



School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

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

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

U.S. Department of Education Green Ribbon Schools

Public Charter Title I Magnet Private Independent Rural

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

Official School Name: Sunrise R-IX School
(As it should appear on an award)

Official School Name Mailing Address: 4485 Sunrise School Road, DeSoto, Missouri 63020
(If address is P.O. Box, also include street address.)

County: Jefferson State School Code Number: 050-009

Telephone: (636) 586-6660 Fax: (636) 586-1866

Web site/URL: www.sunrise-r9.org E-mail: arowden@sunrise-r9.org

**Private Schools: If the information requested is not applicable, write N/A in the space*

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

Angelina Bowden Date: 1/6/20

(Principal's Signature)

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

District Name: Sunrise R-IX School District

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

Dr. Armand Spurgin Date: 1/6/20

(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:

Name of Nominating Authority:
(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.

Kristen McKinney Date: 02.05.2020

(Nominating Authority's Signature)

SUBMISSION

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

OMB Control Number: 1860-0509

Expiration Date: March 31, 2021

Public Burden Statement

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



Sunrise R-IX School – DeSoto, Missouri

School Contact Information

School Name: Sunrise R-IX School	Street Address: 4485 Sunrise School Road	
City: DeSoto	State: Missouri	Zip: 63020
Website: Sunrise-r9.org	Facebook: www.facebook.com/groups/121453391584183	
Principal: Angelina Rowden	District Sunrise R-IX School District	
Principal Email: arowden@sunrise-r9.org	Principal Phone: (636) 586-6660 ext.143	
Lead Applicant and Position (if different): Danielle Peppers / Agriculture Coordinator		
Lead Applicant Email: dpeppers@sunrise-r9.org	Lead Applicant Phone: (636) 586-6660 ext. 134	

School Eligibility and Compliance (put an x by all that apply)

1. The school has some configuration that includes one or more of grades Pre-K-12.	X
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction as 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.	X
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.	X
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.	X
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.	X
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.	X

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.	X
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School Characteristics

Level (x) Early Learning Center () Elementary (PK - 5 or 6) (x) K - 8 () Middle (6 - 8 or 9) () High (9 or 10 - 12)	School Type (x) Public () Private/Independent () Charter () Magnet	How would you describe your school? () Urban () Suburban (x) Rural	Total Enrolled: 332 Graduation rate: N/A Attendance rate: 96.1%
Does your school serve 40% or more students from disadvantaged households? (x) Yes () No			
% receiving FRPL: 55%	% limited English proficient: 0%	% total disadvantaged students – without double counting , provide the total percentage of students that are receiving FRPL and/or have limited English proficiency, and/or have learning disabilities: 60%	

Summary Statement

Sunrise School’s vision is to inspire and educate students in a safe and challenging school. Sunrise School District began to focus on sustainability in 2015. This began by developing educational outdoor spaces and making modifications to the building, grounds, and school curriculum which continues on an ongoing basis. Already, the impact of our effort is compounding. Since our sustainability efforts began, grant awards have saved the district \$77,000 as we advance towards green goals. Academic impact of these systems changes is evident in the outstanding results Sunrise has achieved in state assessments during the previous two academic years. From 2017-2109, Sunrise School scored 100% on the school's Annual Performance Report, released by the Missouri Department of Elementary and Secondary Education. Sunrise is a K-8 school district, thus the majority of points earned is based on state assessment scores. And each year, we engage more parent and community partners to create lasting and positive impact on our school and wider community.

We take a holistic approach to sustainability, and have focused heavily on waste reduction and resource conservation efforts that contribute to the improved quality of life for the school’s internal and external communities. We are expanding our instructional program to include information and materials from a variety of partners--from state and regional agencies to local farmers and parents. In addition to examining the mindset and culture of our classroom and school communities, we are changing systems (cafeteria/food systems, purchasing practices, classroom routines) to support authentic learning opportunities and real-life application of classroom curricula.

The outdoor classroom is now a 22-acre plot that allows for a variety of learning experiences in several ecosystems including a pond, woodland, and a cultivated vegetable garden. In 2016, we installed a storm water detention basin which deters approximately 75% of the school campus runoff water to a stream that leads to our pond. Students and staff achieved designation of the outdoor classroom as a Certified National Wildlife Habitat during the 2018-2019 school year. Through an annual schoolwide PD session, teachers learn ways to utilize the outdoor classroom space for a variety of subject areas. The space is also utilized for after school programming and by the community-at-large during after school hours.

