

## 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. Julianna Daly

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

Official School Name: Saint Agnes School

(As it should appear on an award)

Official School Name Mailing Address: 1800 Newburg Road, Louisville, KY 40205

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

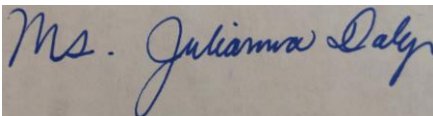
County: Jefferson State School Code Number \*: N/A

Telephone: 502-458-2850 Fax: 502-45-5215

Web site/URL: [www.stagneslouisville.org/school](http://www.stagneslouisville.org/school) E-mail: [jdaly@stagneslouisville.org](mailto:jdaly@stagneslouisville.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.



Date: 02/14/19

(Principal's Signature)



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

District Name: Archdiocese of Louisville

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

A handwritten signature in black ink that reads "Leisa Schulz".

Date: 02/14/19

(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: 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.

A handwritten signature in blue ink that reads "Billy Bennett".

Date: 2/15/2019

(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](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



# SAINT AGNES SCHOOL

1800 Newburg Road Louisville, Kentucky 40205

Kentucky application for nomination to the  
U.S. Department of Education Green Ribbon Schools (ED-GRS)  
January 8, 2019

## Nominee Information

Name: Saint Agnes School

Category of Nomination: School

Address: 1800 Newburg Road Louisville, KY 40205

Twitter: @saintagneslou Facebook: Saint Agnes School Instagram: @saintagneslou

Website: [www.stagneslouisville.org/school](http://www.stagneslouisville.org/school)

### Top Official:

Mrs. Julianna Daly, Principal

Email: [jdaly@stagneslouisville.org](mailto:jdaly@stagneslouisville.org) Phone: 502-458-2850

### Lead Applicant:

Mrs. Tamra Koshewa, Saint Agnes School Board Chair

Email: [tamrakoshewa@gmail.com](mailto:tamrakoshewa@gmail.com) Phone: 502-558-6211

- ✓ Early Learning
- ✓ Elementary
- ✓ Middle
- ✓ Non-Public

Pell Recipients: N/A

Free and Reduced Price Lunch: 2%

Minority: 4%

Limited English Proficiency: 0%

Special Education: N/A

Graduation Rate (8th Grade): 100%

Attendance Rate: 97.3%

Total Enrolled: 453 students Number of Schools: 1 Buildings: 4 Campuses: 1

# SUMMARY NARRATIVE

Saint Agnes School is a private Catholic elementary school in the Archdiocese of Louisville. Founded in 1914, and with a current enrollment of 453 students in Pre-Kindergarten through 8th grade, Saint Agnes School's mission is to shape young minds to be good stewards, and to lead faith-based mindful lives. Saint Agnes has been awarded the National Blue-Ribbon School of Excellence three times (1999, 2005, & 2014) by the US Department of Education. We are the first elementary school in the Commonwealth of Kentucky and the only elementary school in Louisville to win this award three times. Saint Agnes is accredited by the Southern Association of Colleges and Schools Council and the Kentucky Non-Public Schools Commission. We have been named a Compassionate School by the City of Louisville Mayor.

Saint Agnes School shares a 32-acre campus with Saint Agnes Church, the Passionist Monastery and the Passionist Earth and Spirit Center. The collective grounds offer a natural classroom to raise awareness, learn, discuss and experience our environment, and see how our positive actions can improve our communal space and provide a springboard to our local community and beyond. Our campus is home to a student-built and maintained pollinator garden, extensive wetlands that students helped create, a composting facility and a center focused on Earth literacy.

