



## 2015-2016 School Nominee Presentation Form

### ELIGIBILITY CERTIFICATIONS

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#### 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

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X Public  Charter  Title I  Magnet  Private  Independent  Rural

Name of Principal: Mrs. Mimi Moore

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

Official School Name: Spalding Park Elementary School

(As it should appear on an award)

Official School Name Mailing Address: 4101 Stone Avenue

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

County: Woodbury State School Code Number \*: NCES 02178/ school 0601

Telephone: 712-274-4043 Fax: 712-274-4036

Web site/URL: [www.siouxcityschools.org](http://www.siouxcityschools.org) E-mail: [lewisk@live.siouxcityschools.com](mailto:lewisk@live.siouxcityschools.com)

\*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.

\_\_\_\_\_  
(Principal's Signature)

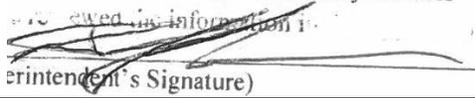
Date: 1/28/16



Name of Superintendent: Dr. Paul Gausman  
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: Sioux City Community Schools

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

  
Superintendent's Signature)

Date: 1/28/16

(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: Iowa Department of Education

Name of Nominating Authority: Mr. Thomas Cooley  
(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: 1/29/2016

(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 [ed.green.ribbon.schools@ed.gov](mailto:ed.green.ribbon.schools@ed.gov) 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](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.

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

Spalding Park Elementary is in the Sioux City Community School District has 650 students in grades PK-5th. Currently, Spalding Park is in the process of becoming an Environmental Science Specialty School. The school campus sits on approximately 12 acres of land and includes a school garden and 48 newly planted trees. The school property also joins up to a 5 acre wooded area owned by the city of Sioux City.

### **Pillar #1 Reduce Environmental Impact and Costs**

Spalding Park Elementary has demonstrated itself a leader in energy conservation within the Sioux City Community School District. When Spalding Park was built, the most up-to-date technologies were used to maximize energy efficiencies.

Element 1A. – The school is housed with a bidirectional cascading central geothermal system. This system has saved the district \$46,583 in electrical costs as well as shown a reduction in CO<sub>2</sub> by 671.015 metric tons. While the district as a whole has saved 25.1% on its energy costs, Spalding Park Elementary has saved 38.8%.

Element 1B. – Water conservation has also been evident as Spalding Park Elementary has avoided 6,587 K/gal of irrigation water. The building also utilizes well field irrigation in areas that are not adjacent to the building. Inside the school building, sensors are used at every hands washing station to reduce the impact of water usage. Forty-eight additional trees were planted in May 2015 to not only reduce water runoff, but also provide energy efficiency to the heating and cooling of the school building.

Element 1C. – Reducing waste and recycling efforts have been a major goal for Spalding Park Elementary students and staff. Our 5<sup>th</sup> grade student council has been at the forefront of this initiative by collecting paper and cardboard for recycling. Spalding Park has led the district's elementary schools by recycling an average of 750 pounds of paper and cardboard per month. Any hazardous materials are disposed of properly off school campus with coordinated efforts by the district's operations and maintenance staff and recycling centers of Sioux City. The school's food service staff has been invaluable in helping eliminate waste by recycling as much as possible. This spring we have the goal of creating a waste compost system for our school gardens.

Element 1D. – As a Blue Zone designated school, Spalding Park Elementary created a Walking School Bus for our students. This occurs on Wednesdays during the spring and fall months. A group of volunteers walk into the community and pick up students at pre-arranged bus stops and then walk back to school. We average 45 students per week walking to school. This program has not only provided additional exercise for our students but also has eliminated a large number of vehicles entering our parking lots. We also offer and promote bike to school days with our students and staff. One of our school climate goals this spring is to create front row car pool parking spots for our parents and staff members.

### **Pillar #2 Improve the Health and Wellness of Students and Staff**

Spalding Park Elementary school has achieved the distinction of becoming a Blue Zone designated school. Our school provides many opportunities for our students and staff to focus on health and wellness.

Element 2A. – Spalding Park Elementary was built with a Trane bidirectional cascading central geothermal system. This system also controls air flow through the school's ventilation system. Outside air is brought in, filtered, and then dispersed throughout the building. The heating and cooling system works as one unit in monitoring moisture

levels in the school. Our operations and maintenance department works closely with Presto X Pest Management in providing the safest solutions in preventing pests on school grounds.