The Missouri Department of Conservation hosts a three year training and provides science curriculum for all PK-8th grade science teachers on their grade level curriculum free of charge. In addition, the Missouri Department of Conservation funds outdoor field trips for each grade level annually. The Jefferson County Health Department provides monthly lessons

for grades K-2 on a variety of health topics such as My Plate, hand washing, and family health education. Sunrise partners with the Missouri Extension to offer health education and cooking lessons to preschool through 8th grade, impacting 100% of our students. Cooking lessons utilize school garden harvest and/or tower garden produce. Local farmers provide mini-lessons to specific grade levels based on content needs, and a potato farmer has provided produce for first and fourth grade students to study roots. A Master Gardener has provided lessons during the planting season to second grade. The Jefferson County Bee Association partnered with our school and worked alongside us to help teach multiple sessions regarding the importance of bees. Two bee hives have been installed in the outdoor learning environment, and students are involved in helping to maintain the hives, extract honey and sell it to the community.

Waste reduction is fostered at Sunrise through daily practices that are incorporated into school-day and after-school opportunities. The use of water bottle refilling stations, rain barrels, tower gardens and an aquaponics system all reinforce the value of water conservation for the school community. We are involved in multiple recycling contests which make environmental stewardship a fun opportunity for the students. Parents and staff have become increasingly involved by collecting recyclable items from home to add to our total collections. Sunrise participates in a milk carton challenge that has reduced our landfill waste by 35%. We are recycling our hard plastic to a local plant that shreds, melts and molds it into composite boards used to build raised garden beds for our school garden. Our green team of approximately 60 middle school students leads this effort, providing the hands-on work for rinsing hard plastic, sorting recyclable materials, and weighing items prior to distribution.

Sunrise composts 40 pounds of raw fruit and vegetable scraps on-site per week from the lunchroom, yielding a 2.5% reduction of landfill waste. This spring we will extend our composting to collect lunch scraps for a Feed The Pigs program, where local hog producers will come to the school daily to pick up food waste to be used for feed. The goal is to reduce our lunchroom food waste by 90%. Our Feed the Worms program also helps students engage in responsibly dealing with food waste. Students are sent home with a container to fill with scraps their family generates then return it to school to help feed the worms in our vermicomposting program. Families receive a brochure that teaches them what can and cannot be put in. Currently, 75% of our students participate in this program.

Work is also underway to reduce energy use and GHG emissions at Sunrise. A geothermal heating/cooling system has been installed, and 100% of the school building has been converted to LED lighting. The new wing built in 2017 is equipped with occupancy sensors in its locker rooms, bathrooms, 8 classrooms and an office. Beginning next school year, Sunrise middle school science classes will start tracking energy usage through Energy Star Portfolio. We have implemented new dismissal procedures that reduce parent vehicle idling by 50% and bus idling by 40%.

Students and Staff at Sunrise have implemented an inclusive program to promote health and wellness that touches the interior school population and the exterior school community as well. Sunrise recently held its 3rd annual Health and Wellness Fair open to area residents. At this event to encourage and support healthy lifestyles, 20 vendors & local agencies participate including American Red Cross, Air Medical, Jefferson College, DeSoto Rural Fire Dept., Jefferson County Recycling, Jefferson County Health Dept. mobile health and dental vans, Valle Ambulance, Factory Annex gym, GNC, Essential Oils, Missouri Conservation Dept., Midwest Recycling Center (electronics), and Jefferson County YMCA. There are also medical professionals present to do basic health screenings at no cost. This fair has grown by 40% since its inception, and 80% of the staff attend every year. This past year, there were also 100 community members in attendance.

Our green efforts instill in all students the value of life skills. As a school dedicated to a more sustainable community, we want those skills to be infused with the value of sustainability as students develop into productive citizens of the future. As we move forward, the goal of Sunrise is to increase and expand the school's value and importance to the community at large. We have been working to reduce environmental impact, improve the health and wellness of our students and staff, and provide effective environmental and sustainability education for five years. We are proud of our accomplishments so far, and look forward to continuing the green trajectory!

Engagement, Benchmarking and Recognition

List the members of the team that helped prepare documentation and their role in the school

1. Dr. Armand Spurgin- Superintendent
2. Angie Rowden- Principal
3. Danielle Peppers- Green Schools Team Leader
4. Dr. Joe Panhorst- Green Schools Quest Mentor
5. Paula Akins, RN- School Nurse
6. Elizabeth Isaacson- Physical Education Teacher
7. Becky Mattingly- Food Services Coordinator
8. Katie Weible- School Counselor
9. Olivia Brinkman- Student

List any programs you are currently using to benchmark your progress in sustainability

