

## **Sustainability at Saint James Academy, a California Green Ribbon School**

*A holistic and spiritual approach to educating and caring for our community and nature.*

St. James Academy strives to prepare students to live and work in the world as responsible citizens and as faithful stewards of creation. In the words of Pope Francis, “We are faced not with two separate crises, one environmental and the other social, but rather with one complex crisis which is both social and environmental. Strategies for a solution demand an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature.” At St. James, students are taught daily in the classroom, in church and through hands-on indoor and outdoor activities that they have a spiritual and moral responsibility to care for their community and world.

In 2017 and 2018, St. James Academy received California Department of Education Green Ribbon School awards (Bronze and Silver levels) for reducing environmental impacts and costs, improving health and wellness, and providing effective environmental education as summarized below.

### Energy

St. James is fully committed to efficient and clean energy. In 2016, light emitting diode (LED) lights were installed throughout the campus, replacing all overhead fluorescent lighting. In 2017, rooftop solar was added. In their first year of use, the solar panels provided 98% of the school’s onsite electricity. In addition, St. James has opted to purchase excess electricity from the Solana Energy Alliance under a 50% renewable and 75% greenhouse gas free plan. Heating, air conditioning and lighting are turned off during periods of non-use and the school has a white, reflective roof. Based on St. James’ clean energy commitment, Electrify America/Greenlots recently selected St. James for the

installation of five dual 240 volt electric vehicle charging stations (one handicap accessible) at no cost (\$75,000 value).

### Water and Grounds

St. James' has dedicated approximately 61% of its school grounds to ecologically beneficial uses, including student health and wellness. All landscaped green spaces (40,100 sq.ft.) are drought tolerant. The grounds include an edible, organic school garden (1500 sq.ft.), a newly fenced in green schoolyard and outdoor classroom on the west side of campus (3400 sq. ft.) and a tree-shaded patio on the south side (1800 sq. ft.). The only grass maintained on campus is the athletic field used for physical education and sports (27,000 sq. feet). Water conservation practices include timed irrigation, mulching for landscaping and a drip irrigation system for the school garden.

### Waste

St. James students, staff and parents follow a formal Sustainable Practices Policy. The policy encourages the community to Refuse, Reduce, Reuse and Recycle disposable plastics and styrofoam. Reusable plates, cutlery and cups or biodegradables are used in the teacher's lounge and at school events, including back to school night and open houses. Since 2016, the campus has been a single-use plastic water bottle free campus. All students and teachers use reusable water bottles and are encouraged to use reusable lunch bags, and containers.

In November 2018, two outdoor filtered water bottle filling stations were installed on campus (funded by a St. James family donation) ensuring that clean, cool drinking water is available to encourage hydration. The filling stations track the number of 20 oz. plastic water bottles saved from the landfill (over 1300 so far and increasing daily). Additionally, the St. James campus has recycling bins throughout the campus for commingled glass, paper and plastics.

## Environmental Health

The St. James campus is cleaned by an eco-friendly cleaning service JAN-PRO. Their services comply with all regulations and standards, including Occupational Safety and Health Administration (OSHA) safety regulations and are Green Seal certified. JAN-PRO uses microfiber cleaning cloths, bleach-free and chemical-free cleaning products, and high efficiency particulate air (HEPA) filtered vacuums. The campus has properly maintained ventilation and natural lighting throughout and is free of allergens and toxins such as lead, mercury and radon gas. Every homeroom classroom opens to an outdoor environment with fresh ocean air.

## Nutrition

Local family-owned Ki's restaurant supplies quality fresh and nutritious foods to the St. James student lunch program. Ki's offers gluten-free options and food free of pesticides, fillers, preservatives, and trans fatty acids. Ki's is recognized as an Ocean-Friendly restaurant by the Surfrider Foundation, making sustainable packaging choices to protect our oceans. Additionally, St. James has a wellness policy that campus celebrations feature healthy foods instead of sugary treats or drinks, with only rare exceptions. Students study health and nutrition as part of PE and sustainability curriculum.

In 2016, St James received a gift of \$20,000 from Feed the Future to rebuild and enhance its organic edible garden, now known as the Peace Garden. Together with school volunteers, the garden was redesigned, planters and soil were all replaced, drip irrigation was installed and the garden was made handicap accessible. Students plant seasonal vegetables including broccoli, radishes, kale, lettuce, onions, tomatoes and herbs including basil and rosemary and care for two citrus trees. Students make soups, salads, smoothies and lemonade with the organic harvest.

## Fitness

Saint James students are becoming "Fit to Lead" - healthy in every aspect of their lives - physically, mentally, emotionally, spiritually, relationally. St. James's physical education curriculum is designed to intentionally empower students in their leadership, team building, and conflict resolution skills. The fitness program promotes diversity of play and movement across all grade levels. Physical education classes are taught in every grade at St. James. Traditional sports teams include basketball, soccer, volleyball and flag football and proximity to the beach allows for surf club and beach volleyball. In the schoolyard during recess and PE, students play with a variety of balls, hula hoops, jump ropes and Indo balance boards on the athletic field, playground and basketball, volleyball and Ga-ga courts. Junior High students may take a Taekwondo or surfing elective. Students are given opportunities to participate in track and surf competitions.