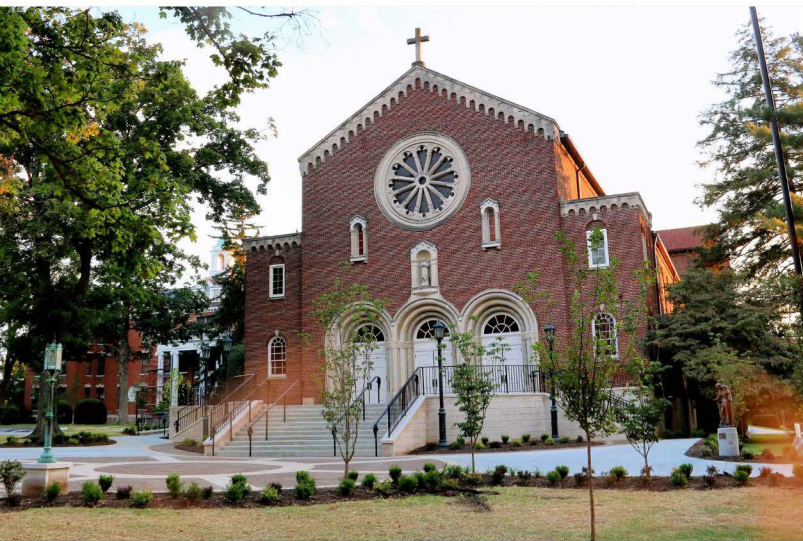


Front of Saint Agnes School building at 1800 Newburg Road, Louisville, Kentucky.

Instilling an appreciation to nurture and safeguarding our natural surroundings is a common thread that weaves itself through our school curriculum. Taking guidance from Pope Francis' environmental encyclical, *Laudato Si*, in which he calls on everyone to "care for our common home", our parish community and school have thoroughly embraced this call to action. Our school has implemented many programs to reduce waste, recycle whatever can be repurposed, and reuse everyday items in our classes, offices and common areas.

As we strive for academic excellence, we have embraced the importance of implementing a comprehensive environmental and sustainability curriculum across all of our classes. We have made great strides as a community and a school to help reduce our overall impact on the environment and to improve the health and wellness of students and staff.

# SUMMARY NARRATIVE (continued)



*Rear of Saint Agnes School building (top left), After School and Summer Care building (top right), front of Church (bottom left), Side of Church and adjoining Monastery, parish rectory building and athletic field (bottom right) .*

Reducing environmental impact is a cross-cutting focus at Saint Agnes. Students play an active role as environmental stewards to teach each other environmental best practices. Fourth grade students won both the Kentucky and the National Elementary Rookie of the Year award from the National Energy Education Development Project for a project entitled "Energy in Our School," focusing on the efficient utilization of resources. Reducing fossil fuel usage by adoption of alternate forms of transportation and finding efficiencies within the existing physical infrastructure are constant considerations. From using washable trays, glasses and flatware in our lunchroom, to encouraging our students to bring their own water bottles to school; we are cognizant that using less disposable resources will get us closer to a sustainable community. Recycling occurs throughout our school. Each classroom has dedicated recycling bins, and we empower our students to be in charge of the recycling process within the school. Our recycling mindset has spread to the greater Saint Agnes community, with community sponsored events recycling hundreds of pounds of materials annually that would have made their way to landfills just years earlier.

Promoting health and wellness for students, faculty and staff is foundational to the daily activities at Saint Agnes. All students take part in a structured physical fitness curriculum. Participation in after school sports is very high with over 70% of the students taking part in an organized sport at some point during the school year and with many students participating every season. The health of our faculty and staff is also an important focus. All school employees are enrolled in Go365, a health and wellness program sponsored by Humana Health. Flu shots are offered to all staff, and 100% of the faculty is trained in CPR, first aid and basic life saving.

# SUMMARY NARRATIVE (continued)

Air quality issues are a fact of life living in the Ohio River Valley. To reduce the associated potential negative health effects, Saint Agnes is an "idle free" zone for all cars and school buses. In addition, indoor air filtration systems are used and maintained continuously, and cleaning agents used in the school are chosen based on their safety profile. Positive mental health is supported by a multi-faceted counselling program. One-on-one and group counselling services are available to all students and families. Students are taught coping skills to deal with everyday life issues such as anxiety, depression and low self-esteem.