1. Trex Recycling Program
2. Proud Veteran Resources Recycling Program
3. Republic Recycling Program
4. Missouri Botanical Garden EarthWays Center School Sustainability Network
5. Drinking Fountain Counters

List any recognition or awards you have received in the last five years related to your efforts in any of the pillars

1. Jefferson Foundation 2019 Water Bottle Filling Station Grant
2. Jefferson Foundation 2018 Greenhouse Construction Grant
3. Whole Kids Foundation Grant- Bee Cause Project: Supporting the Honey Bees 2017/2018
4. 2017/2018 Missouri State Assessment Score of 100%
5. 2017 Jefferson Foundation- Trail Gravel Grant
6. 2017 Lowes Grant Written By PTO
7. 2016/2017 Missouri State Assessment Score of 100%
8. Green Schools Quest Third Place in Elementary Schools Division 2016/ 2017
9. Innovative Technology Education Fund Grant 2016/2017
10. Whole Kids Foundation Garden Grant Program 2016/2017
11. 2016 MSTA School & Community Magazine Printed An Article
12. DeSoto Farmers Market & Get Healthy DeSoto Fund Booth Fee At Local Market

Pillar I: Sustainability - Reduced Environmental Impact and Costs

Sunrise School District began to focus on sustainability in 2015. This began by developing outdoor spaces to be used educationally and making modifications to the building, grounds, school curriculum, and cultural practices to be continued on an ongoing basis. This has caused internal and external school communities to become more focused on sustainable practices.

Energy and Greenhouse Gases

- Energy efficient systems have been incorporated in addition to the school recently building on campus. A geothermal heating/cooling system has been installed, 100% of the school building has been converted to LED lighting, and the new wing built in 2017 is equipped with occupancy sensors in its locker rooms, bathrooms, 8 classrooms and an office. This all was funded with the passage of a bond issue in 2017. Beginning next school year, Sunrise middle school science classes will start tracking energy usage through Energy Star Portfolio. Teacher training for this will be provided.

Water and Grounds

- Sunrise is a rural school on well water. Fourth and fifth grade students did a study of water consumption at the water fountains in the school and found that approximately 48% of the water passing through the fountain was returning to the drain when students were drinking. This resulted in a grant proposal being funded in 2019 to put water bottle filling stations at each of 4 fountains. Already, bottles have been refilled 20,614 times.
- In 2016, we installed a storm water detention basin which deters approximately 75% of the school campus runoff water to a stream that leads to our pond. This system helps us maintain a healthy water level year-round in our pond. In addition, rain barrels have been installed to collect stormwater runoff for irrigating our planting areas on campus. The barrels are emptied approximately twice per month, depending on rainfall. The barrels save approximately 8,750 gallons of well water per school year.
- Sunrise School currently has two tower Gardens and an aquaponics station that promote water conservation. The tower gardens and aquaponics station use, on average, 90% less water than growing the same plants in traditional soil planting. Our estimated water saving is 4.9 gallons per week or approximately 98 gallons per school year. The aquaponics station also demonstrates a closed loop system by using fish waste to feed the plants.
- The outdoor classroom is a 22-acre plot that allows for a variety of learning experiences in several ecosystems including a pond, woodland, and a cultivated vegetable garden. Students and staff achieved designation of the outdoor classroom as a Certified National Wildlife Habitat in the 2018-2019 school year. When we found this program we knew it would be the perfect opportunity to teach the students about a variety of habitats and how we have habitats of our very own at school. Sixty 4th and 5th grade students each completed a sample NWF application which required them to tour our outdoor classroom, walking trail, pond and woods to see if we had all of the qualifications to apply. To maintain this certification, Sunrise students annually document that our outdoor classroom provides food, water, cover, and places for wildlife to raise their young and that we are maintaining the habitat with sustainable practices.