Element 2B. – The health and wellness of our students and staff is taken very seriously at Spalding Park Elementary. Students receive physical education classes twice per week for 30 minutes each time. Students also receive 40 minutes per day worth of recess times. The beginning of each day is started with 5 minutes of daily mindfulness readings. These exercises teach how to control breathing and stay relaxed. Spalding Park offers several resources and programs for staff and students. Employee assistance and counseling provide support to staff, and counseling and mental health therapists provide assistance and guidance to students. Our school offers health and wellness programs through our insurance program. Incentives are available for staff members who attend fitness facilities. Spalding Park is currently involved in Live Healthy Iowa. This is a 10 week program for schools to create teams and set goals regarding health and wellness. Spalding Park students participate in the health cart program. This program provides each student a healthy snack every afternoon.

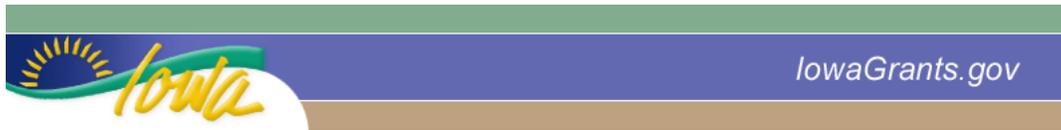
### **Pillar #3 Provide Effective Environment and Sustainability Education-Incorporating STEM, civic skills and green career pathways**

Spalding Park provides effective environmental and sustainable education through a variety of programs and lessons. Our teachers are committed to providing the best instruction for our students and that includes lessons and activities seen through the lens of environmental science.

Element 3A. – Spalding Park teachers provide lessons on Aerospace. Students are learning the mechanics of gravity and creating their own theories. Fourth and fifth grade students also have the opportunity to learn and study about liftoff and air dynamics. Teachers are working with NASA education programs to help students learn about energy and space.

Element 3B. – Spalding Park has brought in several local presenters to discuss with students wild life habitats, recycling efforts, and ways to protect the environment. Classrooms have been using water to investigate sound production and how to identify patterns. Students are also able to observe wind waves and how they are formed. Students are learning how to write their own hypothesis on wave formation and then create experiments. Spalding Park Elementary lies adjacent to city owned property that is approximately 5 acres of wooded terrain with creeks flowing through. We look forward to working with the city to creating outdoor learning centers for our students.

Element 3C. – Our school created a student council program to assist students in leadership roles within the school. These students help plan incentives for the entire school, coordinate the recycling efforts, and also provide mentoring to our younger grades. As we progress to an environmental science specialty school, we will be creating a Junior Naturalist program for students. This program will coincide with our school improvement plan to teach students to respect, value, and contribute to making our school, neighborhoods, and community great places to live and learn.



**FY16 Iowa Green Ribbon Schools - School Application**

***Spalding Park Elementary Environmental Science Specialty School***

*Submitted Date: 01/06/2016 9:55 PM*

**Organization Information**

Organization Name: Sioux City Community School District  
 Organization Type: K-12 Education  
 Address: 627 4<sup>th</sup> St.  
 Sioux City Iowa 51101  
City State Postal Code/Zip  
 Fax: 712-279-6081

**Cover Sheet-General Information**

**Authorized Official**

Name: Kyle Lewis  
 Title: Physical Education Instructor  
 Organization: Spalding Park Elementary School  
 Address: 4101 Stone Ave  
 Sioux City Iowa 51106  
City State Zip  
 Telephone Number: 712-898-4846  
 E-Mail: lewisk@live.siouxcityschools.com

**Fiscal Officer/Agent**

Name: Mimi Moore  
 Title: Principal  
 Organization: Spalding Park Elementary School  
 Address: 4101 Stone Ave  
 Sioux City Iowa 51106  
City State Zip  
 Telephone Number: 712-274-4043  
 E-Mail: moorem@live.siouxcityschools.com

**School Contact Information**

School Name:	Spalding Park Elementary
Street Address	4101 Stone Ave.
City	Sioux City
State	Iowa
Zip Code	51106
Website:	<a href="http://www.siouxcityschools.org">www.siouxcityschools.org</a>
Facebook page:	
Principal Name:	Mimi Moore
Principal E-mail Address:	moorem@live.siouxcityschools.com
Telephone Number:	712-274-4043
Lead Applicant Name (if different):	Kyle Lewis
Lead Applicant Email:	lewisk@live.siouxcityschools.com
Lead Applicant Phone Number:	712-898-4846
School Level:	Elementary (PK - 5 or 6)
School Type:	Public
School Description:	Urban
School District Name:	Sioux City Community School District