Joyful movement to music, singing and playing instruments are a significant part of the culture at St. James, with enthusiastic participation from the boys and girls alike. Teachers use GoNoodle, *Just Dance* and take regular movement based "brain breaks." Each grade has weekly performing arts classes and all students perform in Christmas and Spring shows that incorporate dance, singing and creative movement. In 2018, the Spring show *Just Move* featured each class performing social dances spanning the 1920's through 2000's and rooted in the diverse communities of the United States including African-American and Latin. The entire school recently learned to sing the song *Grateful: A Love Song to the World* accompanied by American Sign Language.

Part of the core ideals at St. James is that every person on the planet has a role and makes an impact. St. James' inclusion program recognizes all forms of learning and fosters growth for every student. Children with special needs are welcome to enroll at St. James and

their learning skills are integrated into their grade. St. James is also the only K-8 Catholic school to have Peer Mentoring program. Peer Mentoring gives junior high students an opportunity to support the education of younger students in a warm and supportive environment. The school's culture of inclusivity was fostered by the 8th grade in 2016 when they funded a Buddy Bench where a child can sit if he or she needs playmates, leading to the formation of many new friendships.

### Interdisciplinary Learning

St. James' holistic and spiritual approach to environmental and sustainability education cuts across all STEAM disciplines (science, technology, engineering, fine arts and performing arts, and math) and as well as social studies, religion and community service. This includes the study of Pope Francis 2015 science and faith-based environmental teaching *Laudato Si: On Care for Our Common Home* urging all people of faith care for the earth and the poor. Like all Catholic institutions, St. James teaches that the science of evolution is compatible with biblical teaching and that we as humans must act as custodians of the beautiful world we were gifted by God.

In 2018, with over \$20,000 in donations raised from students, parents and the community, St. James fenced in additional green schoolyard area and is in the process of completing a new accessible outdoor classroom with numerous features that integrate outdoor environmental and sustainability education into school curriculum. With the support of St. James's dedicated sustainability teacher as well as a University of California Master Gardener, Junior High students have planted a Native American plant garden featuring plants used by the local indigenous Kumeyaay nation. Native American garden activities are integrated into 3rd and 4th grade social studies. Students learn about the native uses and conservation of endangered Torrey Pines trees located on the adjacent church campus. Non-native ornamental plants are being

removed and replaced with native, drought tolerant pollinator plants to attract local bees and birds.

In 2017-2018, Junior High and alumni students engineered and built a butterfly house to protect and conserve threatened Monarch caterpillars so that they may grow into butterflies. Ample milkweed, the only food source for Monarch caterpillars, is maintained in the pollinator garden. The 5th grade annually works with San Diego Coastkeepers to clean debris from local beach and keep statistics on what they find.

In 2018, the 8th grade class contributed nine cement benches for outdoor classroom learning. Under the guidance of a gifted grandparent artist, students are helping paint a 17' by 8' outdoor Monarch life cycle mural. The center of the mural has a blackboard for teaching and for students to add their own art. Other campus and student art promote sustainability, including school wide recycled art projects, wildlife habitat drawings in 2nd grade and a colorful underwater sea life mural supporting ocean conservation curriculum in 1st grade. The school science lab has a mural showing the earth held in the human hands. Junior High garden science projects have included building biofiltration swales and rain gardens and utilizing organic pest control methods, such as solarization to eradicate nematodes. Vermiculture is taught in 6th grade and students maintain the worm bin.

### Community Service

The St. James Student Council safety and ecology representative helps lead the school's Green Team and participates in community outreach efforts. St. James also has a part-time Sustainability Director actively involved in sharing St. James sustainability focus and California Green Ribbon program with the St. James community and throughout the San Diego County. She also shared the school's work nationally and globally through her work as a Leader, Mentor and North San Diego Chapter Chair of the Climate Reality Project.

In 2017, the entire school participated in an outdoor performing arts production of the environmental fable *The Lorax* by Dr. Seuss and adopted the school sustainability theme “UNLESS someone like you cares a whole awful lot, nothing is going to get better.” All costumes were made from recycled or borrowed materials. Following this production, St. James students have continued to perform excerpts of *The Lorax* outside of school, including at a community holiday parade, for the San Diego Roman Catholic Bishop and Diocese, at other churches and at the 2018 Rise for Climate March. St. James community outreach inspired another Catholic school, St. Martin of Tours Academy, to become a Green Ribbon School.

As model stewards, St. James community parents are extremely generous and have encouraged their children to be young stewards as well. One St. James family started a trend of encouraging donations in lieu of birthday gifts to support the school’s Monarch conservation program, Indo board purchase and outdoor classroom. St. James staff and families are continually raising funds for a myriad of charitable causes, such as food and housing for the homeless, food packaging for people in countries affected by natural disasters, cancer research and native replanting in the local San Elijo Lagoon watershed. As urged by Pope Francis, the St. James community truly hears “both the cry of the earth and the cry of the poor” and is taking holistic, concrete steps to create a more just and sustainable world.

*Updated February 2019*