

# **District Sustainability Award Nominee Presentation Form**

#### **CERTIFICATIONS**

### **District's Certifications**

The signatures of the district superintendent on the next page certify that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

- 1. The district has been evaluated and selected from among districts 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.
- 2. The district is providing 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.
- 3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district 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.
- 4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 5. 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 school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.
- 6. The district 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 District Sustainability Award 2019-2021

Name of Superintendent: Mr Emmanuel Caulk

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

District Name: Fayette County Public Schools

(As it should appear on an award)

Address: 1126 Russell Cave Road Lexington, KY 40508

Telephone: 859-381-4100 Fax: (859) 381-4303

Web site/URL: www.fcps.et E-mail: <a href="mailto:emmanuel.caulk@fayette.kyschools.us">emmanuel.caulk@fayette.kyschools.us</a>

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

Date: 1/22/20

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## **Nominating Authority's Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

- 1. The district 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 education.
- 2. The district 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.

Date: 2/14/2020

Name of Nominating Agency: Kentucky Environmental Education Council

Name of Nominating Authority: Mr. Billy Bennett

(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.

(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.

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### **Summary Narrative**

At Fayette County Public Schools (FCPS) in Lexington, Kentucky, our students are inherently passionate about improving sustainability on their school campuses and in their homes and neighborhoods. Our job is to empower them to lead the way through access to data, strategic community partnerships, and national best practices—and we experience our greatest success when students' ideas and zeal are unleashed. At FCPS, we set our sights on national best practices and trends to guide our priorities, approaches, and strategies. Every year since the program's inception, a Fayette County Public School has been honored as a US Department of Education Green Ribbon School, with each representing wildly unique demographics and geographic areas of Lexington.

All new FCPS buildings have a target EUI goal of 35 kBtu/square foot or lower. Our newest high school, Frederick Douglass High School achieved a perfect 100 Energy Star score with a sub-20 kBtu/square foot EUI. Since FCPS started monitoring and managing energy consumption in 2011, we have achieved an overall EUI reduction of 24% down to 58.9 kBtu/square feet. Over that same period, FCPS saw its student population grow by over 4,000 additional students and an additional 800,000+ square feet of building area. Schools earn incentive funds for sustainable behavior through our Go Green to Earn Green program. Three times per year, each school is able to report how their school is making environmentally conscious decisions, and may receive up to \$1,200 annually. In 2012, Fayette County Board of Education adopted a Recycling Resolution, acknowledging the fiscal, environmental and student engagement benefits of comprehensive, district-wide recycling. With support from our Outdoor Classroom Coalition, 85% of our schools have installed an outdoor classroom. In 2013, FCPS It's About Sustainability published "FCPS Composting Manual for Schools." All plants and landscaping on FCPS properties are regionally appropriate. Twenty-two school campuses have rain gardens to assist with filtration of water runoff. In 2013 FCPS It's About Sustainability published "FCPS Rain Garden Manual For Schools" to include best management practices for rain garden installation and curriculum integration. Recycling, increased energy efficiency, water conservation, utility rate audits, & grants have provided a cost savings to the district of over \$16 million since the inception of the FCPS sustainability program.

FCPS recently purchased Health Curriculum resources from ETR, the HealthSmart Curriculum and materials. Each school was given texts and workbooks to integrate into their school curriculum. PE and Health teachers were then given a full day of professional development to map the curriculum and integrate online resources into the Districts portal. We contract the local Health Department for school nurse services – all elementary and middle schools have a .5 FTE nurse, high schools have a full time nurse. Our goal is one full time nurse in each school by 2025. Additionally, there are Federally Qualified Health Clinics (FQHC) in 8 of our elementary schools, one of our middle schools, and soon the District will be opening one in a high school. Each clinic is staffed by an Advanced Practice Registered Nurse (APRN), a Registered Nurse, at least one Mental Health Professional, and a clerk. Healthfirst also provides dental services through its mobile dental van. FCPS has recently contracted with the University of Kentucky to begin providing mental health screenings, assessments and services in middle and high

schools. The seven-year contract will begin with one high school and will expand to all other non-clinic schools beginning with the 2020 school year. Fayette Co Public Schools has a chemical management program that includes a chemical purchasing policy (low or no-VOC products), storage and labeling, training & handling, hazard communication, spills and selecting third-party certified green cleaning products. Many schools are moving to reduce or eliminate biohazard waste generated as a result of science dissections.

