Kimberly Hampton Primary School has two roof top gardens where outdoor learning takes place. Featured are classroom lessons from the life and water cycle to plants and conservation. The Garden Club meets in the roof gardens weekly. Students use a bicycle powered pump to water the plants from rain water that has been collected in barrels. The school's windmill and solar panels also provide teachers with the opportunity to instruct about alternative forms of energy and environmental awareness.

Kimberly Hampton Primary School is dedicated to being a Green leader. We encourage students to ride the bus or parents to walk with their children to school. We model recycling of milk cartons, bottles, cans, and paper and are a worksheet free school. We incorporate rigorous science instruction into our curriculum and emphasize fitness and good nutrition.

We believe that our current and future practices of energy efficiency, healthy school environments, and environmental education make us a model Green School.



#### Green School Program and Awards.

- 1. Does your school participate in a local, state, or national green schools program?
- (X) Yes () No Program(s) and level(s) achieved:

#### Table Showing Participating Status in Local, State, or National Green Schools Program:

Program, Level in Progress and Level Achieved					
1	School Recycling	Engaging	Currently ongoing		
2	Earth Day Network	Emerging	April 22, 2016		
3	STEAM PD	Year Two/On-going	Currently ongoing		
4	STEMposium	Year Two/On-going	Spring 2016		
5	STEAM Week	Year Two/On-going	Spring 2016		
6	Junior Lego First	Year One	Currently		

2. In the past five years, has your school, staff, students or student groups received any awards for environmental stewardship, student and staff health and wellness, or environmental education/civic programs?

() Yes (X) No

#### Pillar 1: Reduce environmental impact and costs.

#### **Element 1A: Energy conservation strategies.**

1. Which of the following programs or practices has your school implemented to conserve energy and to protect our environment from the negative effects of buildings and transportation? (Check all that apply)



[X] Our school has an energy management plan in place that describes the steps we are taking, the key participants, our goals, and a schedule for conserving energy and reducing energy costs.

[X] Our school participated in an energy efficiency program that resulted in a comprehensive energy audit and cost effective energy efficiency improvements.

[] Our school has set and met an energy conservation target every year since we started our program.

[X] Our school energy use is tracked and benchmarked using EPA ENERGY STAR Portfolio Manager or an equivalent installation program.

[] Our school is EPA Energy Star certified this year.

[X] 5% or more of the energy used at our school is obtained from on-site or off-site renewable energy sources.

[X] Our new school (opened in Fall 2014) was built to meet Leadership in Energy and Environmental Design (LEED) green building standards.

[] Our school has a greenhouse gas emission reduction plan in place that targets energy use. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe how your school programs, policies, and actions have reduced the amount of energy used in your building(s). Include data. Also include information about your efforts to protect our environment from greenhouse gas emissions, how you set your goals for reduction, and how you measure your progress. Work as needed with your installation energy program management team to get information about your energy use (Maximum 250 words).

Prior to Kimberly Hampton Primary School opening in the fall of 2014, an energy audit was conducted. This baseline information is included in our district's internal energy management plan and will be used to compare with energy usage in the future. The school has a building automation system that is monitored at the district office that monitors energy use. Approximately 5% of the school's energy is produced from solar panels placed on the roof. Water is heated as it loops through solar panels on the roof and then stored in a storage tank.

This looping helps regulate the water temperature resulting in a 35% energy savings. Large windows allow natural sunlight in so the need for artificial light is minimized. In the future, a dashboard containing energy consumption information will be utilized at the school to allow on-site energy use tracking.

#### Element 1B: Water quality, efficiency, and conservation.

1. Which of the following practices contribute to the protection and conservation of the school domestic (drinking) water? (Check all that apply)

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[X] We are served by an installation/privatized utility water provider that is required to report annually on the quality of our water.

[] Our school has its own well and we do water sampling in accordance with our local and state health authorities.

[X] Our building maintenance department cleans all water taps and drinking fountains on a regular basis to prevent bacterial contamination.