Waste

- We are involved in multiple recycling contests which make environmental stewardship a fun opportunity for the students. To keep plastic out of landfills, parents have become involved by collecting these items from the home to add to our total collections. We have a school-wide recycling program where families and staff can bring their recycling to us to help with our contest. We also participate in the TREX Challenge with the Schnucks Grocery Chain; students, staff, and parents collect and donate approximately 95 pounds of plastic film to the program per month. We are recycling our hard plastic to a local plant that shreds, melts and molds it into composite boards used to build raised garden beds for our school garden. Our green team of approximately 60 middle school students leads the program, providing the hands-on work for rinsing hard plastic, sorting recyclable materials, and weighing items prior to distribution. Our hard plastic repurposing is also saving the District about \$250.00 per raised garden bed at our negotiated exchange rate of hard plastic for repurposed plastic lumber. We will be taking 4th through 8th grade students on a field trip to the local recycling plant where our plastic is delivered, engaging students in how the recycling process works and how our plastic will be returned to our school as a useful product.
- In addition to the plastic recovery, we have noticed a large amount of other waste streams generated at the school. We are collecting and recycling paper from classrooms and offices. Our new recycling program has helped us reduce our waste from August to December this year by 1000 pounds, eliminating half of our recycling dumpster waste cost per year. Our lunchroom has been a huge source of waste. We are now repurposing milk cartons into planters and decorative arrangements, and have begun a robust food waste reduction effort described below. All of this helps students understand the importance of recycling and the positive effects we can have on the Earth at any age.
- Sunrise has a compost program in place that takes 40 pounds of raw fruit and vegetable scraps per week from our school lunchroom and disposes of them in our school compost bin yielding approximately a 2.5% reduction of landfill waste. We then take that composted material and use it in our gardening program. It is turned weekly by our Garden Club, who helps manage the garden area. We would like to extend this program one step further by collecting all scraps

from lunch trays and not only composting the raw material, but also by saving all other food waste, including milk, and promote a Feed The Pigs program. We are planning to begin a "Feed the Pigs" program in spring of 2020 where local hog producers will come to the school daily to pick up food waste to be used for feed. The goal is to reduce our lunchroom food waste by 90%.

- Local Farmers are donating approximately 10,000 pounds of manure to the gardening program per year, which is then mixed with our composted food waste to reduce the cost of fertilizers and plant food. This is estimated at an \$800.00 fertilizer saving in addition to saving roughly \$270.00 for reduced dumpster service discarding landfill waste. Our Feed the Worms program also helps with responsibly disposing of lunchroom scraps. Students are sent home with a container to fill with scraps their family generates; then return it to school to help feed the worms in our vermicomposting program. Families receive a brochure that teaches them what can and cannot be put in worm compost. Currently, 75% of our students participate in this program.
- Sunrise participates in a milk carton challenge that helps reduce our landfill waste by 35%. Our Carton2Garden project takes milk cartons from our school cafeteria and repurposes them into a structure that enhances our school garden. Our past projects included a bug hotel and a garden structure. These hands-on Cartons2Garden experiences reinforce the schoolwide values of environmental stewardship, sustainable practices, and healthy living.

Transportation

- We have implemented a new parent pickup system. In the past, there was a single line of cars from the school to the main road. The pick-up line was extended into the main road which caused a traffic/safety problem. We have created a system with a double line pick up that makes the pickup process flow quicker. This will also help with reducing unnecessary vehicle idling by an estimated 50%. Recently, we began calling students to busses by groups to increase the efficiency of loading, cutting down on idle time by approximately 40%.

Purchasing and Cost-savings

- Adult garden volunteers maintain the garden areas by committing 4 hours of service per week. This is \$64.00 per week in man-hour cost saving to the District for the 14 weeks schools are closed during a year, an annual savings of \$896. Supplies provided to the garden volunteers who maintain garden areas during non-school periods were purchased using the funds generated by selling items (bedding plants, honey, birdhouses, etc.) at the local Farmer's Market which yielded \$138.00 per month. Costs have been reduced in a variety of ways due to our green efforts. We have saved the school district approximately \$4,254 this year due to our practices in regards to bee/honey profit, composting, recycling dumpster cost, plastic repurposing, farmers market profit, volunteer garden help and science curriculum materials.
- Mineral Area College donated approximately 40 vegetable plants to the school. This saved the school money at the rate of \$2.00 per plant. Another donation was made of 100 poinsettia plants for the garden club to sell in order to support their program. This yielded a \$425.00 donation to our garden program.
- At Sunrise School 50% of the cleaning supplies used are Green Seal Certified, to reduce exposure to toxic chemicals and triggers to asthma, allergies, etc. We have also used paint with a low VOC rating in 25% of the building. Throughout the entire school Ecobee smart programmable thermostats are used cutting our heating and cooling costs by up to \$180.00 per year. The school is currently using paper that is labeled as Sustainable Forestry Initiative copying paper.
- In 2015, Sunrise began ensuring electronics products purchased are all Energy Star certified. Classrooms where mold growth is a concern, are all equipped with Energy Star Certified dehumidifiers to reduce moisture content. Other Energy Star products purchased in the past 5 years include Chromebooks, iPads, refrigerators, copy machine, hand dryer, and water filling stations.

Pillar II: Health - Improve the Health and Wellness of Students and Staff

Students and Staff at Sunrise have implemented an inclusive program to promote health and wellness focused on the interior school population. Recently these efforts have been expanded to the exterior school community as well. The school now hosts an annual health fair open to area residents. This is seen as contributing to the Sunrise School Mission “to inspire and educate”. These efforts have sparked curiosity and interest for students, families, and staff.