Leveraging best practices from dozens of local, state and national partnerships, FCPS supports environmental and sustainability education through *SEE KY*, programming that is strategically aligned to the three dimensions of NGSS with special emphasis on *Engineering Practices* and *Real-World Applications* and purposefully infused with STEM activities and learning objectives. Each school's SEE KY team is led by a school Sustainability Coordinator and curriculum is closely monitored to maintain KY Academic Standards alignment. In addition to providing instruction and tools, *It's About Sustainability* serves as a portal to local, district, state and national resources, partnerships and curriculum. Go Green + Earn Green funds may be invested into registration, transportation and accommodations for green school professional development opportunities or student transportation to environmental education experiences. Each September, *It's About Sustainability* hosts a full day training for school Sustainability Coordinators, to include training on data-driven lessons and "Community Partner Speed Dating" with 20+ local and state EE partners. In 2016, *It's About Sustainability* launched the Outdoor Classroom Coalition with the mission to remove logistical and resource barriers to outdoor learning spaces.

Being recognized in 2016 as a Best of Green School by US Green Building Council and Green Schools National Network provided legitimacy to our successes—large and small—and helps our Board of Education and community-at-large understand that even among formidable challenges intrinsic to a large, urban, diverse school district in a largely rural state, our students have the capacity to largely influence city and school leaders in their community. As high school junior Gabbie Epley of our Bluegrass Youth Sustainability Council reflected, "It feels encouraging and motivating to know that the changes we're trying to make are being noticed; that on a national level GSNN agrees that Action is the Antidote to Despair." FCPS is a majority-minority school district with 69 schools, 42,000 students, 94 native languages spoken and 49% qualifying for free/reduced meals.

Bluegrass Youth Sustainability Council is a project-based coalition of student leaders from all of Lexington's 10 public and private schools. The 65-member Council meets in person monthly and virtually weekly in Project Committees to design and implement collaborative projects. BYSC offers unprecedented collaborative and leadership opportunities and since 2014 has been recognized by Bluegrass Tomorrow (Sustainability Award), Live Green Lexington (Education Accolade, 2019 & 2019), Lexington Environmental Commission Award and National Energy Education Development Project Rookie of the Year Award.

FCPS recognizes that in our mission to *create a collaborative community that ensures all* students achieve at high levels and graduate prepared to excel in a global society, one of our greatest challenges is to provide opportunities for our students to advance economic vitality,

ecological integrity and social equity, now and into the future. As such, we are called upon to establish an institutional culture of sustainability.

In 2019, Fayette County Public Schools developed KY's first school district Sustainability + Wellness Strategic Plan, "It's About Sustainability". The Plan is a five-year roadmap that builds upon our schools' strengths, momentum, and years of sustainability progress in building efficiency, environmental literacy and student & staff wellness that has established FCPS as a national leader in sustainability. This Plan seeks to improve FCPS's stewardship of fiscal, natural and human resources by empowering students, staff and families to improve sustainability + wellness on each school campus and reflects a future-oriented perspective on sustainability that is optimistic, emphasizes development and strengths, and focuses on human potential. The Plan is a living document that is systematically reviewed by the Sustainability + Wellness Steering Committee, a team of diverse stakeholders representing each of the five focus areas. A critical metric to be considered will include schools' annual performance on the Sustainability Scorecard, a benchmarking tool organized by the three pillars of Sustainability + Wellness: Environmental Literacy, Building Efficiency and Student Wellness. In addition to a district wide 3-tiered Sustainability Scorecard to provide schools with a metric tool to benchmark performance and identify opportunities for improvement, It's About Sustainability offers an incentive program called Go Green + Earn Green, divided into four \$200 Power Packs and five Green Culture activities. Through Go Green + Earn Green, schools have the opportunity to earn up to \$1,200 to be reinvested into student-driven sustainability improvement projects through activities such as a Sustainability Listening Session (Sustainability Coordinator/School Admin/Lead Custodian), energy awareness campaign, appliance consolidation and sustainability improvement project.