Is your school in one of the largest 50 districts in the nation?	No
District Enrollment:	14,100
Does your school serve 40% or more students from disadvantaged households?	Yes
Percent receiving FRPL:	56.0%
Percent of limited English proficient:	12.0%
District graduation rate:	85.6%
School attendance rate:	93.4%
Other measures:	

**Summary Narrative:**

**Provide a narrative describing efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships. Be sure to cover every ED-GRS Pillar and Element.**

**Spalding Park Elementary School, Sioux City, IA**

Spalding Park Elementary has 650 students in grades Tk-5th. Currently, Spalding Park is in the process of becoming an Environmental Science Specialty School. The school campus sits on approximately 12 acres of land and includes a school garden and 48 newly planted trees. The school property also joins up to a 5 acre wooded area owned by the city of Sioux City.

When Spalding Park was built, the most up-to-date technologies were used to maximize energy efficiencies. The school is housed with a bidirectional cascading central geothermal system. This system has saved the district \$46,583 in electrical costs as well as shown a reduction in CO<sub>2</sub> by 671.015 metric tons. Our school has demonstrated itself a leader in energy conservation within the school district. While the district as a whole has saved 25.1% on its energy costs, Spalding Park has saved 38.8%. Water conservation has also been seen as Spalding Park has avoided 6,587 kgal of irrigation water. The building also utilizes well field irrigation in areas that are not adjacent to the building. Inside the building, sensors are used at every hands washing station to reduce the impact of water usage.

Waste and recycling efforts have been a major goal for Spalding Park students and staff. Our 5th grade Student Council has been at the forefront of this initiative with collecting paper and cardboard for recycling. Spalding Park has recycled an average of 750 pounds of paper and cardboard per month for 2015. The school's breakfast and lunch staff have also been invaluable in helping eliminate waste by recycling as much as possible. This year we have the goal of creating a compost system for our school garden.

As a Blue Zone designated school, we created a Walking School Bus program for students. This program was designed to help provide added physical exercise for our students and to also include our families and community members in our school activities. With an average of 45 students walking to school on Wednesdays, this has helped eliminate the number of cars entering our parking lots. We also have specific bike-to-school days for students and staff, and this year we are planning on implementing front row car pool parking spots.

Spalding Park's air handler system works in conjunction with its heating and cooling system by monitoring indoor air quality and humidity levels. Outdoor air is brought into the building and filtered throughout.

As a Blue Zone designated elementary school, Spalding Park prides itself on addressing the health and wellness needs of its students and staff members. Students receive physical education class two times per week for 30 minutes each time. Students also receive three recesses throughout the school day. By beginning each day with daily mindfulness and brain breaks throughout the day, students are actively engaged in taking care of their minds and bodies. There are several resources and programs for our staff and students. Employee assistance and counseling provide support to our staff, and counseling and mental health therapists provide assistance and guidance to our students.

Spalding Park provides effective environmental and sustainable education thru a variety of programs and lessons. Our teachers are committed to providing the best instruction for our students and that includes lessons and activities seen through the lens of environmental science. Teachers are taking their classes outside more, whether it's by studying and working in the school garden or studying a tree and the cycle of its leaves. Many lessons are being taught with STEM development content and students are being engaged and challenged with their critical thinking skills.

The community of Spalding Park Elementary School understands its responsibility to the environment and accepts the challenge to teach its students to respect, value, and contribute to making our school, neighborhoods, and communities as great places to live and learn.

**Participation Summary:**

**Is your school, district, or college participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?**

**Yes**

**Program(s) and level(s) achieved:**

Spalding Park and the Sioux City Community School District participate in the national EPA Energy Star Portfolio Manager. This program coincides with our energy saving efforts at Spalding Park.

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**Awards Summary:**

**Has your school, district, college, staff or student body received any awards for facilities, health or environment?**

**Yes**

**Award(s) and year(s):**

Spalding Park Elementary School has just received the Energy Star 2015 Certification. This certification means Spalding Park uses 35% less energy and emit 35% fewer greenhouse gases than comparable buildings nationwide. This accomplishment took many hours of behind-the-scenes work including an out-of-state professional engineer verifying data and completing a physical walk-through of Spalding Park.