Saint Agnes uses environmental concepts and ideas of sustainability to help teach science and engineering and to foster mathematical thinking across all grades. The science and math curricula rely on environmental examples to demonstrate the ideas that are taught. Students in grades Pre-Kindergarten, First and Second use natural materials gathered from the campus to create art and learn about their environment and use recycled materials to learn about simple machines. The middle grades use recycled aluminum in science class to build boats to learn about volume measurement and water displacement, dissect owl pellets to learn about the food web, and build roller coasters out of discarded foam and paper rolls to learn about force and motion. Having access to a full science and technology lab, the upper grades complete experiments and projects where they synthesize the concepts they have learned over the years to demonstrate STEAM literacy.

The students, staff, administration, and the Saint Agnes Parish community have worked to promote and to help develop future leaders in our local community and the world. The philosophy of the Green Ribbon School Program aligns closely with the thoughts, actions and teachings of our school. We are always striving to better ourselves as a faith-based community by empowering our future leaders to become champions for our environment. We will continue on that path.



# PILLAR 1: Efforts to Reduce Environmental Impacts and Costs

The goal of lessening our impact on the environment is a thread that runs through all aspects of Saint Agnes culture. Reducing the amount we consume, reusing what has useful life remaining, recycling items to decrease the total waste stream, and finding efficiencies in the systems in our environment are shared goals of our students, faculty, staff, administrators and greater community. Students are empowered to make positive environmental policy recommendations for the school through the environmental steward program. The environmental stewards are students who help educate their peers about all aspects of green living. The stewards have dedicated time on Fridays during the school-wide newscast to educate students and faculty on various topics such as composting or recycling. These environmental stewards are also part of the Student Council, ensuring that green concepts are taken into consideration when school-wide policies are being discussed.

To become a more efficient school, the 4th graders, during the 2017-2018 school year, completed an energy efficiency study of the campus. Under the guidance of their teacher, the students measured temperatures in selected classrooms at varied times with varied solar exposures. These measures were plotted and compared to outdoor temperatures and thermostat settings



*Fourth grade students and their teacher in Washington, DC at the NEED conference.*



to arrive at recommendation for the most efficient use of window shades to help control environmental conditions. Their project "Energy in Our School" won both the Kentucky and the National Elementary Rookie of the year award from the National Energy Education Development Project.

The school cafeteria has been an important focus to reduce environmental impact. Saint Agnes only uses washable trays, cups and silverware for its daily lunch service. Disposable straws were removed from the cafeteria and concession stands in 2017. In addition, students and faculty are encouraged to bring reusable water bottles to further increase the efficiency by not having to wash multiple glasses. Coffee grounds and vegetable waste gets composted at the Earth and Spirit Center, located on the south side of our campus (pictured below).



*School cafeteria.*



*Earth & Spirit Center and refugee garden (left).*

# PILLAR 1: Efforts to Reduce Environmental Impacts and Costs (cont.)

Reducing fossil fuel use by adopting alternative forms of transportation is another shared goal. Since we are located within the city of Louisville, we encourage neighborhood students to walk or bike to school. Crossing guards and bicycle racks are provided for all students who get themselves to school. For those who are dropped off and picked up by car, carpooling is encouraged, and the St. Agnes campus has a "no idling" policy for all vehicles picking up or dropping off students (this includes our school bus fleet as well). To further decrease transportation-related fossil fuel consumption, we have added some walking field trips for the students, and when feasible, we have used the existing city bus infrastructure for field trips.