#### Pillar 1: Reduced Environmental Impact and Costs

Since the inception of the FCPS Sustainability program in the 2009-2010 school year, the district has made vast strides in how it manages its energy consumption and tries to reduce its environmental impact. In the inaugural year of the program, FCPS had a districtwide average energy use intensity (EUI) of 77.6 kBtu/square foot. By the end of this most recent school year (2018-2019) the district had reduced its overall EUI to 58.9 kBtu/square foot, a 24% decrease. Over that same time period, FCPS saw its student population grow by over 5,000 additional students and an additional 800,000+ square feet of building area was added to the district. Based on the difference in EUI, while also accounting for differences in additional occupied space and changes in utility rates, the district has seen a cost avoidance in excess of \$12.5 million. That figure does not even include the cost savings accrued through utility rate structure audits, energy rebates, and grants awarded for sustainability related projects. FCPS has seen an unprecedented level of growth over the last decade, but we have been able to manage and reduce the environmental impacts of our operation through increased awareness and novel initiatives.

Building occupants are encouraged to make energy conscious decisions with the help of our *SEE KY* (Sustain, Educate, Empower, KY) teams. The *SEE KY* programming will be discussed in greater detail in the third pillar, but one of the most effective items the students participate in are building audits. These occur nearly monthly, and the *SEE KY* team at each school, facilitated by that school's sustainability coordinator, perform audits in which students look for positive sustainable behaviors. These include looking for lights, computers, & projectors to be off when a room is unoccupied, counting personal appliances (mini-fridges, coffee pots, microwaves, etc.), recycling bins are checked for usage and visibility, plus many others. Students leave feedback through 'Thank you!' post it notes, or an 'Oops!' ticket, and they write a note saying how a room earned its rating. Students love the opportunity to grade their teachers' performance, and it opens up a dialogue where the students can help explain why sustainability and conservation is important to them. As students perform audits throughout the year, they graph the results of positive versus negative sustainable behaviors, and most schools see a positive trend as the year progresses.

Schools may also earn incentive funds for sustainable behavior through our *Go Green to Earn Green* program. Three times per year, each school is able to report how their school is making environmentally conscious decisions, and may receive up to \$1,200 annually. They can earn incentives for up to five *Green Culture* activities and one *Power Pack* activity for each submission. The *Green Culture* activities earn a smaller amount of funds compared to the *Power Pack* activities and include items like:

- Is your school recycling?
- Has your SEE KY team performed at least 2 school energy audits?
- Are shutdown checklists disseminated to staff and followed before all long breaks?
- Are classrooms encouraged to turn lights off when occupants leave?
- Does your school participate in any local, state, or national environmental education or wellness programs?

The *Power Pack* activities require a little more work, and therefore earn a larger reward each submission. Schools can earn their *Power Pack* in a number of ways, including:

- Hosting an energy awareness campaign, using data gathered from student investigations, and data provided by the district energy engineer that is tailored to their school.
- Scheduling a 'listening session' in which the FCPS Sustainability team meets with the sustainability coordinator, lead custodian, and principal to have a conversation about sustainability and energy consumption at their school to discuss what they are doing that is fantastic and what they may need assistance with.
- Performing personal appliance consolidation in which they reduce the number of minifridges, microwaves, coffee pots, etc. in classrooms.
- Implement a sustainability or wellness improvement project. This is where previously
  earned Go Green to Earn Green funds are spent on items like vending misers, water
  bottle refilling stations, outdoor classrooms or gardens, and even LED lighting retrofits.

FCPS also recognizes its schools through its districtwide sustainability scorecard. Modeled after the three tiers of the USDOE's Green Ribbon School program, this scorecard measures schools based on their environmental impact, student & staff wellness, and environmental literacy. While this scorecard is used to recognize schools for the great work they are doing in those three areas, the greatest benefit is that it helps introduce schools to initiatives and community partners they might not have known existed or were available to them. Schools are recognized for their performance in the individual pillars, as well as overall awards for the top elementary, middle, and high schools.

The city of Lexington has single stream recycling, and in 2012 FCPS adopted a recycling resolution stating that all schools will participate in recycling of paper, cardboard, and recyclable plastics when available. In Lexington, emptying landfill-bound dumpsters incurs a fee, but emptying recycling dumpsters is free. As schools increase the amount they recycle, they are able to lower the number of times their landfill-bound dumpster is emptied each week, saving the district money. Currently, recycling provides an annual cost avoidance of around \$36,000. FCPS has a robust partnership with Bluegrass Greensource, a local non-profit that provides education and resources throughout central Kentucky "for all things green." Bluegrass Greensource collaborates with our schools to do recycling audits to determine how much contamination makes it into the recycling bins, and then provides education to building occupants to help them learn what is and is not appropriate to go in the recycling bins. Some enterprising students throughout our schools initiated a campaign to reduce Styrofoam in our cafeterias. Cafeterias are in the process of switching to biodegradable lunch plates, reducing landfill-bound waste even further.