Environmental Health

- Sunrise has a reduced vehicle idling program on school grounds. Due to revised traffic flow patterns, we have reduced idle time for cars by 50% and busses by 40% (see above).
- The school’s well water is tested voluntarily for lead and other contaminants on an annual basis. The water test was within appropriate levels and our school was on St. Louis news in 2016 for being a school that had water that was within appropriate mineral ranges. Our school is on well water and it is tested and adjusted monthly to ensure water quality.
- The outdoor education area is ground tested for contaminants annually.
- A local integrated pest management company comes to the school twice per year to inspect the entire campus, file a report of findings, and treat on an as needed basis. All treatment is done at times when students are not present. All treatments and findings are written in a report.
- Carbon monoxide detectors are installed and monitored daily. The detectors are tested annually along with all combustion appliances. Carbon Monoxide detectors work 100% of the time and have not detected monoxide in the last 5 years.
- Radon testing is done yearly in conjunction with standards set by the Jefferson County Dept. of Health. The testing has reported at the appropriate level and is recorded.
- Mold growth is constantly monitored by school staff and reported, when found, to appropriate District personnel for abatement. Four basement classrooms have had drywall replaced with green board to ensure mold does not grow in these classrooms.
- Signage is in place prohibiting tobacco and smokeless tobacco use on campus is in place.
- Appropriate District staff is trained on proper use and handling of all chemicals.

Nutrition and Fitness

- Sunrise partners with the Missouri Extension Council to offer health education and cooking lessons to preschool through 8th grade impacting 100% of our students. Cooking lessons utilize school garden harvest and/or tower garden produce. Each month the Missouri Extension provides hands-on cooking and nutrition lessons. We have worked with our coordinating instructor who uses vegetables needed for recipes that are grown on campus, thereby eliminating the need for her to purchase them. Students harvest the vegetables needed in cooking classes from our vegetable garden.
- Our middle school FACS (Family and Consumer Science) classes cook about 2 times a month, involving approximately 100 students in grades 6-8, with one class being led by an instructor from the University Of Missouri Extension who teaches students about making healthy, nutritious meals. We have local farmers who donate goods to our classes. A

local meat market provides fresh meat, and a local chicken farm provides us with eggs. We also receive a grant from the St. Louis Dairy Council to help supply dairy that is used in recipes.

- Sunrise School received the 2017-2018 Jefferson Foundation Grant award for a tower garden & greenhouse to extend our growing season, facilitate learning different agriculture techniques, and provide fresh produce for student and staff consumption. The greenhouse will be used to grow produce for school use, involving all grades to different degrees depending on each grade level's life science curriculum pacing. In 2018, Sunrise purchased its second tower garden. They are located in the school agricultural lab and the cafeteria. Classes help maintain them weekly by checking the pH level and adding water with the proper nutrients. Students prepare and host salad parties in the Agriculture Lab. They are taught how to harvest, rinse, trim and assemble a delicious salad. The tower garden located in the school cafeteria provides all students immediate access to fresh organic produce, and is situated to easily allow daily use and maintenance. Produce such as greens, broccoli, green beans, and various herbs grow well in the tower garden, helping supply the salad bar and/or healthy side menu options each school day. These plants are harvested weekly yielding an average of .5 pounds of greens each week. With the new gardening options, there are high hopes that we will be able to provide a fresh produce option to all students on a daily basis.

- As students became involved with gardening, awareness grew of the disappearing bee population and the critical food system and nutrition issues associated with not having bees. Our school beehives will be used to pollinate our vegetable garden and to provide honey to our school food program and the external community. The honey will encourage students, families and the community to eat natural sugars as opposed to the processed store-bought. We are expecting to get approximately 60 lbs. of honey per hive.

- The school nutritionist participates in a variety of professional development activity programs by the state, county, and local organizations. The nutritionist passes on information from these professional development sessions to 100% of the foodservice staff at the school.

- A variety of after school student groups have been established to promote student involvement in community with their peers, as well as healthy social, emotional, and physical development. These groups include but are not limited to running club, garden club, cheerleading squad, basketball and volleyball teams. These activities are open to 100% of the students' grades 2-8.

- Students participate in physical fitness activities during 6% of their regular school hours. In addition students, depending on grade level, are given an additional 2-3 free play activity periods per day (about 12% of the school day).