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**School Pillar 1: Reduced Environmental Impact and Costs**

**Describe how your school is reducing environmental impact and costs by reducing or eliminating greenhouse gas emissions; improving water quality, efficiency, and conservation; reducing waste production; and using alternative transportation.**

Spalding Park Elementary has maximized energy efficiencies by taking the most up-to-date technologies available and exercising good energy management in the utilization of those technologies. This has been done through the building automation system as well as comprehensive plans for human organizational behaviors such as utilizing energy when only in use. Staff members routinely shut down all energy using items to include unplugging draw load during any extended break such as Spring Break or during the Winter Holiday.

The building engineer through the building automation system has utilized night setback temperatures during unoccupied times (55 F for heating and 85 F for cooling), time scheduled air handlers and AEX units, and utilized both photocell as well as time managed exterior lighting.

Reduced wattage T-8, 25 watt lamps and staff conservation efforts have helped to reduce electrical load so much that Mid-American no longer charges demand charges after the building saved a significant amount of load. Demand charges are a billing mechanism used to recover the cost of providing transmission and distribution service to non-residential customers with a certain load thereby easing demand upon the utility that need not rely on greater generation capacity. Students and staff have also engaged in tree planting efforts in order to provide natural windbreak and shading through grant dollars.

These savings have helped Spalding Park save \$46,583 in electrical costs in comparison to its first year of usage.

The Energy Reduction Impact in CO<sub>2</sub> is the equivalent of 3,649 MMBTU avoided and the same as 671.015 equivalent metric tons of CO<sub>2</sub> avoided.

### **Efficient Technology**

Although the Sioux City Community School District was accustomed to using central chilled water plants with central station air-handlers in their facilities, when plans were being drawn up for their new Spalding Park Elementary School, the district sought a different type of solution. In line with their commitment to sustainability, the district specified a more efficient geothermal system to handle their comfort needs. The Sioux City Community Schools decided in Spalding Park Elementary to utilize the most efficient technologies available, a bidirectional cascading central geothermal system. This system has allowed Spalding Park to realize energy costs 17% more efficient than other geothermal buildings in the District as well as 40% more efficient than buildings with an air-cooled chiller / natural gas boiler plant. Trane used the building in April of 2014 as a case study.

According to the case study by Trane for Spalding Park Elementary School, the Trane Bidirectional Cascading Central Geothermal System installed is substantially lowering energy and maintenance costs for the school, while improving humidity levels and acoustics for a more comfortable learning environment. Comparisons to other district schools with a similar size footprint, location, usage and construction techniques show the bidirectional cascading central system to be 17% more energy efficient than other central geothermal systems and 40% more efficient than an air-cooled chiller/natural gas boiler plant. With the bidirectional geothermal system, the district is also receiving utility incentives equal to 10% of the utility costs.

“We compared the bidirectional cascading central geothermal system at Spalding Park Elementary with a parallel chiller/heater central geothermal system at Liberty Elementary and an air-cooled system at our Leeds Elementary,” said Jeremy Taylor, Sioux City Community School District Energy Manager. “Leeds energy costs are \$42 more a day than Liberty, and Liberty uses almost three times the natural gas as Spalding. With the bidirectional cascading central geothermal system, Spalding Park is by far most efficient.”

### **Conservation Program**

Spalding Park Elementary has been a leader in cost avoidance under the District’s Energy Conservation Program. While the District has as a whole saved 25.1% on its energy costs, Spalding Park has saved 38.8% in baseline adjusted to current conditions using industry standards and practices in accordance with the IPMVP (International Performance Measurement and Verification Protocol) as well as Energy CAP, a proprietary program the District utilizes to calculate energy savings.

As further third-party validation of its conservation efforts, Spalding Park is an Energy Star rated school with a score of 100 by the US Department of Energy and US EPA. To date, the building has avoided 858,865 kWh of electricity in comparison to its baseline usage as well as 6,587 kgal of irrigation water. The building also additionally utilizes well field irrigation in areas that are not adjacent to the building and LED lighting on the exterior security lights of its building.