Plastic lids are not recyclable in Lexington and are diverted to the landfill. In an effort to divert plastic lids from the landfill and in partnership with GreenTree Plastics in Evansville, IN, over 20 FCPS schools have collected and upcycled over 20,000 lbs of non-recyclable plastic lids into campus benches and tables incorporated into their Outdoor Classroom settings.

Several FCPS schools have implemented voluntary, incentive-based carpooling initiatives. Available student parking for three of our six traditional high schools falls well below need, and students/staff capitalize on the high-value parking by offering parking spots only to students who commit to carpooling with 3+ students. In a district of 42,000 students, our free, public 252-bus system transports 37,975 bus rides a day, including 1,400 routes. Our students travel 18,622 daily and 3,457,360 miles annually on our mass transit transportation bus system.

In 2013, FCPS It's About Sustainability published "FCPS Composting Manual for Schools" in cooperation with our municipality (Lexington Fayette Urban County Government) and local nonprofit Bluegrass Greensource. This manual includes background information, scaffolded lesson plans, step-by-step directions, funding sources and community partnerships to support school composting in several forms, from classroom vermicomposting, to outdoor tumbler and outdoor palette. To date, 18 schools have implemented a composting program in some form.

All plants and landscaping on FCPS properties are regionally appropriate. Twenty-two school campuses have rain gardens to assist with filtration of water runoff. In 2013 FCPS *It's About Sustainability* published "FCPS Rain Garden Manual For Schools" to include best management practices for rain garden installation and curriculum integration (lesson plans, community partners, funding sources, etc.). 85% of our schools have some form of an outdoor classroom. FCPS has an outdoor classroom coalition that develops best practices for outdoor learning environments and puts schools in touch with community partners to assist with creation and upkeep of those outdoor learning areas.

In 2018, the Urban Forestry Initiative launched an annual citywide October Tree Week, during which over 60 trees were planted on our school campuses, in partnership with FCPS Operations and countless local nonprofits. A coalition of 20+ community partners developed *Adopt-A-Tree* in partnership with the University of Kentucky to help students measure the ecological, social, aesthetic, and wellness benefits of their existing campus trees. Through Adopt-A-Tree, over 50 trees have been adopted and 100+ campus trees planted.

FCPS is in a period of growth, and is building new schools and renovating older schools every year. In design stages of both renovation and new construction, increased energy efficiency is one of the top goals. All new buildings have a target EUI goal of 35 kBtu/square foot or lower. Our newest high school, Frederick Douglass High School achieved a perfect 100 Energy Star score with a sub-20 kBtu/square foot EUI. Another new high school is in design stages right now with the goal of being just as efficient. One of our technical schools, Locust Trace AgriScience Center was designed to be a net-zero building, with a solar array of 181 kilowatts, plus solar thermal heating, and a graywater harvesting system on its campus. New construction and renovations have been making use of permeable pavement in parking lots and driveways to reduce the amount of stormwater runoff produced. There is a greater emphasis on tighter building envelopes to reduce the loss of conditioned building air, as well as increased natural lighting.

Even some of our older buildings have been able to make incredible strides in increasing their energy efficiency. Through campaigns spearheaded by students and staff, we have had schools like 2017 Green Ribbon School recipient, Morton Middle School, that have been able to make buildings built decades ago run as efficiently as some of our newer construction. 2012 Green Ribbon School recipient, Rosa Parks Elementary, reduced its EUI by over 40% solely by altering occupant behavior. No capital improvements were involved, just passion from the school community. Our students and staff lead the way and are passionate about conservation and sustainability.

Since 2009-2010, Fayette County Public Schools has added five new schools and renovated eleven existing buildings, it has increased in enrollment by approximately 5,000 students, added over 800,000 square feet of space, but still managed to use less total energy in 2018-2019 than it did in 2009-2010. In

2009-2010 FCPS used just over 420 million kBtus of energy (electricity and natural gas normalized to kBtus), in 2019 FCPS used just under 370 million kBtus. The EUI of the entire district's 60 schools plus support buildings in 2010 was 77.6 kBtu/square foot, and in 2019 with 65 schools plus support buildings it had decreased to 58.9 kBtu/square foot. Recycling, increased energy efficiency, water conservation, utility rate audits, & grants have provided a cost savings to the district of over \$16 million since the inception of the FCPS sustainability program. FCPS has been able to reduce its CO<sub>2</sub> emissions produced by energy consumption by 10,700 metric tons of CO<sub>2</sub> annually.

