



# *San Mateo County Office of Education*

California Department of Education Green Ribbon Schools Green Achiever

CALIFORNIA



Prepared By:  
California Department of Education  
School Facilities and Transportation Services Division  
[Green Ribbon Schools Award Program](#)  
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## **PART II – SUMMARY OF ACHIEVEMENTS**

### **San Mateo County Office of Education, San Mateo, California**

#### *County Office of Education Leads Sustainability and Wellness Initiatives with Award-Winning Programs and Partnerships*

The San Mateo County Office of Education (SMCOE) operates several key facilities and programs, including its main office, the Special Services Center site, and various schools. These schools encompass two Community Schools, two Court Schools, two Special Education programs, and an Outdoor Education program, all of which support diverse student populations across the county. SMCOE demonstrates a robust commitment to sustainability, environmental literacy, and student and staff wellness through a range of initiatives. Since hiring its first Sustainability Analyst in 2020, SMCOE has expanded its capacity by hiring a Director of Sustainable Facilities and Construction, who supports districts in implementing sustainable practices and building standards. SMCOE's partnership with Peninsula Clean Energy has facilitated the installation of solar panels and EV charging stations while reducing energy costs. The Environmental Literacy and Sustainability Initiative (ELSI) advances district-wide assessments, data-driven sustainability projects, and staff training on waste diversion. Staff wellness programs, led by the Live Well @SMCOE Committee, promote physical and mental health, often integrating environmental activities. Students benefit from enhanced mental health resources, physical activity programs, and nutrition education supported by partnerships with local agencies. Through effective environmental education programs like the Environmental Solutionary Teacher Fellowship and Youth Climate Ambassadors, SMCOE empowers educators and students to address climate change and sustainability challenges. Recognized with numerous awards, SMCOE continues to drive transformation across districts throughout California, fostering sustainable and equitable learning environments.

## **PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE**

### **Pillar I: Reduce Environmental Impact and Costs**

#### *Element IA: Energy*

- San Mateo County Office of Education (SMCOE) has a Sustainable Campus and Operations Plan (SCOP), including an Energy Master Plan to achieve carbon neutrality by 2030. The plan incorporates a third-party benchmark assessment and a 2017 American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Level II-plus audit, leading to facility upgrades such as lighting, Heating, Ventilation, and Air Conditioning (HVAC), occupancy controls, thermostats, and plug loads. SMCOE collaborates with Pacific Gas and Electric Company to create a Facilities Master Plan for site-specific energy conservation management.
- In 2001, the SMCOE adopted Regulation 3511: Energy and Water Management, which mandates the analysis and improvement of lighting, HVAC systems, water heaters, appliances, and irrigation systems. Additionally, the SMCOE has followed Policy 3510: Green School Operations since 1978. This policy focuses on reducing resource consumption, promoting recycling, using sustainable products, and encouraging walking.
- SMCOE tracks utility use through a spreadsheet and an innovative Tableau sustainability dashboard designed by the SMCOE's Environmental Literacy and

Sustainability Initiative (ELSI) with input from agency partners. The publicly available dashboard monitors water, electricity, methane gas, greenhouse gas emissions, and waste. Staff manually input electricity and gas data from utility bills.

- SMCOE collaborates with the County of San Mateo to track energy use through California's Building Energy Benchmarking program and calculates electricity-related emissions using emissions factors from its energy provider, Peninsula Clean Energy (PCE). Between 2018 and 2023, emissions factors decreased, achieving a documented 36% reduction.
- The SMCOE purchases 100% carbon-free electricity, with 50% from renewable sources, through PCE, a Community Choice Aggregator; by 2025, all purchased electricity will be 100% renewable.
- SMCOE, in partnership with PCE, executed a 20-year Power Purchase Agreement to install 463 kilowatt (kW) solar panels on the main office parking lot and roof. The project plans are complete; geotechnical work has begun; when completed, the system will generate 100% of the office's energy under optimal sunlight, saving \$1.6 million in utility costs.
- The SMCOE lowers energy usage by implementing 100% LED lighting, installing energy-efficient heat-reflective windows, and ensuring a well-insulated roof at the main office. The COE has installed 19 ENERGY STAR air conditioning units at the Anne Campbell Center. Shade trees line the blacktop at the Special Services Center site, and shade structures cover the asphalt play areas at all school locations. The SMCOE's Outdoor Education site features San Mateo County's first permitted off-grid straw bale classroom, which utilizes passive heating, cooling, and solar energy panels.

