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.

8. The school or its district has in place and is willing to provide a link to or a copy of a non-discrimination policy, upon request. The U.S. Department of Education reserves the right to disqualify a nomination and/or rescind an award if unlawful discrimination is later discovered.

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

Name of Principal: Mrs. Tara B. Mitchell
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: Park Forest Elementary Creative Sciences & Arts Magnet School
(As it should appear on an award)

*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.

**[Signature]**
(Principal’s Signature)

Date: **February 13, 2023**

Name of Superintendent:
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)
District Name: East Baton Rouge Parish Public Schools

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

(Signature) Date: 2/15/23

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: Louisiana Department of Education

Name of Nominating Authority: Sharon Necaise, Deputy Assistant Superintendent of Academic Content

(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.

Sharon Necaise Date: 2/13/2023

(Nominating Authority’s Signature)

SUBMISSION

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

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

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.
Nominee Contact Information:
Park Forest Elementary Creative Sciences & Arts Magnet School
Category: Elementary School
Address: 10717 Elain Drive, Baton Rouge, LA 70814
Website: www.Parkforestmagnet.org
Facebook: Park Forest Magnet
YouTube: Park Forest ElementaryCSAM

Principal: Mrs. Tara B. Mitchell
taramitchell@ebrschools.org
Phone: 225 272-0814
Phone: 225 610-3382

Pell Recipients: N/A
Free and Reduced Lunch: 100%
Minority: 17.6
Limited English Proficiency: 15.5%
Special Education: 10%
Graduation Rate: N/A
Attendance Rate:
Enrollment: 478 students
The number of schools: 1
Number of Buildings: 3
Campuses: 1
Park Forest Elementary Creative Sciences & Arts Magnet (PFECSAM) is a traditional magnet school with a theme of Creative Sciences & Arts with a concentration in Renewable Energy and Water Conservation. In 2017, the school received a Magnet Schools Assistance Program (MSAP) grant that created a gateway to resources that transformed the school from a letter grade of an “F” to a “C” in two years all while concentrating on a “Park Forest Elementary Pirates ARRRR Going Green” theme. This transformation began with the school creating three laboratories to engage our students: Entertainment Technology, Creative Smart Lab, and Renewable Energy Lab. In the Entertainment Technology Lab students create podcasts that aligned with the school’s theme to engage the community in the conservation work that occurs at Park Forest Elementary. The Creative Smart Lab and Renewable Energy Lab use STEM-based lessons to educate students on sources of renewable energy, and the conservation of water and energy. Additionally, students can experience different types of gardening such as the traditional raised garden beds outside on the campus and the aeroponic garden towers inside of the Renewable Energy Lab. The school’s efforts are shared and communicated to families and the community through school events, the school app, the website, and JCampus callouts.

Park Forest Elementary is located in the Park Forest neighborhood in the city of Baton Rouge. The school is part of the East Baton Rouge Parish School System. As a magnet school students from across the city can also select to attend the school. These students take part in the transportation system provided by the school district or they are carpoolers. The socioeconomic status of the families that the school serves is lower class and we currently service 470 students. Park Forest Elementary CSAM is classified as a Title I school. The students are all eligible for the free lunch provided by the U.S. Department of Agriculture (USDA) Community Eligibility Provision, the Child Nutrition Program.

The entire magnet staff attends professional development and conferences throughout the year to broaden teachers' perspectives about instruction, project-based learning, and overall how to better serve the students enrolled at Park Forest Elementary. This past summer the magnet staff attended The Smart Lab Conference in Boulder, Colorado. The conference was an opportunity to learn about scheduling and maximizing the time and equipment in the Smart Lab and the school’s other specialized labs. The staff has also attended Magnet Schools of America conferences that have exposed teachers to exemplary schools all around the country.

We have applied for Grants such as Project Lead the Way and Donors Choose, Explore Learning Frax Math Educator Grant, and many more in the area of math and science. Our current school score is 56.4 D, However, we grew in the area of science in every grade level except for a 1-point decrease in fourth grade. We are aggressively trying to increase our current school score this year to a “C” through data analysis, vertical planning, project-based learning, STEAM, and the use of strong supplemental materials that support the Tier I curriculum.