[X] We have a water reduction plan in place that includes:

[X] low-flow water fixtures

[X] native drought-tolerant plants

[X] minimal or no landscape irrigation

[ ] Our school water use is tracked and benchmarked using EPA ENERGY STAR Portfolio Manager or an equivalent installation program.

[X] We use only non-potable water (such as water collected from a rain barrel or rain cistern) for irrigation.

[ ] Our school has a greenhouse gas emission reduction plan in place that targets water use. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe how your school implemented and is maintaining your water conservation program including your baseline, your goal, and your reduction rate to date. Explain how you will continue to reduce water use to meet your goal. Include who in the school participates in the water conservation program. Describe the work done to protect water taps and drinking fountains from bacterial contamination. Work as needed with your installation energy program management team to get information about your energy use (Maximum 250 words).

Kimberly Hampton Primary School's goal for water conservation is being met by several design features. A 10,000 gallon in-ground cistern captures rain water to flush toilets in the group bathrooms. Rain water is also collected in barrels for irrigation for our rooftop gardens, and the landscaping around the school is composed of native drought tolerant plants and pervious pavers make up the pavement surfaces. Any high water usage is monitored and addressed by the school district's extensive pre-maintenance program. The school is serviced by Old North Utility Service, a privatized utility company that provides annual reports of water quality. The building maintenance and custodial department clean all water taps and drinking fountains regularly to prevent contamination, and fixtures are low-flow.

#### **Element 1C: Waste Management and Product Procurement.**

1. Which of the following programs has the school initiated and maintained to reduce solid waste, eliminate hazardous waste, and procure environmentally preferable products? (Check all that apply).



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[X] Our school has initiated and maintained a solid waste management plan that includes waste reduction practices, collection of recyclable and compostable materials, elimination of hazardous waste, and preferred-purchasing requirements.

[X] Our recycling program collects every material that is collected on our installation.

[] Our school composts organic materials on site.

[ ] Our school only purchases office/classroom paper that is 50% or more post-consumer material.

[ ] Our school only purchases office/classroom paper made of fibers from forests certified as responsibly managed in accordance with Forest Stewardship Council, Sustainable Forestry Initiative, or a comparable certification standard.

[ ] Our school purchases office/classroom paper that is totally chlorine-free (TCF) or processed chlorine free (PCF).

[X] All new furniture purchases are certified by the Business and Institutional Furniture Manufacturers Association or a comparable standard.

[X] Hazardous and dangerous products at our school have been reduced or eliminated.

[X] Hazardous, dangerous, and universal wastes at our school are handled and disposed of in accordance with federal and state regulations.

[ ] Our school has a greenhouse gas emission reduction plan in place that targets solid waste reduction and recycling. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe your solid waste management plan, including goals, materials you collect to be recycled or composted, your current recycling rate, and how you calculated the recycling rate. Include who participates in the waste management program, any student learning objectives, and the educational and environmental benefits to date. Provide an overview of your environmentally preferred purchasing. Work as needed with your installation hazardous waste program manager or recycling program manager to gather information about your efforts in this area (Maximum 250 words).

Kimberly Hampton Primary School has a recycle room and each classroom has dedicated recycle bins that are used to collect recyclable paper. Our installation, Ft. Bragg, has a main post recycling center that collects our recycled materials. Paper, cans, water bottles and plastic milk cartons from student lunches are some of the materials that Hampton Primary School collects to recycle. While we are a worksheet free school, printer and copier paper that is used is either recycled or chlorine free paper.

All furniture purchased for the opening of this school in 2014 is certified by the Business and Institutional Furniture Manufacturers Association.

#### **Element 1D: Alternative transportation.**

Our school provides the following alternative transportation options to driving in single occupancy vehicles to and from school. (Check all that apply)



[] Our school participates in a "Safe Routes to School" or similar program.

[] Our school has designated carpool parking stalls.

[X] Our school offers yellow school bus service.

[] Our school is served by public transportation service.

[X] All school buses that serve our students were built after 1994 when the first emission standards were adopted.