### **Waste and Recycling**

According to the monthly recycling report provided by the Sioux City Community School District, Spalding Park Elementary is demonstrating itself as a leader in cardboard and paper recycling. So far for the calendar year, Spalding Park has recycled an average of 750 pounds of paper and cardboard per month. This amount is

due to the diligence of all staff members recognizing the need to recycle. Our own 5<sup>th</sup> grade Student Council participates in the recycling program by visiting each classroom twice per week collecting the recycling bins and disposing its contents appropriately. Our breakfast and lunch service staff participate as well recycling as much cardboard as possible. We as a school have set a goal to recycle even more from our food service. We have contacted our district's food service director about recycling more plastic and also setting up an organic waste system that we can use as compost for our school garden.

### **Alternative Transportation**

Spalding Park Elementary has created a Walking School Bus program as part of being designated a Blue Zone school. The WSB occurs on Wednesdays for 6-8 weeks in the Fall and 6-8 weeks in the Spring. Volunteers, consisting of teachers, parents, college students, business leaders, and community members walk along a designated route, pick up pre-registered students at identified stops, and walk them to school. The program is a safe way for students to walk to school and also gain some before school exercise. Each student enrolled in the WSB receives a "bus pass" that the volunteers use to keep track of attendance. Students that participate receive blue-zone t-shirts and other cool prizes such as frisbees, stickers, pencils, etc. This Fall at Spalding Park Elementary, 45 students and 8 volunteers participated in the WSB. This was the largest number of participants for Spalding Park since it started the WSB in 2013. Spalding Park also participates in bike to school programs encouraging students to ride their bikes to school. These programs also coincide with Iowa's Fall and Spring fitness days. As an elementary school we value the importance of physical exercise as well as providing opportunities for alternative transportation for our students. One of our goals as we become an Environmental Science Specialty School is to promote carpooling with our staff and parents. We are in discussions about creating front row carpool parking spots as an incentive to reduce the amount of vehicles on the roads and in our parking lot.

### **Identify your schools energy-efficient facilities and practices, ecologically beneficial uses of grounds, and methods of disposal for solid and hazardous wastes.**

Spalding Park Elementary school is a leader in the Sioux City School District with its recycling efforts. Over 750 pounds of paper and cardboard are recycled each month at Spalding Park.

In 2014 Spalding Park converted all of its light bulbs to 25w from 32 watt. Also, timers were installed when the school was being built to save on electricity costs. Lights automatically turn off when a room or section of the school is unoccupied.

The state-of-the-art heating and cooling system is programmed to maintain temperatures from 68-72 degrees. The school functions on an average temperature of 70 degrees.

The school's sprinkler system is connected to well water to reduce the impact of our city's water supply.

The Sioux City School District's Operations and Maintenance Department oversees all disposal of solid and hazardous wastes. These hazardous materials are disposed of properly with local recycling centers in the city. This includes solids, paints, and chemicals. Also, all electronic equipment (computers, phones, dot camera, projectors, monitors, etc) are maintained by the district's technology department. Tech department is responsible for not only maintenance of equipment, but also refurbishing and appropriate recycling of equipment.

In May of 2015 Spalding Park received a grant from the DNR to plant 48 trees on school property. As part of the grant we completed a 20 and 40 year study on the benefit of planting these trees. The results of the study proved that water run-off will be reduced by almost 50% and the heating and cooling costs of the building will decrease as well. The study showed that Spalding Park will save the district over \$300,000 in energy costs over 40 years due to the trees being planted in precise locations to maximize future savings.

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## **School Pillar 2: Improve the Health and Wellness of Students and Staff**

**Describe how your school improves the health and wellness of students, faculty and staff by integrating a campus-wide environmental health program and promoting sound health and wellness practices.**

*Discuss integrated pest management, contaminant controls and ventilation, asthma controls, indoor air quality, moisture control, and chemical management. Address the amount and type of outdoor time that your students and staff have, as well as the types of fresh, local, and organic food that they eat. Other components you may want to include are: health education, health services, counseling, psychological and social services, staff health promotion and family and community involvement.*