Park Forest Elementary has reduced its overall energy consumption (in kBTU) by 41.6% and its EUI by 40.5% compared to usage in 2015. This is equivalent to a reduction in greenhouse gas emissions by 909 metric tons. Park Forest Elementary CSAM is conserving energy and working to improve conservation in every area of the school. The East Baton Rouge Parish school district cares about energy conservation.
Developing strong relationships with the facilities management companies contracted by the district, HES, and Aramark has helped the school to maintain and continue to grow in the areas of energy conservation on the campus. Park Forest Elementary was awarded a certificate of appreciation for the support of the Energy Management Program through the demonstration and promotion of energy-efficient actions and behaviors of the faculty, staff, and students of our school.

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

Park Forest Elementary Creative Sciences & Arts Magnet is a school within a school that services magnet and traditional students. The funding was made possible by the [Magnet Schools of America Grant](https://www.magnet-schools.org) funded in the 2016-2017 school year. During the Great Flood of 2016, the first year of the grant, the school flooded, which caused a renovation of the entire school. Park Forest Elementary Creative Sciences & Arts Magnet moved to a temporary location. The school partnered with Star Energy to purchase energy-efficient appliances and devices as needed to begin the following school year. The builders CSRS deemed it necessary to conduct biweekly meetings to discuss the vision for the building with the principals and building team. The building of walls to replace sliding doors that had previously joined classrooms, and the HVAC system were all considered in the discussions with the maintenance team and the school board contractors CSRS. The partners at Energy Star understood the administration's commitment to energy efficiency, and the company suggested products aligned with that vision. This was an excellent collaboration for energy conservation.

Daily school operations became more energy efficient through the use of motion sensors on various school equipment. Motion sensor lights ensure that lighting is only used when necessary, decreasing energy costs, and increasing the life of the LED light bulbs. LED lighting replaced the previous bulbs, which were more costly. The school’s camera system functions on a motion sensor system and has helped with monitoring the school campus. Non-programmable thermostats were replaced with energy-efficient digital devices that teachers could adjust with ease. The school also continued its vision of energy conservation by replacing and adding weather stripping between doors and the floors and placing installation into the walls to conserve energy while heating and cooling the school buildings. Students were a part of the effort through their observations and writing on how weather stripping could better conserve the energy of the school.

Water fountains at Park Forest Elementary Creative Sciences & Arts Magnet were replaced and are now water bottle filling stations. Students are encouraged to bring reusable water bottles from home to school to ensure a reduction in plastic waste. To lessen the amount of water utilized by students in the restrooms motion sensors were added to the handwashing stations and also the toilets. The hand washing station in the cafeteria is also equipped with a motion sensor.

The water quality of our school is checked regularly by the Baton Rouge Water Company.

The students and staff worked with our stakeholders Big Buddy to revitalize the front landscaping of the school to better drain water from the flower beds by use of mulch and pebbled rocks. The students and volunteers worked to lay the mulch and clear drains for efficiency on several occasions with various stakeholders. The school made water conservation decisions through the help of volunteers to install raised garden beds to encourage the growth and development of vegetables. Students use buckets from our stakeholder, LOWES, to collect rainwater to saturate the raised garden beds as needed. This
promotes student awareness of simple ways to conserve and use water at home. In addition, our partner Aramark provided the school with conservation campaign fliers to educate families about how to conserve energy through simple actions that protect the environment and save the average family up to $5 a month on electricity costs. Leaky and clogged gutters on the building that hampered the removal of water from the roof were identified and repaired as a part of our conservation efforts.

It is a school effort to recycle paper from the classrooms using the blue recycle collection bins and recycling dumpster provided by the Republic Collection Receptacles. The dumpster is used to collect cardboard boxes, paper trash, and cans in addition to other items.

**Expanded use of alternative transportation, through active promotion of locally available, energy-efficient options and implementation of alternative transportation supportive projects and policies**

At PFEC SAM we use a silent dismissal system to reduce the time needed for dismissal and through the use of walkie-talkies that run on rechargeable batteries, our communication is excellent. The walkie-talkies are useful for fire drills, programs, and aftercare parent arrival. The rechargeable batteries help us to stay prepared for efficient communication at all times.