#### Pillar 2: Health and Wellness

Schools' wellness initiatives are benchmarked using the FCPS Sustainability + Wellness Scorecard. Some of the metrics on the Wellness Pillar include healthy fundraising policy, peer mentoring program, first aid certifications, mental health services, recess policy and indoor air quality.

FCPS recently purchased Health Curriculum resources from ETR, the HealthSmart Curriculum and materials. Each school was given texts and workbooks to integrate into their school curriculum. PE and Health teachers were then given a full day of professional development to map the curriculum and integrate online resources into the District's portal. This was done to insure that each school was teaching the same lessons so that students who had to switch schools during the school year (this impacted many of our students in the low SES demographic) would not miss content or instruction.

FCPS contracts with the local Health Department for school nurse services – all elementary and middle schools have a .5 FTE nurse, high schools have a full time nurse. The district's goal is one full time nurse in each school by 2025. Additionally, there are Federally Qualified Health Clinics (FQHC) in 8 of our elementary schools. Soon the District will be opening a middle school clinic and a high school clinic. Each clinic is staffed by an Advanced Practice Registered Nurse (APRN), a Registered Nurse, a Mental Health Professional and a clerk. Healthfirst also provides dental services through its mobile dental van. The van makes regular stops at the clinic schools, and they coordinate with Health Department nurses to make visits to other schools to attend to the dental needs of students who do not have a regular dentist.

FCPS has recently contracted with the University of Kentucky to begin providing mental health screenings, assessments and services in middle and high schools. The seven-year contract will begin with one high school and will expand to all other non-clinic schools beginning with the 2020 school year. The district adopted a new social and emotional curriculum to complement the work of social workers and health teachers as students begin to develop emotional intelligence, a critical skill in the global economy.

Fayette County was the first and one of only a few Districts to allow students to carry and self-administer sunscreen. Needing only parent permission, a student may bring sunscreen to school and apply it for recess or any other activity that takes place outdoors.

Many Health and PE teachers run staff wellness programs in addition to student wellness. There are Wellness Wednesdays and Wellness newsletters. The state also provided incentives through its wellness program. Many schools and district offices have leveraged this tool to develop employee activities in their facilities.

FCPS sponsors a Health and PE Professional Development Day for PE/Health Teachers each August. Teachers are funded, on a rotating basis, for attendance at State, Regional and National Conferences so that they may bring new ideas back to the District to share with their peers at the summer PD event. Each spring the District hosts a Simple and Sensible Wellness Professional Development in partnership with a number of local entities. Subjects covered are active classrooms, healthy snacks, healthy

fundraisers, mindfulness, yoga for the classroom, etc. Teachers have also been given the opportunity to participate in yoga/mindfulness/stress relief seminars given throughout the year.

Fayette Co Public Schools Board of Education receives an annual report outlining conditions seen in clinics and by nurses, as well as the number of dental visits, and how many students are sent home versus back to the classroom. Immunization reports are done quarterly. We receive reports from the state that measure employee engagement in the wellness program. Students taking mindfulness and mindful movement are asked to keep journals and are asked to rate their levels of stress and anxiety at different mileposts during the semester. The University of Kentucky will be measuring student mental health through the RAAPs assessment and school health will be monitored. Beginning in 2020-21 there will be several pilot schools that are going to use heart rate monitors to track student workouts and match that with behavior outcomes.

A coalition of community partners (including FCPS Child Nutrition, University of KY Extension, Fayette Co Health Department, local nonprofits + more) work towards increased locally-sourced café procurement and provide classroom lessons on the environmental, economic and wellness benefits of local food, primarily through 45-minute, hands-on lessons on each benefit (environmental, economic, wellness). In 2019, Farm to School piloted a *Farm to School Lunch Challenge*, a week-long effort to raise awareness on the benefits of local food, locally-procured food items on the line <u>every</u> day, competition for increased student participation in school lunch, prizes and incentives, and visits from local farmers. Since 2015, over 2,000+ students have been reached by Farm to School lessons, and cafeteria procurement on locally-sourced items has increased by 50%.