[] Our school has a well-publicized no idling policy that applies to all vehicles including school buses.

[X] Our school has a vehicle loading/unloading area(s) at least 25 feet from building air intakes, doors, and windows.

[ ] Our school has a greenhouse gas emission reduction plan in place that targets transportation. We measure our annual progress against our reduction goal.

2. Use the list above as a guide to describe alternative transportation options to driving in a single occupancy vehicle to and from school. Include how the alternatives are promoted, any data you have about participation in school bus service, public transportation, carpools, ride-sharing, and commuting to school by walking or biking. (Maximum 250 words)

Hampton Primary School provides bus transportation to approximately 55% of students. School bus service representatives attend the school's open house and regularly meet with parents to encourage bus riding. The remaining students are within a one mile distance and are encouraged to walk with their parents to school. Privately owned vehicles driven by staff and visitors are parked at least 50 feet away from the building. During school bus loading and unloading, bus operators adhere to a no idling policy, and parents that pick up their students from school are encouraged to do the same.



#### Pillar 2: Improve the health and wellness of students and staff.

#### Element 2A: An integrated school environmental health program.

1. Which of the following programs or practices does your school implement to ensure the environmental health of the school community? (Check all that apply)

[X] Our school implements an up-to-date Integrated Pest Management program.

[ ] Our school implements an up-to-date Indoor Air Quality Management Plan modeled after the EPA's Indoor Air Quality (IAQ) Tools for Schools or other national recognized model.

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

[X] Our school does not have any wood playground equipment or other structures that contain chromate copper arsenate or we have identified these structures and have taken steps to reduce exposure.

[] Our school has a comprehensive green cleaning program.

[ ] Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L or our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

[ ] Our school has an Asthma Management Program consistent with the National Asthma Education and Prevention Program.

[X] Our school has a chemical management program in place, with elements of purchasing, inventory, storage, training, spills, and hazards communication.

2. Use the list above as a guide to describe how your school implements and measures the success of your integrated environmental health programs and practices to ensure the health and safety of the school community. Include information on how your school addresses exposure to health hazards including radon, chromate copper arsenate, carbon monoxide, chemicals, asthma triggers, and mold. (Maximum 250 words)

Kimberly Hampton Primary School, as part of the Ft. Bragg, NC School District, participates in the district's wellness plan that integrates our health programs and practices of physical education and healthy eating. Kimberly Hampton Primary School's quality environment also supports wellness. The school has a chemical management plan where all cleaning materials are accounted for and secured when not in use. Maintenance and custodial crews are trained in the proper use of chemicals. Any exposure concerns are addressed by our pre-maintenance program to ensure that any issues are addressed. School air quality is monitored with appropriate maintenance provided as required.



Our nurse provides regular reminders and provides health tips to our community via the weekly news broadcasts, newsletters, and bulletin boards. Physical education classes are provided to all students as well as daily recess periods. Faculty and staff may participate in morning stretch classes and meals served at the school are well-balanced high quality foods.

Kimberly Hampton Primary School has a comprehensive safety plan encompassing in-depth emergency procedures. Safety drills are conducted regularly. Staff training on emergency responsiveness is given at faculty meetings, and visitor control procedures are in place.

The environment and curriculum at Kimberly Hampton Primary School ensures the safety and encourages the health of all stakeholders.

## 2B. High standards of nutrition, fitness, and quality outdoor time for both students and staff.

1. Which of the following programs or practices does your school implement to promote nutrition, physical activity, and overall school community health? (Check all that apply).

[] Our school participates in the "Coordinated School Health" program (www.cdc.gov/HealthyYouth/cshp/).

[] Our school participates in the USDA's Healthier School Challenge.

[ ] Our school participates in a Farm to School or comparable program to use local, fresh food in our cafeteria.

[] Our school has a food garden either on-site or in close proximity to our building, which is utilized by the cafeteria or by teachers.

[X] Over the past year, our students spent an average of at least 120 minutes per week (for middle and high schools) or 90 minutes per week (for elementary schools) in school supervised physical education.