Many of the students that live in the surrounding community walk home from school... Through the use of 2 crossing guards (on each side of the school, the students are taught to walk on the sidewalk safely until they reach their homes or parent. Most students live within 3 blocks of the school.

**The narrative for Pillar II: Efforts to Improve the Health and Wellness of Students and Staff**

**Element IIA: Nutrition and Fitness**

Park Forest Elementary Creative Sciences & Arts Magnet utilizes the EBRPSS Child Nutrition Program (CNP) to serve nutritious, appetizing, wholesome, affordable meals to students and staff. School meals are planned to comply with the District Wellness Policy and all federal/state regulations for nutritious meals.

Through the U.S. Department of Agriculture (USDA) Community Eligibility Provision, the Child Nutrition Program offered students in our school district breakfast and lunch at no charge to parents. Park Forest Elementary Creative Sciences & Arts Magnet is one of the twenty-two elementary schools in our school district to participate in the *Fresh Fruit and Vegetable Program* allowing students to receive 1/2 cup of fresh fruit or vegetables at no cost and at a time other than at breakfast or lunch within the school day. This additional snack allows the students to go home without feeling hungry. This will help them concentrate on their homework assignments and decrease the amount of junk food consumed during the day. Students participating in our afterschool programs also receive healthy snacks to continue building healthy eating activities throughout the day. In addition, during meals, special diets are provided to students with doctors’ orders. The cafeteria staff works in collaboration with parents, nurses, and physicians to modify menu adjustments and train CNP on the needed menu changes. Many parents of students utilize this accommodation.
Our school has 2 full-time nurses on campus due to having diabetic students that attend our school. These students’ glucose monitors must be checked during breakfast, lunch, and snack time. Having a nurse on campus for the school day gives parents the confidence in knowing that if there is an emergency there is someone on campus qualified to assess and treat their child. Puberty classes are also conducted on 4th and 5th-grade girls and 5th-grade boys on the expectation of the body during pre-teen ages. The girls and boys must bring in a consent form to attend the session. The nurses also conduct a hearing and vision screening for Pre-K through 5th-grade students annually which assists the school in assessing the well-being of all students.

The school nurse is also responsible for monitoring the reporting of positive cases of COVID-19 within the school. They also distribute COVID-19 letters to notify parents of a child’s positive status. Students are also encouraged to wear a mask when needed until a negative test result is reported by the Orion Testing Center (testers of registered students of our school) or home notification from a private doctor).

Our school also uses the Louisiana Smart Snacks listing provided by the Pennington Biomedical Research Center in cooperation with the Louisiana Department of Education, Office of Nutrition Support. This listing of healthy snacks has proven to be valuable in the reduction of calories of snacks to 200 calories or less with 0 transfats in the sale of concession items for students. This activity occurs once a week as an incentive for the completion of homework and classwork. Healthy Snacks such as fruit snacks, Pop Chips, and Capri Suns are all on the listing and the students love them. The students have learned through the selling of concession sales which snacks are considered healthy through this weekly activity. The snack listing is shared with parents as a suggestion for students’ snack consumption at home.

Our school offers a variety of activities that keep students moving in addition to Physical Education and dance classes that are offered at their ancillary time weekly. The Physical Education classes are held most times outside. The students are encouraged to run, jump rope, and learn the rules of various sports. The dance troop and the basketball teams are also extra-curricular activities at our school. Our school has a dance troop that participates in programs and annual shows hosted at the school. Dance classes offer students physical movement and enhance student learning. They practice in ancillary classes and after school. Students are given a chance to increase their heart rate long enough to make a healthy impact on the student's physical health.

Element IIA (cont.) School Health, Mental Health, School Climate, and Safety
PFECASAM is equipped with knowledgeable school leaders that help in the management and upkeep of student culture and the acknowledgment and practice of restorative practices. Our school mission states that we educate students in academic, social, and character development. This simply means that the feelings and concerns of students are our feelings and concerns. We have a professional school counselor, an iCARE counselor, and a licensed prevention professional as our assistant principal. Our team has proven to be an asset when addressing the needs of the 470 students enrolled in Park Forest Elementary. A positive social and emotional school climate is conducive to effective teaching and learning. Students receive weekly social and emotional learning lessons and activities through the ReThink Ed Social and Emotional Learning platform the school district provides. Through this platform,
students receive a 20-minute block of time daily with opportunities for discussions about their feelings and their reactions to others socially. Classroom teachers along with the guidance counselor monitor students’ progress throughout the program. Teachers are given a schedule of topics to cover by the school district. Still, teachers have also realized a better use of the program is finding the lessons in ReThink Ed that teach the social/emotional skills that their students may be struggling with at the time.