Increasing physical activity is endorsed by the District as best practice in every school. A few elementary schools have opted for two recess periods during the instructional day to insure students are getting activity that boosts learning. Each year the District hosts a "Simple and Sensible Wellness Ideas that You Can Use in Your Classroom Tomorrow" event for all teachers. Past topics include: ideas for in class activity, mindfulness activities, yoga in the classroom, alternatives to withdrawing recess as punishment, non-food rewards and incentives, teacher wellness activities, etc. It continues to be a very popular addition to the District's Professional Development menu. Outdoor activities are highlighted at the annual Health/PE Teacher Professional Development in August prior to the start of school.

All of our schools has a chemical management program that includes a chemical purchasing policy (low or no-VOC products), storage and labeling, training and handling, hazard communication, spills (clean-up and disposal), and selecting third-party certified green cleaning products (GS-42, Green Seal Standard for Commercial and Institutional Cleaning). 100% of our Pest Control products are certified. FCPS visually inspects all structures on a monthly basis to ensure they are free of mold, moisture and water leakage. Our classrooms are routinely monitored for CO<sub>2</sub> and RH levels. If the RH level is above 60% or a building occupant raises concern about RH, additional air mold assessments are conducted. Our student SEE KY Teams collect RH data on multiple and various spaces within our school. For biohazard materials (i.e. lab dissections), classroom collection receptacles are provided, collected by district officials, and properly disposed of in a medical waste incinerator. Our Risk Management

department conducts an annual sweep of all classroom and office/student occupant spaces to eliminate any potential hazardous substances, including cleaning solutions and air fresheners not listed on the approved School Supply List.

Despite widespread occurrence of radon in Kentucky, there is no state statute requiring school districts to monitor for radon. FCPS, however, monitors all schools for radon and mitigates any areas at or above 4 pCi/L. Our building management system monitors the ventilation system and filter status that will alert Fayette County Public Schools Maintenance when the unit is not functioning properly, or if filters need to be cleaned and replaced. All spaces were designed to meet ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality.) RH is routinely monitored and any room with RH levels above 60% is further investigated and mitigated.

FCPS implements an integrated pest management plan to reduce and/or eliminate pesticides. Pest control policies, methods of application, and posting requirements are provided to parents and school employees. Copies of pesticides labels, copies of notices, MSDS and annual summaries of pesticide applications are all available and in an accessible location. Our school prohibits children from entering a treated area for at least 8 hours after the treatment, or longer if required by the pesticide label. Our integrated pest management program consists of good housekeeping techniques, reducing clutter, and preventative maintenance that controls entry. If further action is required we use baiting and trapping to remove a pest, which is provided by our contracted pest control company (Terminix). Terminix provides the routine inspections, pest identifications, and monitoring of traps. If any pest control service involves anything besides baiting and trapping, the school provides a letter home to parents and keeps a copy of what insecticides were used on file. Our priority is to conduct pesticide treatment when school is not in session. We have copies of all work orders generated by the school's requesting pest control services.

Stock concentrations are locked in chemical stockroom, students only use diluted versions of chemicals. We follow all MSDS and FCPS guidelines on storage, usage, and disposal. Our kitchen *All Purpose* and *Pot and Pan* are Green Seal Certified, and the Envirowash carries the EPA's Design for the Environment Label. Both Green Seal, and the EPA's DFE Label are widely recognized as being generally safer/more user and environmentally friendly.

In partnership with KY Division for Air Quality, students collect data on afternoon carpool-line campus idling. Upon completion, students implement a two-week No Idling Awareness Campaign using provided newsletter templates, announcement scripts, posters and tokens of appreciation (eg key chains, stickers, pencils). Post-campaign, students collect idling data again and install a No Idling sign on campus. Since No Idling was launched in 2014, 30% FCPS Schools have adopted a No Idling policy.

Additionally, FCPS maintains an asthma management program that is consistent with the National Asthma Education and Prevention Program's (NAEPP) asthma friendly school guidelines. Common asthma triggers such as air fresheners and candles are confiscated during annual hazardous chemicals

sweeps. Students include air fresheners on their monthly wellness patrols and provide feedback to teachers/staff who include air fresheners in their classrooms/offices.