[X] At least 50% of our students' annual physical education and physical activity (including recess) takes place outdoors.

[] At least 50% of our students have participated in the EPA's Sunwise or equivalent program (to protect students from skin cancer).

[] Our school integrates health measures into student assessments.

[] Health, counseling and psychological services are offered for both students and staff

[ ] Families/communities are involved in an integrated school environmental health program

2. Use the list above as a guide to describe how your school implements high standards of nutrition, fitness, and quality outdoor time for both students and staff. (Maximum 250 words)

Kimberly Hampton Primary School participates in the U.S. Department of Agriculture (USDA) National School Lunch and National School Breakfast programs. Kimberly Hampton Primary School provides nutritionally balanced meals to children each school day. The dietary guidelines promote the ABC's for good health: Aim for fitness, Build a healthy base, and Choose sensibly. Meals have plenty of fruits, vegetables, whole grains, and fat-free and low-fat milk, are moderate in sodium, low in saturated fat, and have zero grams *trans*-fat per serving. Reminders for proper food choices are posted for student view on monitors in the cafeteria. To

U.S. DEPARTMENT OF EDUCATION

meet the children's nutritional needs and enhance their ability to learn, Kimberly Hampton Primary School encourages all children to have breakfast, either at home or at school. To support the promotion of having a healthy breakfast, the school offers the National School Breakfast Program and arranged bus schedules to facilitate participation in the breakfast program. In the classroom, healthy snacks from home are encouraged.

Physical education classes are provided to students using an age-appropriate, sequential physical education curriculum that promotes the benefits of a physically active lifestyle and helps students develop skills to engage in lifelong healthy habits, as well as incorporate essential health education concepts. Students are exposed to "Fitness Gram" components that measure the five components of health-related fitness: Aerobic Capacity, Muscular Strength, Muscular Endurance, Flexibility, and Body Composition in preparation of fitness assessments that begins at age 10. The school gym is equipped with age appropriate equipment. Students have 20 minutes of recess daily and movement breaks are incorporated throughout the day. The school grounds have designated developmentally appropriate playgrounds to allow for free play and include playhouses, swings, slides, tricycle paths and play fields. The staff is encouraged to participate in weekly morning stretch sessions and to use the community gym for fitness and exercise after school.

## **Pillar 3: Provide effective environmental and sustainability which incorporates STEM, civic skills, and green career pathways.**

## Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems.

1. Describe how your school integrates and assesses/measures students' environmental or sustainability literacy at each grade level including curriculum, courses, outdoor learning, and assessments. (Maximum 250 words)

Students at Kimberly Hampton Primary School use Project Based Learning to learn, apply, and expand their basic skills in reading, writing, math, social studies and science. Project Based Learning is a teaching and learning method in which students gain knowledge and skills by working for an extended period of time (usually about six weeks) to investigate and respond to a complex question, problem, or challenge. Science, technology, engineering, art, and mathematics (STEAM) is a focus the students use when investigating and solving their problem. A Stemposium featuring student solutions to real word problems is held in the spring. A STEAM lab containing resources for teachers to check out to use in the classroom is available. Two roof top gardens are used as outdoor learning environments focusing on plant life cycles, the water cycle, and conservation, and students enrich their learning in the afterschool Garden Club.

The curriculum includes presentations from STEM resource persons representing engineers, forestry personnel, and STEM industry workers. The engineering design process is used in the project based learning activities.



Kimberly Hampton's Robotics Club captures young children's curiosity and directs it toward discovering the wonders of science, technology and engineering. This club uses Lego materials, BeeBots and littleBits to explore real-world scientific concepts through research, teamwork, collaboration, construction, and imagination. In conjunction with the Robotics Club, six members from the fall Robotics Club will be chosen to participate in the Junior FIRST Lego League (JrFLL). The task for the JrFLL team members will be to research a topic and build a Lego model representing the theme for display at EXPO. This year's theme is "Waste Wise;" with a focus on recycling.