Our partners from Atmos Energy came into the school to make social connections with students and teachers. A motivational space was created in the lounge for teachers to see positive quotes/posters and drink a cup of coffee or tea. The lounge was organized with healthy snacks for teachers to enjoy and share. In addition, a microwave was purchased for teachers to use to conserve time while at lunch. The Atmos team also decorated pumpkins with the kindergarten students and read stories. One of the members of Atmos was dressed like a pirate (our school mascot)! The students loved it. They then discussed types of energy sources with the 3rd-4th grade students and visited our campus to learn about all we had to offer in the smart lab and renewable energy lab. The Atmos team members learned about how the garden towers were another way to grow food and reduce water and energy consumption and the benefits of coding in an elementary school through the visit of our Smart Lab.

We recognize that healthy students lead to a higher student attendance rate and more students at school learning. At Park Forest Elementary CSAM administrators put several initiatives in place to educate students on preventing the spread of communicable diseases. When government guidelines required masks due to COVID the administrator at Park Forest Elementary CSAM also decided to create a COVID pledge. The COVID safety pledge reminded students of the importance of wearing their masks and washing hands and distancing apart. It was included as part of the morning announcements. Even now that wearing a mask is optional and COVID numbers have decreased at Park Forest Elementary CSAM students are still greeted at the door each morning and given hand sanitizer as they enter the building. Students are reminded of the importance of keeping their hands and desk surfaces clean and to assist wipes and hand sanitizer are available in all classrooms daily.

The school also offered incentives to encourage parents to sign up for their children to participate in weekly COVID testing.

The mission of our school to inspire and support students while striving for excellence in academic, social, and character development of students is emphasized through the programs, activities, and clubs that serve the students of the school. The “Positive Behavior in Schools” (PBIS), promotes students to be respectful, prepared, and cooperative. These expectations are posted around the school and in all classrooms. The school’s PBIS committee develops monthly incentives for students whose behavior exemplifies the expectations.

Our school counselor’s description of tasks completed for student mental health is important to the culture of the school. She pulls small groups of students who experience similar issues with anger, grief, anxiety, etc. We do allow shadowing during classroom visits and referrals to support services such as ICARE when needed.

An anti-bullying campaign was held last year. All students participated in the virtual workshop. As teachers began to reflect with students it was observed that they enjoyed parts of the presentation and plan to exercise their ability to calm down without assistance.
Character development is reinforced for the 4th and 5th-grade students through clubs such as OMG Girls and Young Men of Character.

Our school services students in Pre-K through 5th grades. Each grade level has dedicated magnet classes with the exception of Pre-K. Magnet funding assists us in taking our magnet and traditional students on trips that cater to their intellect and curiosity through unique experiences. We traditionally take a yearly trip to Houston, TX. There, we experienced iFly and NASA. Students were able to learn about science in ways that intrigue their intellect and prompted students to ask questions.

Not only is providing for the health of students important but also that of the teachers at Park Forest Elementary CSAM. When teachers are chronically absent due to poor physical or mental health, the need for substitute teachers increases. This can disrupt classroom activities and student learning. Administrators see promoting teachers’ health as an investment in students’ learning. An Employee Wellness Program to encourage school practices that promote staff health and attendance is provided by the school district. The wellness program is part of employment benefits that include health insurance and retirement benefits. Teachers are encouraged to participate in the health promotion activities, such as annual health fairs, safety training, health care screenings, and flu shots. Park Forest also has a “Sunshine Committee” that provides monthly acts of kindness for faculty and staff members.