- When the outdoor classroom was established, a 1/2 mile walking trail was cut throughout the woods. The trail is used daily, weather permitting. There are a variety of labeled trees to help students identify species. Classes have constructed bird and bat houses to install along the trail. Physical education teachers use the trail for warmups and fitness activities. The Preschool-5th grade uses this area for nature walks, scavenger hunts and learning about different ecosystems. English teachers utilize this space for reading and creative writing, and the art teacher utilizes this space for drawing projects. We foresee many other uses for this space over time as teachers become more comfortable using the outdoors for required curriculum. For example, the trail has a variety of elevations, and the middle school math teacher could use slope data in a variety of different types of calculations.

Coordinated School Health Program

- Sunrise recently held its 3rd annual Health and Wellness Fair for the internal and external school communities. At this event to encourage and support healthy lifestyles, 20 vendors & local agencies participate including American Red Cross, Air Medical, Jefferson College, DeSoto Rural Fire Dept., Jefferson County Recycling, Jefferson County Health Dept. mobile health and dental vans, Valle Ambulance, Factory Annex gym, GNC, Essential Oils, Missouri Conservation Dept., Midwest Recycling Center (electronics), and Jefferson County YMCA. There are also medical professionals present to do basic health screenings at no cost. This fair has grown by 40% since its inception, and 80% of the staff attend every year. This past year, there were also 100 community members in attendance.

- Our school insurance company has set up a program to encourage staff to make healthy choices and schedule routine doctor's visits. When goals are met, staff members are rewarded with gift cards. 10% of the staff participated in this program this past year.
- A Staff Health and Wellness Committee was created to provide guidance, health-related tips, and challenges throughout the school year to the internal school community. They instill healthy lifestyle habits among coworkers. The committee coordinated an annual challenge focused on sleep, eating habits, water consumption and exercise. Fifty percent of staff participated in this challenge last school year, and they lost an astounding 95 pounds. We would like to see that number increase, and are encouraging more staff to join this year.
- An afterschool care program is in place which provides students with supervision, healthy snacks, and appropriate physical, social and emotional activities. Fresh fruit is offered weekly, and all snack waste is either recycled or composted as appropriate. The garden and habitat areas are used seasonally for after-care programming.
- Sunrise has nursing services 100% of the school year. Services are available to 100% of staff and students for consultation, basic medical testing, and medication administration. The nurse also interacts with parents on an as needed basis regarding the need to seek additional medical attention, removal from school for health reasons, etc. Sunrise has an average daily attendance rate of 96.1%. Most absences are reported as being health related.
- Sunrise participates in the Brenden's Backpacks Program, a county-wide program which provides non-perishable food to students who qualify for free and reduced pay meals, on Friday afternoons. This food is taken home for family consumption. Number of qualifying students in this program is 55%.

Pillar III: Learning - Effective Environmental and Sustainability Education

Curriculum and Assessment

The value of sustainable practices is woven school-wide across content areas into instruction at Sunrise School. In 2016, Sunrise School expanded their garden area, which was located around the flagpole, to a 2-acre location on the school grounds. It has since been developed into a beautiful 22 acre outdoor learning classroom, which is utilized by teachers and their classes, Girl and Boy Scouts and the public. This learning space consists of a 2-acre pond, a 1/2 mile walking trail, a 2-acre garden, a field for planting large crops and a baseball field. Sunrise students maintain a high level of academic proficiency as they learn about social impacts of sustainable living. This is evident by their 2 years of 100% scores on the Missouri State Assessments. Teaching at Sunrise provides real-life situations for 100% of students to apply academic skills. The science and social studies curriculum in all grade levels provides opportunities for students to learn about social responsibilities such as developing habits relating to environmental sustainability and social and emotional growth.

Examples of providing sustainable real-life learning situations:

- The 5th-grade water consumption test which found only 52% of water at a drinking fountain was being consumed. Due to the student research and communication of results, refillable water bottle stations were installed.
- The 4th and 5th-grade study of electricity output provided by solar panels and wind turbines provides an opportunity for each student to wire a short extension cord to the solar panel and wind turbine in an attempt to light a 100-watt bulb. The students' research and design project exercise yielded a 100% success rate lighting the bulb.
- Currently, 100% of the students participate at school in recycling. Our family delivery of recyclables to the school stands at about 15% which we will be increasing as the program is advertised more heavily.
- All classrooms, preschool through 8th grade, utilize the school indoor Agriculture Lab classroom once a week that provides hands on science lab experiments. Classes use this space for 3% of their science teaching weekly.
- Our outdoor classroom has recently been marked as a Certified National Wildlife Habitat. This area is maintained by students, staff and volunteers. To do this the National Wildlife Federation requires them to commit to sustainably provide the essential elements of wildlife habitat, provide students a place to learn outdoors, and connect with nature. Using these guidelines the Sunrise approach was to make 100% of the outdoor education area fit these requirements. Sunrise students now are able to investigate ecosystems in all areas of the space. All students at all grade levels are involved in studying and protecting this area in order to maintain the School's status. In order to achieve this 60 4th and 5th grade students conducted a paper and pencil survey walking through the area to make sure all guidelines of the National Wildlife Federation are being met. This study is conducted on an annual basis.