*Environmental stewards depositing items into the recycling bin.*

Recycling is a major focus in our classrooms as well. All classrooms and common areas have well marked recycle bins, and all contents get aggregated. Within each classroom, students are assigned to be in charge of the recycling program as part of the daily routine. These students collect the recycled material and bring it to the single stream eight yard recycle bin located outside the school that is picked up twice a week by a third party recycler. Our school also participates in the Crayola ColorCycle program. Coordinated by our art teacher, all Crayola markers are collected, packaged and shipped back to the company for re-purposing. Reducing the amount of paper used in the classroom is also a focus at Saint Agnes. The middle



*8th grader working on bathroom remodel.*

school grades have implemented the use of "digital lockers" to share documents, school flyers, and other large files. These "digital lockers" allow for instantaneous dissemination of information, eliminating the need for excessive printing or emailing.

Eighth grade students select from several art electives as part of their curriculum. This past fall the Project Planning and Design class remodeled a school bathroom and was able to restore and reuse old bathroom tiles for the remodel.

Recycling is integrated into Saint Agnes community events as well. Saint Agnes hosts a carnival fundraiser each summer to support campus capital projects. Students from the Saint Agnes Boy Scout Troop 4 play a significant role in recycling materials from the carnival. The Scouts walk the grounds of the carnival, collecting and separating waste from recyclable items. In 2018, 420 pounds of aluminum cans, 370 pounds of plastic bottles, 385 pounds of cooking oil, 450 pounds of cardboard, and 810 pounds of sheet iron were recycled from the carnival. In addition, 138 pounds of food scraps were composted. Over the years our campus-wide recycling program has continually increased. The ratio of recycling to waste has improved to such an extent that now our school recycles more material than it sends to the waste stream.



*Saint Agnes Carnival recycling examples.*



# PILLAR 2: Efforts to Improve the Health and Wellness of Students and Staff

Student and staff health and wellness are important goals for Saint Agnes. Student activity is promoted through a well-rounded physical fitness curriculum, outdoor recess (weather permitting), and a host of after school sports and activities for all grade levels. Structured physical education is a requirement for all Saint Agnes students as part their overall curriculum, and students take part in physical education classes at least two times per week. In addition to the structured curriculum, opportunities for additional physical activity are provided throughout the day. The gymnasium is open and accessible for children who arrive early to school, outdoor recess, weather permitting, is scheduled for each grade either before or after lunch. In case of inclement weather, recess is moved to the gymnasium.

Pre-Kindergarten, Kindergarten and First Grade students take part in the Minds in Motion curriculum. This kinesthetic approach encourages students to integrate motion into the learning process. Minds in Motion activities occur both in the classroom and on the campus green space. Keeping the entire student body as active as possible is the focus for all grades. In the morning before the first bell, students are allowed to use the gym for walking. Our school also takes part in the Fitness Gram program. This physical fitness curriculum focuses on muscular strength and flexibility and helps track trends in fitness over time. The data collected helps identify and correlate physical fitness with academic achievement. In addition, Saint Agnes participates in the Presidential Fitness Program. Aspects of the curriculum are used as another barometer for overall student health. Students also learn about bike safety through an annual Bicycle Rodeo sponsored by Norton Hospital.

Saint Agnes has a very robust Athletic Program where students participate on competitive teams in the Catholic School Athletic Association (CSAA) or parish-sponsored leagues, beginning as early as Kindergarten. Saint Agnes has a no cut policy. Every student has the opportunity to play on a team, regardless of ability or financial need. Each season offers multiple sports and teams for both male and female students.



The overall participation for our extracurricular sports is very high, upwards of 70%, and we focus on getting our students involved from the very beginning. For example, approximately half of the Kindergarten class participates in winter basketball, over 300 students participated in Spring soccer and over 125 students ran cross country this past Fall. The level of involvement stays very high throughout the grades, with many sports fielding multiple teams to ensure adequate opportunities for all of those interested. For those who do not want to participate in competition-based activities, extramural groups like scouting, theatre and various academic teams are provided at all age levels. For all Saint Agnes extramural activities, parents and siblings are encouraged to participate and are fundamental to their success. Parents and older siblings act as coordinators, coaches and referees for many of our activities. Their involvement helps keep the family unit active and healthy.