The vision of Park Forest Elementary Creative Sciences & Arts Magnet School is that of providing a learning environment centered around critical-thinking scholars, guided by teachers, and supported by home and community! We have invaluable stakeholders that are helping to achieve that vision. Brandon Ballengee conducted sessions with our students that supported their understanding of renewable energy and water conservation through art. Mr. Ballangee is a biologist and professional artist. The Baton Rouge chapter of Link Inc. funded his visit to Park Forest Elementary Creative Sciences & Arts Magnet through their ongoing partnership with the Arts Council of Greater Baton Rouge to support raising awareness of water and energy conservation. Through this very needed experience, the students were able to have an in-depth look at what it really means to be a renewable energy school through discussion and discovery. They began researching types of energy, and how to conserve water. The students adopted the theme for the school year Park Forest Elementary Pirates ARRRR Going Green. We pushed the theme by initiating a T-Shirt contest that focused on the information taught by Mr. Ballengee. The students drew pictures that embodied what they thought “Park Forest Elementary is Going Green” meant. Three designs were chosen from the entries. One of the designs was used to create school-wide note cards for stakeholders as an expression of thanks while educating them about the idea of water conservation. The other two drawings by students were combined to create one image for the school’s spirit t-shirt that is worn on Fridays. It was exciting for the student artists to see their designs on t-shirts being worn by other students at the school. Mr. Ballengee’s visit had a big impact on the school. Volunteers from Big Buddy along with Park Forest Elementary students painted the storage shed along with the theme “Park Forest Elementary is Going Green” as a daily reminder to recycle, save water, and take care of the environment. This is a true testament to the student's dedication to the cause of conservation and the stakeholder's support of our school's theme and its dedication to our students.
Our community partners, Victory Harvest Church and The Knights of St Peter Claver, installed our garden beds where students have been able to plant vegetables. Our community partners and students have worked together to maintain the beds. Also, our partnership with Lard Oil Company has provided gardening supplies for the school.

Atmos Energy has promoted a positive mindset and has helped to sustain the mental health of the faculty and staff by providing positive affirmations for the faculty and staff to be reminded of throughout the day such as “Today is a good day to have a good day”.

Southern University Agriculture has partnered with our Physical Education classes to host student health and nutrition classes. This nutrition, health, and wellness programming incorporates culturally effective messages that are evidence-based, relevant, and beneficial to our school. Additionally, nutrition programs provide research-based initiatives that coincide with the USDA Dietary Guidelines and MyPlate Food Guidance System. The SU AG staff engages with the Park Forest Elementary community, educating and empowering teachers, students, and parents to respond to the information provided to create healthier communities.

The support of the students’ families is also crucial to the success of Park Forest Elementary. To build those relationships between the school and home Park Forest Elementary has a full-time Parent Liaison. She is responsible for building a bridge between the school and parents. The classroom teachers have established ClassDojo as a communicative tool with parents. Parents are also able to stay informed of school events through the school’s website, app, and social media sites. The JCampus callouts are critical to the success of community awareness and the ability to secure a well-attended event. Parental involvement is needed for students to stay connected with school and all it has to offer for the students to participate in.

Red ribbon week, Restorative Circle Friday, the ICARE counseling program, Gardening with Grandparents, the Veteran’s Day Event, Hispanic Heritage Month, i-literacy night, local visitors to teach, the Holiday concert, and weekly basketball games are all activities that promote and foster our parental involvement with their children and grandchildren. Exemplary customer service is what we aspire to give each parent as they come to our campus.

**Element IIA: Integrated School Environmental Health Program**

At Park Forest Elem Creative Sciences & Arts magnet, HES Facilities Management is responsible for the indoor air quality of our building. Their mission is to create a safe environment that enriches lives and facilitates success in the cleaning and maintaining of the school environment. The air conditioning filters are changed once a month. Star Service Inc. maintains the function of the air conditioning system and the use and working condition of the thermostats. Air conditioning filters replacement which happens once a month ensures the air quality is maintained. Heating Ventilating and Air Conditioning (HVAC) systems are monitored and maintained for quality airflow. HES also controls the switch from heating to cooling and vice versa within the building as needed for appropriate temperature for Louisiana’s fluctuating weather patterns. Whether stripping is managed to ensure the building is energy efficient. The threat of COVID-19 is still maintained by the school nurses but the HES-employed janitor prepares a chemical disinfectant to spray COVID-19-positive classrooms because of the virus's ability to spread. This maintains the health of employees and students once the classroom is evaluated. Pest Management Company Orkin sprays the school for pests monthly inside and outside the building. Deep cleaning of
the school is completed each night and feedback is given to HES facilities management every month to report the sanitation of the building and the follow through of workers with cleanliness and their ability to lock up the building appropriately. Teachers are allowed to give input to the grading of the cleaning crew due to their satisfaction or dissatisfaction with cleaning throughout the day.