Professional Development

- Through an initial schoolwide PD session, 35 teachers were shown ways to utilize the outdoor classroom space and they are exposed yearly through a mini session as a recap. Annual training is provided for teachers on outdoor space accessibility and how it directly ties into curriculum pacing. The goal is to have Outdoor Classroom use embedded into Units and Topics for curriculum writing. Elements are added to the Outdoor Classroom based on teacher requests and use. Currently, the school district is working on adding an outdoor classroom meeting location with seating and podium. The professional development for staff involved staff reviewing their curriculum pacing, and brainstorming which lessons could be taught and experimented with outdoors. The staff was also provided with approximately 15 books for educators on utilizing outdoor spaces in their daily instruction. The staff as a whole walked the outdoor classroom spaces while the principal pointed out areas that could be utilized immediately and other areas that would be developed. Teachers then revisited their units and made notes of when to utilize the outdoor space.
- Sunrise School has participated in The Green Schools Quest (GSQ) Program since 2016. The Green Schools Quest is a six-month, project-based contest for Missouri schools that catalyzes student-driven green projects. Mentors are provided for all GSQ schools, cash prizes awarded to the winners, and school green teams work collaboratively to advance toward unique green goals. GSQ involves students in a variety of sustainable practices and is helping staff

become more comfortable with student-driven, project-based learning. Student-driven Quest activities have spread to the staff making them more aware and causing them to be more involved working with students to develop and internalize their green activities. They have begun to provide materials, supplies and additional activities to facilitate student goals. Sunrise placed third in the elementary division in 2017 for the Choose Green project, and this year's project centers on plastic recycling.

- In 2016 Missouri Botanical Garden's EarthWays Center provided training to 9 teachers at Sunrise. This training provides professional development to the teachers and connects them with sustainable leaders from other schools in the participating network. These teachers returned to Sunrise to facilitate programs for all classes and teachers to begin thinking in sustainable terms. Programs for recycling and sustainability were started at all grade levels, beginning with collecting waste paper at 100% of the offices and classrooms in the school. It was then expanded to the lunchroom where empty milk cartons were cleaned and repurposed at the school. The milk carton program saved 4,000 empty cartons resulting in a savings of more than 1,000 pounds of waste from the landfill and was awarded a third-place recognition in the Green Schools Quest program in 2017.
- Curriculum/instructional materials have been given to the District as the result of staff members participating in Staff Development Programs sponsored by various governmental and other agencies. Sunrise school staff participates in the Missouri Department of Conservation Discover Nature Schools program. We have had 10 of the 25 teachers attend Missouri Department of Conservation training since 2016, and have received the Discover Nature Schools teaching materials and grant opportunities as a result. Sunrise teachers also attend several guided field trips to Missouri state parks that are sponsored by the Missouri Department of Conservation. This training in conjunction with the DNS training by MDC Education Consultants has provided instruction, curriculum and other resource materials, and ongoing educational support for classroom activities and curricular support. Materials provided are used by 100% of the students at grade level, and have saved approximately \$50.00 per grade level over cost of purchasing similar items by the school.
- During the process of bringing bees onto the campus, a teacher joined the Jefferson County Bee Association to gain insights into starting the program successfully. The information gathered was then brought to the school and shared with 8 staff members. This led to 4 classrooms of students being trained in establishing and maintaining a bee population. The next step was for students to begin assembling hives and bringing the bees onto campus. Additional members of the bee association then came into work with staff and students on how to manage their program.
- The Missouri Master Gardeners through the University of Missouri Extension Center trained a staff member on best practices for gardening and environmental stewardship during the 2018-2019 school year. She then worked with 2 teachers who sponsored the school's garden club to establish a Serenity Butterfly Garden. This space is being used as an area to relax and attain mental peace. It is used to help staff and students when they are stressed to the point of needing a break.
- Two staff and two students presented at the 2017 Sustainability Institute for Educators, a 3-day P.D. Conference in St. Louis, on sustainability practices being implemented at Sunrise: a worm farm with composting from homes, trash audits and milk carton reuse.