### *Element IB: Water and Grounds*

- The SMCOE main office separates indoor and outdoor water use via a reclaimed water meter. The office monitors reclaimed water usage for landscaping and tracks all water consumption through monthly, quarterly, and annual utility bills. At the main office, the team reduced outdoor water use by approximately 20% from the 2017-2018 school year to the 2023-2024 school year.
- SMCOE-run schools and the Special Services Center meter indoor and outdoor use together, as they do not utilize reclaimed water. The SMCOE calculates water use using enrollment, staff data, and water bill information. Overall water usage across all sites declined by 43% from the 2017 – 2018 to 2023 – 2024 school years.
- To reduce water use, SMCOE's main office renovated all bathrooms and installed low-flow toilets and faucet fixtures. All school sites feature low-flow faucets and drinking fountains. The landscaping across all SMCOE sites is mulched for water retention and is irrigated at night with drip systems to minimize evaporation. Additionally, all faucets, fixtures, and irrigation systems are frequently monitored for leaks and promptly repaired to reduce wasted water.
- The SMCOE's main office maintains limited landscaping, while its Special Education sites incorporate native plant habitats, outdoor classrooms with gardens, and newly planted drought-tolerant trees. The Special Services Center uses 100% drought-tolerant plants on a drip irrigation system, and other sites feature established drought-tolerant landscaping.

### *Element IC: Waste*

- SMCOE records a 63% diversion rate from recycling and composting. All SMCOE sites utilize curbside organics services and tri-bins marked for landfill, recycling, and compost. Separate dumpsters are in the main area, and the Outdoor Education site has on-site composting bins and a compost digester for food waste. Mulch at the main office and the Special Services site is locally sourced, and portable tri-bins are provided for off-site meetings.
- In 2023, the County Office of Education held 13 training sessions focused on achieving zero waste and compliance with California's Climate Pollutant Reduction Strategy, which mandates that all residents and businesses recycle food and yard waste. Additionally, new employees receive instruction on waste sorting and sustainable operations.
- The Superintendent's Office toured Shoreway Environmental Center in early 2023 to learn about recycling and composting. In the fall of 2024, an additional tour was offered where maintenance staff participated in learning methods to reduce contamination and increase diversion.
- To minimize hazardous waste, SMCOE has no labs on its campuses and has replaced all lightbulbs with LEDs. The COE contracts with a third-party service to regularly collect batteries, old lightbulbs, and other hazardous materials, ensuring no hazardous waste enters regular curbside bins. In addition, to protect the health and safety of children and adults, corrosive liquids, such as bleach and other hazardous materials, are not used at any site.
- SMCOE provides and ensures that all departments are informed about sustainable purchasing guidelines. Furthermore, employees are trained to identify and utilize green products during sustainability onboarding sessions.
- The COE uses 10% post-consumer content, responsibly managed forest fiber, and chlorine-free office/classroom paper. The Environmental Literacy and Sustainability Initiative program also uses 100% recycled paper for program materials. All products are purchased through Veritiv, which provides EcoScore reports listing third-party environmental certifications.
- The COE prioritizes using ecologically friendly cleaning and janitorial paper products, with seventy-five percent meeting Leadership in Energy and Environmental Design (LEED) v4 O+M EQ Credit 7 standards for green cleaning. Many of these products have certifications such as EcoLogo, Compostable, Forest Stewardship Council (FSC), Environmental Protection Agency (EPA) Comprehensive Procurement, or Green Seal.
- The SMCOE's Integrated Technology Services department has digitized procurement and contracting processes, reducing paper and ink use. Staff streamline these processes using Informed K12, DocuSign, and other programs. In addition, printers require personalized codes to discourage excess printing.