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

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

At Park Forest Elementary Creative Sciences & Arts Magnet, the STEAM theme is integrated throughout the building in our magnet laboratories and core classes through the use of project-based learning. During the first semester, 4th-grade students were working on a surviving hurricanes unit in their ELA classes. The students were reading about the possible emotions and feelings people experience before, during, and after a hurricane. To extend the lesson, our Entertainment Technology Lab facilitator started lessons discussing how feelings and emotions are expressed through music. Through the use of technology students’ final project for the unit was to compose a song by engineering and building tracks that represent how they felt after experiencing Hurricane Ida in 2021. Students mix and master their tracks and presented them to the class. Additionally, students had to compose a descriptive essay describing the emotions and feelings they expressed with the song.

The school’s outdoor garden is a wonderful interdisciplinary learning experience for the students. The vegetables chosen for the garden beds are directly connected to standards or important concepts for student learning. For instance, one garden bed was dedicated to the “3 Sisters” - corn, beans, and squash, as the 5th-grade students learned about Native Americans. The pollinator garden correlates with the studies of students in second grade in ELA as they read and research about pollinators and science for kindergarten students as they learn about butterflies.

Third-grade students experienced harvesting, preparing, and cooking okra in relation to the 3rd-grade Social Studies curriculum that covers Louisiana.

The Renewable Energy Lab facilitator has also participated in professional development with National Agricultural in the classroom to devise teaching strategies to increase agricultural literacy among the students. The goal is to improve student achievement by applying authentic, agricultural-based content as the context to teach core curriculum concepts in science, social studies, language arts, and nutrition. Through this program, students have participated in several Agclassroom lessons. For example, students read and watched videos about corn, and the popping of popcorn and were able to relate the phenomena of popping corn to 5th-grade standards about the particles in matter and chemical and physical properties changes. The Christmas holidays were a great time to study evergreen and chemical and physical properties changes. The Christmas holidays were a great time to study evergreen trees. Students did a virtual tour of a Christmas tree farm, viewed how Christmas trees are harvested and packed and a local florist donated evergreen tree clippings for students to study. The lesson also included a discussion about the pros and cons of purchasing a real or artificial Christmas tree.

The Project Lead the Way Grant that the school received is another curriculum source that is providing the students of Park Forest Elementary with project-based learning opportunities. When first and second-grade students had science units on plant and animal relationships and plant and animal defenses students did additional reading and research in the Renewable Energy Lab to design clothing and tools to dress a traveler to survive in a given habitat. Another project was for 3rd and 2nd-grade students. As students learned about the environment and survival and pollinators they were given the
task of designing a bee habitat model that promotes bee survival and meets the needs of bees. Students also share their learning by creating a public service announcement about why bees are important and the consequences of the declining bee population.

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

The Smart Lab at PFECSAM includes Lego We Do, Lego Spikes, Co-drones, Dash and Dot along with Que are all programs used to engage students in the hand on robotics systems necessary for exposure to engineering and power designs. Circuits are used to help students better understand the sequence and connections needed to accurately connect to identify sources of power and accuracy identity sources of basics of electricity along with the flow of energy. Students are engaged in the control of electrical circuits by harnessing the power of electricity. This is a skill that is needed in the 4th grade for LEAP 2025 testing. The rigorous curriculum of the Smart Lab includes all the other elements of STEM that are aligned with creativity, expression, and problem-solving skills such as the use of Javascript language to write code including syntax, methods, parameters, strings, loops, and variables to program characters in a game.

In the Renewable Energy Lab students engage in STEM and the design process as they learn about renewable energy sources. Students consider the pros and cons of both renewable and nonrenewable energy sources. Students are hands-on as they explore solar, wind, and hydropower energy sources and complete real-world given tasks. For example, students not only use a solar panel but also had to consider if they were creating a solar farm what would be the best way to maximize the amount of solar energy their panels could capture. This led to students experimenting to find the best angles for the panels compared to a light source and using Legos to build a holder for the panel that was adjustable.