## PILLAR 2: Efforts to Improve the Health and Wellness of Students and Staff (continued)

Faculty health and wellness is an important initiative at our school. All employees are provided Go365, the health and wellness program sponsored by Humana Health. In this program, health activities such as getting a routine check-up or completing a workout routine are assessed, supported, tracked, and ultimately rewarded through incentive credits that can be used to purchase merchandise or experiences. Flu shots are made available to all faculty and staff. Health training is also provided to the faculty. One-hundred percent of the faculty is Red Cross Certified in CPR and first aid.

Our faculty is trained to teach healthful practices. Mindfulness classes are provided to all interested faculty, and they are encouraged to teach these practices to their students. So far, 10 faculty members have been trained and the program is ongoing. These practices have been found to help foster inner resilience and mitigate mental and emotional stress. The mindfulness program has been introduced to 3rd and 4th grades by bringing in invited speakers to explain and demonstrate how these practices can help them in their day to day routine. Basic yoga is taught to the Pre-K and Kindergarten students.



*Faculty and staff participating in CPR training.*

The Louisville Water company has earned national acclaim for offering the highest quality of drinking water in the nation and is one of only two water utilities to receive that award more than once. Saint Agnes benefits from this amazing resource, and students are encouraged to bring their own water bottles to school. Bottled water is not sold on campus. In their science curriculum, Saint Agnes students learn about how wetlands act as natural buffers in our environment, provide critical habitat for wildlife, mitigate flooding and help improve our overall water quality. In partnership with the Earth and Spirit Center, Saint Agnes students in grades three, four and five helped create and now maintain natural wetlands that are located on our campus.



*Third grade students transforming a campus site into a wetlands.*

## PILLAR 2: Efforts to Improve the Health and Wellness of Students and Staff (continued)

Asthma and air quality concerns are an ever present reality living in the Ohio River Valley. When air quality alerts are issued, outdoor student activities are curtailed. To reduce our contribution to air pollution, Saint Agnes is an "idle free" school zone. All cars waiting to pick up students, as well as school buses are required to turn off their engines while waiting. This policy is enforced by faculty members who facilitate end of school day student pick up. Air quality is also a concern for inside our facilities as well. Air filtration systems are used within the buildings to remove particulates. Filters are replaced in this system on a regular basis. Air quality concerns are also addressed with our integrated pest management plan. Our contractors limit the use of chemicals that may be potential irritants and only treat areas outside of school hours when faculty and students are not present. As part of the integrated pest management plan, we are constantly cognizant of our surroundings, to make the physical environment less appealing and less accessible to unwanted pests. These physical actions reduce the amount of chemicals applied on the campus.



Saint Agnes has a dedicated school counselling program to support students and families as they deal with life challenges at school, home and outside of school. Counseling assists students with key developmental tasks and offers a positive approach while addressing concerns and conflicts at school, home and in their social environment. Students benefit from learning positive coping skills to deal with every day life issues that can include: anxiety, depression, loss, transition, divorce, low self-esteem, managing anger, and making friends. In addition to traditional counseling, we offer small group and whole class research-based and prevention education programs to students in all grades. In grades K-5 educational programs are focused on social skill and communication. In the upper grades the emphasis focuses on bully prevention, drug and alcohol awareness, using social media responsibly, as well as the Owing Up and Mindfulness curriculum.

Proper nutrition for our students is an important emphasis of faculty, staff and parents. We have a volunteer Health, Wellness and Nutrition position on our PTO Board who works with our cafeteria staff to review and plan healthy food choices. The school cafeteria offers many healthy lunch options for students and teachers each day that include protein, fresh fruit and vegetable options. We have a salad bar available every day as well. Sugary juices and soft drinks are not offered and sweet treats are limited to special occasions.