### *Element ID: Alternative Transportation*

- Most students enrolled in SMCOE programs take a bus to school, given that alternative transportation methods are often hindered by factors such as incarceration, hospitalization, or significant special needs. Specific programs, such as the Court Schools, operate as residential facilities, and students frequently travel to these programs from different areas within the county, which rules out walking or rolling as viable options.

- SMCOE provides alternative transportation education for the 13 school districts within its jurisdiction. This initiative is supported by the San Mateo County Safe Routes to School (SRTS) program in collaboration with the City/County Association of Governments and the California Office of Traffic Safety. SRTS offers bike and pedestrian safety education, training, and free bike repair at schools. This initiative reduces traffic congestion, improves air quality, and promotes healthier habits by encouraging walking and biking to school.
- The COE supports the SRTS School Travel Fellowship, which helps city and school teams implement temporary projects to enhance safe student travel, such as traffic calming quick-builds and campaigns. SRTS collaborates with district administration, wellness coordinators, teachers, parents, and community partners to promote active transportation.
- The SRTS at SMCOE organizes campaigns such as International Walk to School Day, Ruby Bridges Walk to School Day, Pedestrian Safety Month, and Bike to School Day. Collaboration with Stanford Our Voice includes conducting walk audits at schools, where students gather data and express their vision for safe transportation. SMCOE's SRTS program received a J. Russell Kent Award in 2024 for its positive influence on travel and facility enhancements at schools. Kent Awards recognize innovative and replicable programs being implemented within a school district, county office of education, or community college district in San Mateo County.
- SMCOE installed seven electric vehicle charging stations at its facilities—five at the main office and one at two school sites. Each station features two ports, allowing 14 electric vehicles (EVs) to charge simultaneously. In the 2023 – 2024 school year, the COE used electric vehicles to save about 16,000 kilograms (16 metric tons) of greenhouse gas emissions.
- During the 2024 – 2025 school year, the SMCOE purchased six hybrid Toyota vehicles. The fleet now consists of 17 vehicles, including 10 cars (six hybrids), seven vans, and one golf cart. The COE has committed to replacing other vehicles with hybrid or electric vehicles as they reach the end of their lifespans.
- Since July 2022, the SMCOE has allowed staff to work remotely one day per week, which has decreased commuting. At present, 128 out of 228 eligible employees are taking advantage of this policy, leading to a reduction in commute hours and emissions. The COE provides reimbursement for employees utilizing alternative or public transportation. Carpoolers earn \$3 daily, cyclists \$20 monthly, and public transit users are compensated and reimbursed.

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

### *Element IIA: Environmental Health*

- SMCOE contracts with a third-party company for pesticide applications when necessary and provides a 72-hour written notice before any application. The contracted company performs all pesticide work and is GreenPro certified, ensuring reduced pesticide use through prevention, IPM practices, inspections, and employee training.
- All staff and personnel complete an annual Integrated Pest Management (IPM) online training course through Vector Solutions before the start of each school year. Custodians and facilities personnel are also required to complete the training for the upcoming year.