At least one teacher from each grade level has attended a NEED Project professional development session and/or national NEED Project conference. The NEED curriculum and kits are a vital resource for STEM lessons in the Renewable Energy Lab. The Renewable Energy Lab contains kits covering wind energy, solar energy, and hydropower. Just recently students were challenged to use the design process to develop blades for KidWind turbines that would create the most energy.

**Development of civic engagement knowledge and skills and students; application of such knowledge and skills to address sustainability issues in their community.**

Civic engagement is the heart of our school and the mindset of our students and teachers. Students have developed their skills and knowledge of civics through experiences and engagement with the community through the leadership of teachers.

The two mentoring groups of our school The OMG Girls and Young Men of Character teamed up to complete community outreach for the betterment of others by feeding the homeless and less fortunate. These groups also helped to distribute toys, donated by Toys for Tots and Fed EX Freight, to every child in our school. Led by the Park Forest Elementary CSAM Magnet team students took part in collecting water donations for McLeod Elementary in Jackson MS. This created awareness that water is scarce in some nearby places which prompted students to ask questions about day-to-day operations in a school with scarce water supply and how can we prevent it in our own school.
Park Forest Elementary students take an active role in understanding the cause of water waste and how to communicate simple tips to decrease waste. Mayor Sharon Weston Broome deemed September 24, Park Forest Day four years ago for winning the city-wide water challenge. We took the Wyland Foundation National Mayor’s Challenge for Water Conservation and won in 2019. Our students, led by Mrs. Renita McQuirter entered a city-wide contest allowing the school to take the water pledge to conserve water and won a city-wide award. This award was given by Mayor Broome and was a huge honor and acknowledgment for our school. During her visit to our school, she deemed Park Forest Elementary Creative Sciences & Arts Magnet Day to be September 24th because we won the Water Challenge through families pledging to decrease water use in the community. Our special day is always celebrated with school pride.

Park Forest Elementary also makes effort to bring awareness to the local community on energy and water conservation practices. The school’s Gardening with Grandparents Event serves to educate the community about the use of hydroponic/aeroponic gardening for growing vegetables more efficiently and conserving water in the process. This method of growing vegetables is an alternative to water sprinklers in the regular gardens of the local community. We are the only school in our district that sponsors a “Tower to Table” program promoting healthy eating with students and awareness of conserving energy and water in the process of growing food efficiently through hydroponic/aeroponics farming. The Gardening with Grandparents event was also used to demonstrate how easy upcycling of what may be considered “waste materials” can be. To extend the size of the outdoor gardening area pallets left behind from deliveries to the school were upcycled into planters. Grandparents were asked to bring any 2-liter plastic bottles that they may have had at home to the gardening event. The bottles were transformed into planters that students could decorate, soil and seeds were added and lastly, students chose a spot on the pallets to hang their plastic bottle planters.

The upcycling of what may be considered “waste materials” has been a very student-friendly approach to teaching students about ways to conserve the Earth’s resources. For the last two years, students have created their own upcycled Christmas ornaments as a part of the Pirate family’s activities for the holidays. Each year it has been a huge success with enough ornaments to place on trees around the school. This provides students with a sense of pride, creativity, and uniqueness and lessens the financial burden on parents.

The school’s STEM Challenge team is currently designing a classroom learning center using the upcycling of “waste materials”. The Park Forest parents have sent in donations and after its completion, the team will donate it to a lower-grade classroom.