In our plumbing, a reduced pressure backflow preventer is installed at the domestic water entrance, preventing the reverse flow of polluted water from entering into the water supply. Lead free plumbing components were also utilized during construction of our buildings. In all new construction and renovations, water bottle refilling stations are installed to encourage students to re-use water bottles. Many schools have used their *Go Green to Earn Green* funds to purchase one or more water bottle refilling stations for their buildings as well.

School buildings are kept between 71-74 degrees Fahrenheit during the cooling season, and between 69-72 degrees Fahrenheit during the heating season. Newly renovated schools have  $CO_2$  monitors that will regulate the fresh air ventilated into rooms. Schools that do not have the monitors are regularly checked using handheld  $CO_2$  meters.

In 2012, the Bluegrass Youth Sustainability Council partnered with our water utility (KY American Water) to purchase and install 2 water bottle refilling stations in every Lexington public and private high school to increase water consumption and decrease the use of disposable water bottles. Enthusiasm for water bottle refilling stations has reached fever pitch, and currently 85% of our schools have installed a water bottle refilling station either through direct purchase, a partnership with a local nonprofit, or through renovation.

## Pillar 3: Environmental and Sustainability Education

Fayette County Public Schools *It's About Sustainability* understands that to improve local and global sustainability, we must follow our students' lead with the singular vision of removing barriers and equipping them with the tools and partnerships necessary to see their visions to fruition. Leveraging best practices from dozens of local, state and national partnerships, FCPS supports environmental and sustainability education through *SEE KY*, programming that is strategically aligned to the three dimensions of NGSS with special emphasis on *Engineering Practices* and *Real-World Applications* and purposefully infused with STEM activities and learning objectives. Each school's SEE KY team is led by a school Sustainability Coordinator and curriculum is closely monitored to maintain KY Academic Standards alignment. In addition to provides instruction and tools, *It's About Sustainability* serves as a portal to local, district, state and national resources, partnerships and curriculum (eg KY Green & Healthy Schools, Live Green Lexington and National Energy Education Development Project).

Step 1 of SEE KY is to identify the team of students who will spearhead school wide sustainability initiatives. During Step 2, Energy Engineer (Logan Poteat) and Sustainability Coordinator (Tresine Logsdon) teach a 45-minutes STEM & Our Environment lesson to include grade-level aligned content (eg renewable vs nonrenewable, climate change causes and impacts, sustainable habits), training on five investigations, data collection and data analysis. The five investigations conducted during STEM & Our Environment include Energy + Sustainability Audit, Plug Load Survey, Light Level Survey, Indoor Air Quality Assessment and Building Envelope Assessment, using tools such as Thank You/Oops Tickets, footcandle meter, IAQ meter, infrared temperature meter and plug load meter. After completing investigations, student analyze data in graph form with Logan and Tresine. Also during Step 2, school Sustainability Coordinators are encouraged to submit energy and sustainability projects to KY Green & Healthy Schools or National Energy Education Development Project. During Step 3 of SEE KY, students further analyze their data and raise awareness by distributing appliance and light-switch stickers and implementing a school wide Sustainability Awareness Campaign, using their collected data and customized data provided by It's About Sustainability. Each April, schools submit an action picture of their favorite SEE KY project to be included in a citywide Earth Day Celebration video. SEE KY's final step, Step 4 supports each school's annual Sustainability Improvement Project (leveraging data collected throughout the school year and utilizing Go Green + Earn Green funds) and measures performance through the 3-tiered Sustainability + Wellness Scorecard, allowing schools to document beginning, progressing or advanced performance on each metric. Example metrics on the Environmental Literacy pillar of the Sustainability + Wellness Scorecard include Leader Engagement (Sustainability Coordinator at each school), Communication (monthly Sustainability Newsletter), Farm to School, KY Green & Healthy Schools, Outdoor Classrooms and Adopt-A-Tree.

Bluegrass Youth Sustainability Council is a project-based coalition of student leaders from all of Lexington's 10 public and private high schools. Mentored by *It's About Sustainability*, The 65-member Council meets in person monthly and virtually weekly in Project Committees to design and implement collaborative projects. BYSC offers unprecedented collaborative and leadership opportunities and since 2014 has been recognized by Bluegrass Tomorrow (Sustainability

Award), Live Green Lexington (Education Accolade, 2019 & 2019), Lexington Environmental Commission Award and National Energy Education Development Project Rookie of the Year Award. During the 18-19 school year, BYSC was awarded a \$5,000 Turner Foundation grant, invested into project implemented through seven Project Committees: Urban Gardening, Student Sustainability Leadership Academy (BYSC-designed 3-day student leadership development), Water Quality, Community Outreach, Food & Agriculture, Waste & Recycling and Idea Festival (annual Earth Day Celebration in collaboration with nonprofit Bluegrass Tomorrow).