The Saint Agnes School is really the Saint Agnes School community. The degree of family and community involvement in all aspects of the school is astounding. Our vibrant parent teacher organization (PTO) helps organize and facilitate school volunteers, fundraising projects, our stewardship program and social events. Parents act as recess monitors, cafeteria aides, library assistants, classroom helpers, and coaches for intramural sports teams and organizations. Without the help of the wider community, the school could not fulfill its mission, and the health, wellness and sustainability for the entire community would be adversely affected.



Students, teachers and parents participate in Saint Agnes' annual St. Vincent dePaul Walk for the Poor across campus.

# PILLAR 3: Efforts to Ensure Effective Environmental and Sustainability Education

Integrating STEAM and environmental sustainability is a major focus across the school curricula. The Louisville Metro area is designated a Tree City USA by the Arbor Day Foundation. The younger classes learn about trees and their important role in the environment. Each year, these students get their own tree to take home, plant and nurture. In 2016, the 3rd grade class created a pollinator garden in conjunction with the Louisville Nature Center, the Kentucky Department of Fish and Wildlife and the University of Louisville. The students learned about the importance of pollinators in our environment, identification of indigenous Kentucky plants that attract pollinators, and threats imposed from invasive species. Students were also taught how to estimate the number of birds, mammals and bees that visit the garden on a daily basis by evaluating the plants and the environment. The garden is still flourishing and is used and enjoyed by our local pollinators as well as by our students.



*Students working in the pollinator garden.*

Students who take part in the daily after school care program partnered with Common Earth Gardens and the Kentucky Refugee Ministries to build a garden with recently arrived refugees from Burundi in East Africa. Using a plot of land at the Earth and Spirit Center, the students and refugees learned from each other to create an edible garden. During this process the concepts of sustainability, composting, nutrition and self-reliance were taught and put into action.

A major focus for our 4th grade students is energy and our environment. Students are taught about energy efficiency by the National Energy Education Development Project curriculum. This curriculum focuses on what energy is, how it is generated, and how to use energy wisely. All aspects of energy efficiency, from monitoring usage, retrofitting existing spaces to increase efficiency, to building science are taught. Students use project-based learning to make energy usage measurements around their environments. The data they collect and analyze has been used to directly effect energy efficiency policies around the school. These 4th graders are then tasked as efficiency ambassadors to teach other students about energy conservation.



*Students ready to release a butterfly emerged from its chrysalis.*



*Students and parents touring the 4th Grade Scientist Wax Museum.*

Fourth graders also study scientists and inventors and their contributions to our world. They select a scientist to research, write a report about it and then the entire grade creates a wax museum with costumes and props that reflect the life of each student's scientist. Students record a statement about their scientist's life and create a QR code that visitors to the museum can scan on their smart phone or tablet to hear the recording. Visitors (parents, teachers, other students) are invited to tour the museum and learn about the scientists.

## PILLAR 3: Efforts to Ensure Effective Environmental and Sustainability Education (continued)

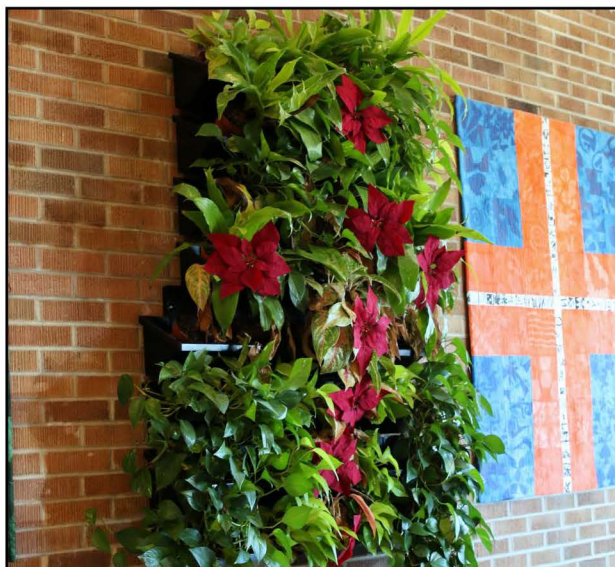
At Saint Agnes we support Earth Day with dedicated inquiry projects for grades Pre-K through 2nd grade. Pre-K students gather natural materials to make environmentally inspired art. Kindergarten students learn about energy efficiency by making and testing a "draft-o-meter" to see how energy tight a space can be. First graders focus on erosion and the flow of water and how to prevent erosion on our environment. Second graders use recycled materials to build simple machines to learn about efficient uses of energy.