- The COE's IPM policy includes setting pest thresholds, monthly monitoring, using non-poisonous scented traps, spraying exteriors as needed (safe once dried), and employing IPM practices such as organic products, minimal chemical use, and food and shelter removal.
- The San Mateo County Office of Education maintains a smoking, drug, and alcohol-free environment with no-smoking signs throughout its facilities and grounds. The Tobacco Use and Prevention Education (TUPE) team educates students and staff on the harms of smoking.
- SMCOE facilities staff members undergo annual training on chemical usage and IPM and are certified in Janitorial Hazard Communication. Facilities staff are trained to read labels and use appropriate personal protective equipment (PPE), while all other staff are instructed to notify the Facilities Office when pest management is necessary. All cleaning products are clearly labeled, and custodial offices and closets containing cleaners are secured at all locations to prevent student access, per Fire Marshal regulations requirements.
- The SMCOE reduces asthma triggers by ensuring natural ventilation in all areas except the main office, maintaining regular cleaning schedules, and using environmentally friendly products. One hundred and fifty mobile HEPA air purifiers are distributed across campuses and offices to remove particulate matter from the air. All HVAC systems utilize Minimum Efficiency Reporting Value (MERV) 13-rated filters. Buildings with air conditioners utilize indoor-outdoor air circulation. Economizers that bring in outdoor air are turned off during environmental hazards like wildfire smoke.
- Every SMCOE-run classroom has a view of trees and plants, which are consistently maintained at all campuses. Appropriate ceiling tiles are fitted for optimal acoustics, and any cracked or broken tiles are promptly replaced.
- SMCOE regularly inspects for water damage to prevent mold. If mold is present, it is treated with water and special mold-resistant paint. The COE rooftops and air conditioning units are regularly inspected for leaks.
- The SMCOE hires a third-party contractor to maintain its HVAC systems and water heaters, inspecting and maintaining them quarterly. The contractor replaces air conditioning filters every four months. To reduce environmental impact, the COE has replaced the RC-80 coolant with the more efficient R-22 coolant.
- A third-party vendor tested all floors, walls, and site soil for lead presence and provided written reports, confirming that SMCOE has no exposed lead-based materials at any site. To address asbestos concerns, all windows were replaced. A contracted abatement team treats all exposed floors and walls before renovations or construction. Contractors do not use lead-based paint in new construction.
- The SMCOE sources water through local groundwater and snowmelt via aqueducts. The San Francisco Public Utilities Commission's Harry Tracy Treatment Plant treats the water using UV light, chloramines, pH adjustment, and fluoridation. Reservoirs and sampling points are regularly tested for bacteriological quality, chlorine residual, physical parameters, and disinfection by-products.

### *Element IIB: Nutrition and Fitness*

- Since SMCOE contracts with an outside provider to provide fresh daily meals featuring 80% locally grown produce, organic options based on market availability, and whole

grains. Meals are low in fat, contain no artificial trans-fat, include detailed menu descriptions with nutrition information, and exclude fried food.

- SMCOE-run schools provide nutrition education through health, physical education, and science classes. Gateway Community School partners with Each Green Corner to offer weekly agriculture lessons and garden cultivation, raising awareness about community food scarcity. Students at Canyon Oaks Youth Center collaborate with a nutritionist twice weekly.
- SMCOE schools incorporate gardening into their educational programs in the following ways:
  - Gateway Community School: Teachers use the garden for lessons, supported by a partnership with Each Green Corner to provide access, promote sustainability, and address food insecurity. A Sustainability Service Corps Fellow visits the garden weekly to provide instruction.
  - Hillcrest School: The Probation Department manages garden access, and the educational staff leads culinary arts CTE programs linked to regional agriculture.
  - Special Services Center: The outdoor classroom includes raised planter beds and a greenhouse, where staff facilitate weekly planting, nurturing, and harvesting activities.
  - Outdoor Education Site: The site features a one-acre permaculture garden, a three-bin compost system, and a chicken coop. Students engage in composting and sustainable gardening, and dining hall food waste is composted on-site to enrich the garden.
- All students attending SMCOE-run schools receive at least 45 minutes of Physical Education (PE) daily, with Special Education students participating in adapted PE through their Individualized Education Programs (IEPs) and Community-Based Instruction (CBI) at parks and on trails. Physical activities beyond required PE classes include the following:
  - The Anne Campbell Center provides an accessible playground for preschoolers to engage in integrated play with nondisabled peers. An Adapted PE Teacher leads weekly motor groups.
  - Court and Community School students attend traditional physical education classes and weekly yoga instruction. At the SMCOE's Outdoor Education site, students engage in physical activities such as hiking, walking, dancing, and playing throughout the day and evenings.
  - The Special Services site focuses on health, wellness, and life skills education. It features an outdoor classroom, garden, and greenhouse that students visit multiple times weekly. The site also has an accessible playground for physical activities and community walks between classes.
  - Canyon Oaks Youth Center students hike a nearby trail to support positive social-emotional and mental health. Gateway Community School students use the garden for planting, harvesting, and cooking activities.
- SMCOE partnered with Green Schoolyards America in 2017 to develop the Living Schoolyards master plan, completed in 2020. SMCOE also supports professional development workshops to help schools green their schoolyards. In the 2022 – 2023 school year, SMCOE awarded 15 green schoolyard grants of up to \$5,000 each for garden education programs, native plant restoration, outdoor learning, and play spaces. SMCOE staff assisted all grant awardees with implementing their plans and provided support to ensure that the funds were used for living schoolyard elements.