- **Spalding Park Facilities**—Students receive physical education classes twice per week for 30 minutes each time. Students are taught numerous skills in a variety of sport specific and life-long activities. Students also are engaged in activities that promote and enhance their balance, coordination, strength, cardiovascular endurance, and flexibility. After receiving a \$40,000 grant in 2012, students at Spalding Park have access to a Traverse Climbing Wall, a Light Wall (promotes hand-eye coordination, cross mid- line activities), exercise bikes, weighted bars, and a Railyard System that emphasizes motor learning and motor development. All staff members have the opportunity to use the facilities for exercising. We have numerous yoga mats and free weights for staff to use.
- **Brain Breaks**—Students regularly participate in Brain Breaks. These are short 2-3 minute activities that promote exercising the brain and getting kids out of their chairs. These are mostly performed in the classroom in between periods of time where students have been sitting for an extended length of time.
- **Daily Mindfulness**—Every morning before school for 5 minutes, our building principal speaks to all students and staff about relaxing our minds and bodies before we begin the school day. She puts everyone through breathing exercises and visualization strategies to help relax the mind and to focus on specific tasks.
- **Therapy Dogs**—Once-a-month, Spalding Park welcomes in therapy dogs to interact with our students. These trained dogs visit classrooms and provide an opportunity for students to pet the dogs and learn about their breed and how they help children. Our students are always thrilled to see the dogs as it creates a positive atmosphere, especially with our special needs population.
- **Tree Planting**—In 2015 Spalding Park received a \$5,000 grant through the Department of Natural Resources to plant trees on school property. In May our school planted 48 trees in one day. We included all 650 students in this tree planting day. A representative from the DNR as well as Master Gardeners from the Iowa State Extension Office joined us as we created tree planting lessons for all of our students.
- **Student Recess**—All Spalding Park students receive two (2) 10 minute recesses per day and (1) 20 minute recess per day.
- **Weight Watchers**—All-staff at Spalding Park have the opportunity to join Weight Watchers as a group. Specific discounts apply if a certain number of staff sign up.

- Spalding Park Elementary is a certified Blue Zone school. This certification was achieved after redesigning the lunchroom, eliminating sugary foods and drinks, creating Walking School Bus, promoting brain breaks, establishing healthy cart snack, and promoting healthy living habits for students and staff.
- Spalding Park students receive fresh fruits and vegetables everyday as part of their healthy snack. Spalding Park also has created a school garden. Students participate with the help of a Master Gardener from the Iowa State Extension Office. Students learn about gardening and how plants grow. They also follow a curriculum that teaches students about soil quality, proper moisture for plants, and how to prepare and fight weeds.
- United HealthCare Insurance provides incentives for teachers as part of their health and wellness program. Teachers are challenged to complete various healthy missions to earn points. By completing health exams and participating in healthy missions, teachers also earn gift cards to use at local stores and restaurants.
- As part of the school districts business health program, teachers and staff members are eligible for three free counseling sessions per year. This is a great opportunity for teachers and staff to visit with a professional about personal or work-related issues affecting one's life.
- Spalding Park is working alongside the Sioux City School District in implementing an early warning system and behavior screening tool that will serve as a preventive measure for mental health challenges.
- Spalding Park also participates in healthy screening services for its staff members. Each fall, teachers and staff have the opportunity to complete a health screen for free. This health screen includes blood pressure and cholesterol level checks, weight issues, and overall stress level indicators.
- Spalding Park utilizes Arlington Air Handlers that filter outside air for use in the building. This unit ties in with the Trane Geothermal Heating and Cooling unit to monitor humidity and the overall indoor air quality for the school.
- With Spalding Park's goal of becoming an Environmental Science Specialty School, our teachers are encouraged to take their classes outside as often as they wish. We intend to create outside learning centers that all of our students can use. Currently, we have many teachers who have adopted a tree on our school property and are studying the different season and cycles of a tree's life. Our school garden is expanding and all of our classes get the opportunity to plant vegetables, herbs, and flowers. Many parents and staff members have helped expand our school garden, as well as having professional instructors from the Woodbury County Iowa State Extension Office.
- Spalding Park has made it a goal to include families and communities in many of its activities. Several dances are promoted in conjunction with our school positive behavior incentive programs. Every month a school-wide celebration occurs and family members and the community are invited to spend time with us. We have worked with the local high school to create spirit assemblies, dances, and reader's theatre programs.
- Recently our school district received a grant to expand mental health services for our students. This expansion had greatly impacted our school in a positive way. More therapists are now working with our school administrators and counselors to provide the best possible services for our students.