2. Describe professional development opportunities available to your teachers in environmental and sustainability concepts and the number and percentage of teachers who participated in these opportunities during the past 12 months. (Maximum 250 words)

Prior to the opening of Kimberly Hampton Primary School in the fall of 2014, all selected faculty participated in intensive professional development over a period of six months regarding the effective use of project based learning in the curriculum to solve real word problems. To ensure the effective use of this instructional strategy, ongoing, weekly professional development is provided by our staff development teacher. Within these collaborative professional development opportunities, training is given on best practices of project based learning, STEAM, and 21<sup>st</sup> Century Skills teaching and learning.

Our STEAM team, comprised of teacher representatives from each grade level, and the STEAM teacher, receive ongoing district support on the effective instruction of STEAM concepts and attend workshops and classes on the use of STEAM curriculum materials and resources. The STEAM team shares information with all teachers at faculty and grade level meetings. The STEAM teacher works collaboratively with colleagues to develop and co-teach lessons using STEAM. She regularly pushes into the classroom to assist students in developing their STEM knowledge and application to projects.

## Element 3B: Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy.

1. Describe how environmental and sustainability education at your school supports teaching science and engineering practices (e.g., asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument from evidence) and supports robust general science education that includes a deep understanding of life, physical, and earth sciences. (Maximum 250 words)



The project based learning opportunities at Kimberly Hampton Primary School support rigorous inquiry based science education and a deep understanding of applicable life, physical and earth science concepts. Educators design units that incorporate the science content along with a driving question that the students need to research and create solutions for. Students use technology resources to collect data and information to formulate their research based conclusions. These in-depth studies take from 6 or 9 weeks and support the application of science content knowledge.

Kimberly Hampton Primary School has two roof top gardens where outdoor learning takes place. Featured are classroom lessons from the life and water cycle to plants and conservation. The Garden Club meets in the roof gardens weekly. Students use a bicycle powered pump to water the plants from rain water that has been collected in barrels. The school's windmill and solar panels also provide teachers with the opportunity to instruct about alternative forms of energy and environmental awareness.

The Robotics Club focuses on using Legos to build a model to solve a real world problem. After learning about waste management, students are creating their own models to assist our community with this issue.

2. Describe how your curriculum connects classroom content to career and college readiness, particularly post-secondary options that focus on environmental and sustainability field studies and/or careers. (Maximum 250 words)

Kimberly Hampton Primary School's project based learning intentionally incorporates the 21<sup>st</sup> Century skills as learner outcomes. All integrated units are designed to address these outcomes: critical thinking and problem solving, collaboration across networks and leading by influence, agility and adaptability, initiative and entrepreneurship, effective oral and written communication, accessing and analyzing information, and curiosity and imagination. Within the unit design, science concepts are featured and careers within the area of study are discussed. Professionals, parents, and other stakeholders from the community employed in the science field are regularly guest speakers. The planned use of 21<sup>st</sup> Century tools in the curriculum support the focus of STEAM and Green technology.

### Element 3C: Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community.

Describe your students' civic and/or community engagement experiences integrating environmental and sustainability topics/concepts, field studies, community service, etc. Address if and how students conduct an age-appropriate community engagement projects around a self-selected environmental or sustainability topic at every grade level; and partnering with local academic, business, informal science institutions and/or other schools to help advance the school toward the 3 Pillars and/or assist the progress of (an) other school(s), particularly a school with lesser capacity in these areas. (Maximum 250 words)



Students at Kimberly Hampton Primary School are developing their knowledge of how they are part of a global community and how their actions can impact their world. Beginning in Kindergarten, students create a model of their home and community. First graders continue the theme and develop more awareness of how humans can impact the environment. Second graders examine the impact of humans on the world. Through the use of project based learning, students formulate and present their own solutions to real world environmental issues.





Kimberly Hampton Primary School Gardening Club

Rain water is collected for plants on our Roof Garden. Students use the tricycle to pump water into the hose.

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First graders program Legos in the Robotics Club.



The windmill and solar panels are used as teaching tools for conservation and energy units of study.