In addition to student-driven sustainability projects, Go Green + Earn Green funds may also be invested into registration, transportation and accommodations for green school professional development opportunities (eg National Green Schools conference, North American Association for Environmental Education) or student transportation to outdoor learning or environmental education experiences (eg Raven Run/McConnell Springs, KY Green & Healthy Summit). Each September, in collaboration with local nonprofit Bluegrass Greensource, *It's About Sustainability* hosts a full day training for school Sustainability Coordinators, to include training on data-driven lessons and "Community Partner Speed Dating" with 20+ local and state EE partners.

In 2016, in response to overwhelming demand for school garden support, *It's About Sustainability* launched the Outdoor Classroom Coalition with the mission to remove logistical and resource barriers to outdoor learning spaces (rain garden, vegetable garden, community gardens, sensory garden) and foster communication among parents, teachers, students, community partners and district personnel to promote and support outdoor learning for improved student achievement, appreciation and respect for nature, nutrition knowledge, healthy life skills and student engagement. The primary role of the Outdoor Classroom Coalition is to pair schools with community partners on schools' most pressing needs: design, supplies, installation, curriculum integration, culinary/harvest training and summer maintenance.

Each school year on average of 3-5 FCPS schools are under renovation or design for renovation. Launched in 2014, Renovation 101 and Design 101 Teams acquaint students with architectural and engineering career pathways and train students as liaisons between their school's renovation and their school community (students/staff/parents). Students on Design 101 or Renovation 101 Teams meet once a month with the architectural and engineering team to understand the sustainable and high performing components of their school renovation through classroom discussion, hands-on activities and behind-the-scenes "Learning At Work" hard hat tours. Design 101 & Renovation 101 Teams use the information they learn to design progress presentations to be delivered at faculty meetings, Open House events or any school wide community events.

In addition to all aforementioned programs and initiatives of support, purposefully designed to Follow Our Students' Lead, our team supports numerous other student-driven endeavors such as

# Farm to School

A coalition of community partners (to include FCPS Child Nutrition, University of KY Extension, Fayette Co Health Department, local nonprofits + more) who work towards increased locally-sourced café procurement and

provide classroom lessons on the environmental, economic and wellness benefits of local food, primarily through 45-minute, hands-on lessons on each benefit (environmental, economic, wellness). In 2019, Farm to School piloted a *Farm to School Lunch Challenge*, a week-long effort to raise awareness on the benefits of local food, locally-procured food items on the line <u>every</u> day, competition for increased student participation in school lunch, prizes and incentives, visits from local farmers. Since 2015, over 2,000+ students have been reached by Farm to School lessons and cafeteria procurement on locally-sourced items has increased by 50%.

## Urban Forest Initiative

A coalition of 20+ community partners who developed *Adopt-A-Tree* in partnership with University of KY to help students measure the ecological, social, aesthetic, and wellness benefits of their existing campus trees. Launched in 2018, UFI launched an annual citywide October Tree Week, during which over 60 trees were planted on our school campuses, in partnership with FCPS Operations and countless local nonprofits. Through Adopt-A-Tree, over 50 trees have been adopted and 100+campus trees planted.

## No Idling

In partnership with KY Division for Air Quality, students collect data on afternoon carpool-line campus idling. Upon completion, students implement a two-week No Idling Awareness Campaign using provided newsletter templates, announcement scripts, posters and tokens of appreciation (eg key chains, stickers, pencils). Post-campaign, students collect idling data again and install a No Idling sign on campus. Since No Idling was launched in 2014, 30% FCPS Schools have adopted a No Idling policy.

# Upcycling

Plastic lids are not recyclable in Lexington and are diverted to the landfill. In an effort to divert plastic lids from the landfill and in partnership with GreenTree Plastics in Evansville, IN, over 20 FCPS schools have collected and upcycled over 20,000 lbs of non-recyclable plastic lids into campus benches and tables incorporated into their Outdoor Classroom settings.