The choir has participated in creating lyrics to our school song led by the director of the Singing Pirates, Ms. Domonique Gibbs to promote the magnet theme of conservation. This has proven to be an effective way to incorporate water conservation into the minds of students, families, and community events. Christmas caroling by walking through the neighborhood has been successful in making the students conscious of the number of steps make a mile and the good effects of exercise for the family as they participate in the caroling event. This has been an impactful part of the choir’s programming. A few
places they have performed with a mission of communicating conservation are in the courtroom of Judge Johnson, the East Baton Rouge Schools Student of the Year Program, and the East Baton Rouge Arts events. As a special performance for the Magnet Schools of America Conference which took place in Baton Rouge, Park Forest Elementary Creative Sciences & Arts Magnet was featured on the school tours list. We are also scheduled to perform at the Best of Green Schools Conference of 2023 in New Orleans! Our Creative Arts, Water Conservation, Renewable energy, and Smart Lab have exposed our students to “a tomorrow we are trying to learn about”! They will be prepared for the future with the progression and continuation of the theme in our Middle and High neighboring schools because of their “green school focus”. In the Entertainment Technology Lab, students can participate in two learning pathways: Music and Audio and video production (AVP). In AVP, the students lead in creating music, videos, and podcasts in our fully functional recording studio. Photography is an extension of our AVP pathways. Students capture, edit, and publish pictures. In the music path, students learn different aspects of music, including vocal, instrumental, and performance. These three laboratories have opened up a world of possibilities for our students in the field of STEAM. Students take charge of creating music, photography, videos, and podcast to show the work that’s being done in our Renewable Energy Lab, Creative Smart Lab, and school-wide. Some of the projects the students have produced on the entertainment technology side were: creating a school song that tells the theme of the school, taking photos of students working in the labs, and creating videos that showcase what activities students are working on in the other labs. These projects are used to share with the community and stakeholders to create a deeper understanding of renewable energy sources and the conservation of water and also showcase our students who are the next generation of clean energy leaders.

**Summary Narrative: An Overview of Your Work Encompassing All Three Pillars**

Park Forest Elementary Creative Sciences & Arts Magnet School is a Magnet Pre-Kindergarten through 5th-grade school with a theme of “Creative Sciences and Arts” and a focus on renewable energy and water conservation. Funded by the Magnet School of America Grant since 2017, Park Forest Elementary CSAM provides a unique experience to our students by the way of a music studio and green screen room, choir room (home to the Singing Pirates), Smart Lab (robotics, coding), and the renewable energy lab (renewable energy resources, tower gardens, and raised flower beds). Through the use of tier 1 curriculum, clubs, and project-based learning the school has consistently offered students opportunities to broaden their thinking and synthesize their learning of the curriculum. Through mentoring clubs (The OMG Girls & Young Men of Character) students have participated in community service stewardship that exemplifies their ability to execute the theme of water conservation across state lines. Park Forest Elementary has received numerous awards for participation in competitions, shows in and around the city, and has been awarded *The Best STEM/STEAM school in the Mid-South 2023* along with *The Best of Green Schools* recognition to be announced in March of 2023. Our scholars are academically and socially sound because of our school vision and mission and the belief that we must prepare students academically and socially for what's to come.

Our school campus allows students to discover and wonder. The educational experiences of the music studio, smart lab, and renewable energy lab provide students with the opportunity to learn in a technical yet engaging environment. Exposure to robotics and hands-on circuit activities in the smart lab gives
students a chance at success in the science classroom like never before. Through music production, voice lessons, piano, and the greenscreen the music studio address the needs of the whole child in a way that simply cannot happen anywhere else on the campus. The renewable energy lab gives the teacher a robust feel for what is expected in the future regarding gardening, chemistry, and much more. Measurements, hands-on experiences, and intellectual conversations leading to demonstrations in the classrooms are the norm in the renewable energy lab. Our campus is an experience for every child to have a place to enjoy.

**Park Forest Elementary Creative Sciences & Arts Magnet’s** efforts will continue to expand every day as going green has become not only desirable but attainable. Park Forest Elementary CSAM Pirates are eating healthier, being physically active, and environmentally friendly, and increasing awareness about water and energy conservation in their community. Here at PFECSAM, students are developing into the next generation of clean energy leaders as they create a deeper understanding of renewable energy sources and the conservation of energy. Our ultimate goal is to develop learners for tomorrow that are ready for the ever-changing world that we live in.

**View the photos below.**

Victory Harvest Church Pastor Ben is filling up the raised garden beds along with his team of church members.

This is a student designed shirt that was created from our school wide tee-shirt contest.

Here is a wall that is now closed in with instillation and sheet rock to conserve energy.

This is the professional development of students in the beginning of our learning about renewable energy from Mr. Brandon Balengee.
Tower to Table - Tasting of lettuce grown on Tower Garden

Hydroponics Gardening

Exploring Solar Panels

Gardening with Grandparents
Harvesting, Preparing, Cooking and Tasting of Okra