- The San Mateo County Office of Education's Live Well @SMCOE staff wellness committee meets monthly to plan events promoting staff wellness, such as yoga classes, boot camps, and walks during breaks. The committee also plans staff events to honor the staff's diverse cultural heritage, such as a Latino Heritage Month lunch and a Filipino American History Month event.
- The SMCOE developed "Teach Well. Be Well: A Guidebook to Support Adult Social-Emotional Learning (SEL) and Educator Well-Being" to raise awareness about SEL, improve educator well-being and resilience, support thriving school communities, and increase educator job satisfaction and retention.
- Gateway Community School offers a Health Sciences and Medical Technology CTE pathway, including a new Patient Care Sports Medicine course. Students gain hands-on, project-based experience studying the health effects of lifestyle choices.
- The SMCOE's Safe and Supportive Schools team leads mental health and wellness programs for staff; fosters conversations around challenging topics; and provides support during times of tragedy.
- SMCOE promotes student health and learning through a coordinated approach, as outlined in the SMCOE's Student Wellness Board Policy 5030. Examples across the SMCOE's schools are as follows:
  - The Anne Campbell Center and Special Services Center have sensory and art rooms for students who feel overwhelmed or overstimulated. Posters in every classroom remind staff to be sensitive to students with sensory issues.
  - Adult Special Education students access a student union for games, art projects, and peer interaction.
  - Gateway Community School launched a Wellness Center in the 2023 – 2024 school year to provide behavioral support.
  - Court and Community Schools focus on structured social-emotional learning instruction at the beginning and end of each day, based on the Collaborative for Academic, Social, and Emotional Learning (CASEL) framework.
- All SMCOE schools have a nurse on campus as needed, and the SMCOE employs a registered nurse to support all school health programs county-wide.
- Most students at SMCOE-run schools see a therapist for at least 60 minutes once a week, and all programs have access to bilingual counselors, as well as additional mental health support based on their IEP. Access to mental health care at county-run schools includes the following:
  - Gateway Community School students can access a mental health clinician on-site daily.
  - Hillcrest School and Canyon Oaks Youth Center provide mental health services in partnership with San Mateo County Behavioral Health and Recovery Services.
  - At Canyon Oaks Youth Center, students participate in 60 minutes of individual counseling and 60 minutes of family counseling each week. They also engage in daily art therapy, consult with a residential counselor, and meet with a psychiatrist twice a week.
- The SMCOE collaborates with San Mateo County Behavioral Health and Recovery Services to focus on prevention, early intervention, and treatment of mental health and substance abuse conditions. They support whole-person treatment, promote physical and behavioral health, and address the needs of individuals, families, and communities served by the COE.