Third, fourth and fifth grade students focus time and effort on a dedicated STEAM Day. Students are put in cross-grade groups to conduct projects and experiments. This past school year students built roller coasters out of discarded foam and paper rolls to learn about force and motion. They dissected owl pellets to identify the owl's recent meals to better understand the food web. And they built cargo boats out of recycled aluminum to learn about displacement and engineering principles.



Students participating in STEAM day activities.

The middle school grades focus their efforts on collaborative project-based learning that incorporates STEAM principles. This past year, 8th grade students planned, designed and created a "green wall" within the school. Under the guidance of faculty mentors, the students, researched what plants would thrive in the environment, constructed and installed the planter. The Saint Agnes environmental stewards took the responsibility for plant care and maintenance going forward.



8th grade students installing a "green wall" in the school foyer.

## PILLAR 3: Efforts to Ensure Effective Environmental and Sustainability Education (continued)

Saint Agnes has a step by step stewardship program that begins in Kindergarten and continues through eighth grade, with each grade having a different focus. The fifth grade stewardship focus is on people who are thirsty. Throughout the school year students learn about challenges our world faces in getting access to safe water as well as simple steps and solutions we can take to mitigate these issues. Through a partnership with WaterStep, a nonprofit organization with a mission to provide safe water to communities in developing countries, Saint Agnes students hear from speakers and take a field trip to the Louisville Water Tower's "Adventures in Water," a day of activities focused on water purification. Students also create and promote a shoe collection drive across our parish community each fall. These shoes are donated to WaterStep to help fund safe drinking water projects all over the world and to help keep unwanted shoes out of landfills. This past year students collected 1,700 pairs of shoes and for the past eight years have contributed over 13,000 pairs of shoes to WaterStep.

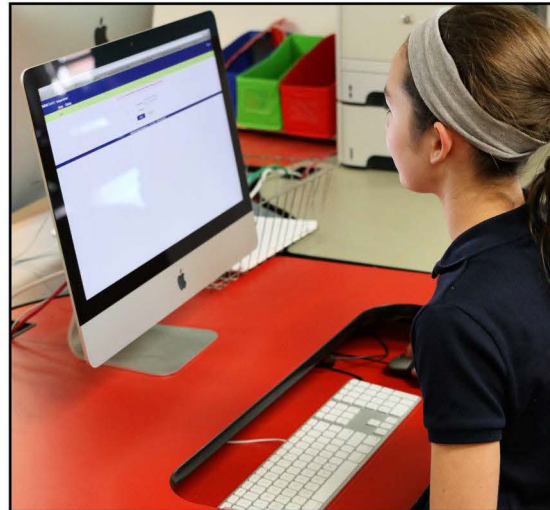


*Students collecting shoes for WaterStep.*

Our Saint Agnes School library has over 16,000 books and a full-time librarian. We have recently updated our non-fiction collection to include 150 current publications on various environmental topics from National Geographic and other publishers. Students in all grades frequently utilize these materials in addition to online resources in their day to day classroom learnings and for special research projects as assigned.



*Middle school students utilizing library resources for environmental studies.*



*Students working in the STEAM lab with our 3D printer.*

Coding and robotics activities are embedded into the curriculum in K-6 grades. Eighth grade students can take 3D Printing or Advanced Robotics as an elective. A full robotics lab featuring Makerbot 3D printers and Vex robotics are used by our students during their science and engineering instruction. The robotics lab is also available after school hours and is used by the school's Robotics Club and competitive Robotics Teams.