- Spalding Park's pest management system is provide by Presto-X. This local company works with our O&M department on appropriate measures to prevent pests from affecting our school environment. All and any chemicals are used in a safe and responsible manner so that the environment is not negatively affected in any way.
- Spalding Park's school climate transformation program (PBIS) works to improve our students' behavioral and emotional health. The goal of this program is to promote a positive school climate for our students and staff. Goals of this program include reducing office referrals, increasing student attendance, and improving a student's overall behavioral health.

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### **School Pillar 3: Effective Environmental and Sustainability Education**

**Describe how your school provides effective environmental and sustainability education by incorporating STEM, civic skills, and green career pathways.**

*Provide examples of interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems. Demonstrate how your school uses the environment and sustainability to develop STEM content, knowledge, and thinking skills. You should also discuss how your school develops and applies civic knowledge and skills to environmental and sustainability education.*

- **School Garden** - Spalding Park created a school garden in the spring of 2015. There are currently 6 raised beds that measure 4x8 feet. There is also 1 bed that is wheelchair accessible with plans to add another one in spring of 2016. Working with the Iowa State Extension Office, the plans are to add 6-8 more raised beds for students.
- **Wild Life Habitats** - Kindergarten and first grade students have a presenter from the city that discusses wild life habitats, recycling, and protecting the environment. Also included are science lessons devoted to organisms and their environments.
- **STEM** - Kindergarten and first graders participate in several lessons using toothpicks, marshmallows, rubberbands, plastic spoons, and balloons. Also students are building tornado bottles, balloon powered race cars, and puff of air boats.
- **Robotics** - Third and fourth grade lessons are Jr. 1st Lego League Lessons. Children work together in teams to build models that are either battery or computer powered. Fifth grade lessons are from the National 4-H curriculum, Eco-Bot Challenge. Students build a simple robot out of a tooth brush and battery. This challenge explores how robots can be used to preserve and protect the environment, while offering a glimps into the future of science, technology, engineering, and math.
- **Bridge Building** - These lessons are taken from the Iowa State University "Elementary Engineering: Bridge Design" curriculum and includes K'Nex Bridges and the book "Building Toothpick Bridges". Lesson one for each group involves learning about bridge design and engineering, including types of bridges and active/hands on experiences. Lesson two includes building bridges to specifications using different materials.

- **Where We Live: History of the Land** - The Where We Live third grade lessons are activities that link where the children live and what their favorite foods are with the global community. The second and third grade lesson teaches the connection between their favorite breakfasts to where the food comes from. The fourth grade lessons include learning about the origins of foods we eat today, ethnic foods and their origins in the world and in the state of Iowa. The fifth grade lessons are about the prairie. Students create a prairie in the classroom and read the written stories of people who came to the Iowa prairie.
  - **2nd-3rd grade water objectives** - Students get to learn about surface tension, and that it is a force that holds surface of liquids together. They have a chance to take water through a water race and water stretch. Students then make a hypothesis on what will happen with the water as they take it through the race.
  - **4th grade water objectives** - Students get to have fun discovering and using their critical thinking skills to determine why water can dissolve some things and not others. They will have a chance to write a hypothesis before the experiment and record their results.
  - **5th grade water objectives** - Students are able to observe waves and how they are formed. They write their own hypothesis on how they believe waves are formed, and then experiment on how waves are really formed.
  - **2nd-3rd grade science objectives** - Student learn about static electricity with this experiment. They get a chance to predict and test how to make a balloon move a pop can. Students learn that invisible electrons can build up on the surface of the balloon and move the pop can.
  - **4th grade science objectives** - Students explore the concept of surface tension and that it is a property of the surface of liquid that allows it to resist an external force. They learn that water will make a paperclip float if done right. They will predict how they are going to make the paperclip float with the objects they have. Students also get the opportunity to make the paperclip sink.
  - **5th grade science objectives** - Students get to demonstrate that they can make electrons flow from just about anything. They have to predict how to make the objects they get to make a clock start working again. Students have time to predict and test out their theories.
  - **3rd grade Aerospace** - Gravity is the major focus for third graders, as they will be introduced to the mechanics of gravity through a demonstration involving gravity defying water. Students will observe a penny diving into water as a result of Newton's Law of Motion.
  - **4th grade Aerospace** - Study propulsion and work with details of the liftoff. Children build straw/candy/balloon rockets in groups. Students also participate in an activity that uses balloons and discs to simulate a hover craft.
  - **5th grade Aerospace** - Students learn about the processes in keeping aircrafts in the air, and move on to making and testing paper helicopters.
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