Outdoor Learning Experiences

- Sunrise School has an established outdoor learning garden that provides 10% of class time monthly (for all students) in hands on learning along with an array of opportunities for students to interact with a natural environment. The outdoor education area is designed to provide a variety of land and water ecosystems for student inquiry. The outdoor classroom is a 22-acre plot that allows for a variety of learning experiences in several ecosystems. They are applying what they learn in the classroom with authentic outdoor experiences. This helps them understand the value of and the real-world connection to information they are learning daily, and helps make abstract concepts tangible.
- The outdoor classroom has also been found to be a great location for teaching writing and for many non-school traditional fitness activities. The community utilizes our outdoor area with the following activities: Baseball practice,

Mother Son Adventure Night & Garden Club. The use of this space by our community, along with things like our Health and Wellness Fair, help anchor our school as a hub for conversation and information flow in the community.

- On the wooded walking trail, there are a variety of tree species labeled to allow students to observe the differences. Students have constructed and painted gourd birdhouses to be installed along the trail. This encourages increases in bird populations and enables students to watch the birds. Bat houses have also been constructed and installed around the pond area for students to observe the impact of bats on insect populations.
- As students became involved with gardening, awareness grew of the disappearing bee population and the critical issues associated with not having bees. The Jefferson County Bee Association partnered with our school and worked alongside us to help teach multiple sessions regarding the importance of bees. Two bee hives have been installed in the outdoor learning environment, these will help pollinate our garden and grow the bee population. Students are involved in helping to maintain the hives, extract honey, and sell it to the community. We are expecting to get approximately 40 lbs. of honey per hive. We anticipate selling it for roughly \$1.80 per pound based on current market value. Our middle schoolers are a little fearful at first, but with the bee suits soon realize they are harmless. The Jefferson County Bee Association voluntarily allows us to use their observation hive throughout the school year. This is a great learning opportunity for all classes to utilize during appropriate seasons.
- In 2017, Sunrise was fortunate to have a large outdoor aquaponics station donated by a school family. The family stocks and helps to maintain the unit annually. The middle school science classes plant lettuce, kale, and various herbs that are later harvested for school salads. These plants are harvested weekly, during outdoor growing seasons, yielding .25 pounds of greens for school lunch areas. The dollar saving here is about \$.70 per week or \$14.00 per school year.
- An after school garden club was created in 2016-2017 that consists of 25 3rd-5th grade students. They meet weekly learning the value of growing fruits and vegetables. Local farmers donate manure, approximately 10,000 lbs., used with roughly 1,440 pounds of compostable matter the school generates. The students understand the importance of putting nutrients into the soil and learn about the decomposition process. During the summer, the students sell weekly at the local farmers market yielding average profits of about \$120.00 per week. They sell a variety of items such as: class grown and cleaned succulents, vegetables, and gourd birdhouses they have painted.

Community Engagement

Sunrise Garden Club is fortunate enough to have parent/family volunteers that help with group activities related to sustaining our garden during the summer months. During the past season, we had 8 people assisting for approximately 4 hours per week. This saved the school approximately \$28.00 per person in labor costs that would have been paid to staff. The produce that is harvested is taken to the local farmers' market and sold by students. The profit from the market, of about \$120.00 per month, is returned to the program for purchasing garden materials (gloves, tools, equipment, etc.).

- We have a school wide recycling program where families and staff can bring their recycling to us to help with our contest. We are teaching students the importance of recycling and the effects we will have on the Earth. The Sunrise community has helped with our new plastic recycling program. We currently have about 10% of our internal and external community members that participate in our recycling efforts. Our goal is to raise this number by 60% by the next school year. We have partnered with a local plastic repurposing plant to process the plastic we take in into plastic boards used in our garden area as raised planting beds.
- Sunrise has engaged with a number of community members from inside and outside the immediate school population. Farmers donate about 10,000 pounds of manure to feed our plants. Mineral Area College and Drummonds Florists have donated 40 bedding vegetable plants for the gardens. Local Franciscan Sisters donated garden tools, gardening supplies, wheelbarrows, and benches to be used in the garden areas. Community and family donations consisted of a block of potting soil, bag of onion bulbs, sweet potato plants, fish for the aquaponics station, a grow table for the Agriculture

Lab, flower pots and planters, fish food for the pond. These donations have an estimated value of about \$1,000. All of these donations provide supplies to grow the school garden and provide students with fresh produce.

- The Sunrise School Health Fair is planned annually on the Sunrise School campus. A variety of vendors are present to promote and educate families on healthy life styles. This event has been scheduled to accommodate family work schedules and promote parent/student attendance. During this event, school strives to encourage healthy life styles and daily habits. As a school community, we are trying to positively influence healthy eating and life style habits.