- In 2014, SMCOE co-founded the San Mateo County Coalition for Safe Schools and Communities (SMCCSSC) to address youth safety, partnering with over 15 organizations, including school districts and law enforcement. In 2023, the Coalition launched the United for Youth initiative with school districts and 20+ public agencies. Its Steering Committee and workgroups assessed behavioral health; explored workforce and funding opportunities; and collaborated with youth and the community to create a Plan of Action in September 2024. The Plan focuses on enhancing services, adopting trauma-informed approaches, and strengthening collaboration among county providers.
- The San Mateo County Community College District partners with the SMCOE to standardize emergency responses and other programs. In September 2024, the Coalition launched United for Youth: Vision 2030, a county-wide strategic plan addressing the social-emotional and behavioral health needs of San Mateo County youth.
- The SMCOE collaborates with Stanford University to educate students on drug use prevention and works with the Peninsula Conflict Resolution Center (PCRC) to implement the TUPE curriculum at Gateway Community School. Additionally, the County Office of Education partners with Effective School Solutions to provide a clinical therapist specializing in substance use disorders at Gateway and Hillcrest schools. They also join forces with San Mateo County Health (SMCH) to ensure students are up to date on vaccines through a youth immunization program.

### **Pillar III: Provide Effective Environmental and Sustainability Education**

#### *Element IIIA: Interdisciplinary Learning*

- In the Fall of 2018, the SMCOE's Governing Board adopted a commitment to Environmental Sustainability Action. The San Mateo County Office of Education also developed a board resolution template that school districts across the state have widely adopted. Sustainability remains a core focus in the San Mateo County Office of Education's 2023–2028 Strategic Plan, which emphasizes serving present and future students through environmentally, socially, and economically responsible practices.
- The SMCOE's Environmental Literacy and Sustainability Initiative (ELSI) assists schools in integrating environmental literacy, sustainability, and climate-resilient practices into their campuses, curricula, communities, and cultures. ELSI supports K-12 school communities in modeling sustainability and climate resilience while providing students with the tools to cultivate an environmentally sustainable, socially just, and economically prosperous future.
- ELSI developed a Green Building and Resilient Communities elective course for Design Tech High School, enabling students to redesign climate-impacted communities. The curriculum has since been adapted for broader use across secondary schools in the county.
- ELSI, in partnership with the San Mateo County Sustainability Department, Grassroots Ecology, and the Citizens Environmental Council, facilitates the Youth Climate Ambassadors Program (YCA) for ninth through twelfth-grade students. This seven-month program empowers participants to take climate action through bi-monthly meetings, three retreats, and skills development in sustainability and leadership. The program features assessments, formative projects, and presentations on exceeding Earth's resource capacity, climate literacy, and environmental justice.
- ELSI partners with local organizations to lead the YCA Program, which empowers high school students to tackle local climate issues through training, retreats, and \$1,000-

funded community impact projects. In these projects, students design and implement initiatives such as rain gardens, native plant restoration, clothing swaps, and neighborhood cleanups.

- The Environmental Literacy and Sustainability Coordinator, in collaboration with the California Environmental Literacy Initiative (CAELI), developed a toolkit to assist districts, schools, and teachers in complying with California's climate change education mandates for grades 1-6 and 7-12, which take effect in the 2024–25 school year. The group also shared details about the mandates at key events, including CAELI's March County Office of Education Community of Practice, Nature's Narrative summer professional learning days, and a spring meeting with curriculum coordinators from San Mateo County.
- SMCOE, in partnership with the environmental education non-profit organization Ten Strands, is developing Seeds to Solutions, free and open K-12 instructional resources on climate change and environmental justice. These resources will align with state standards and highlight community experiences.
- The ELSI team created a curated list of books and videos for different grade levels to support environmental literacy in English/Language Arts, focusing on topics like climate issues and sustainability while prioritizing diversity, inclusivity, and equity to ensure all learners are represented and supported with accessible curriculum.
- San Mateo County Reads, hosted by SMCOE and library partners, highlights the 2024 theme "Voices of Resilience: Empowering Change through Collective Action" with resources like lesson plans and environmental activism materials for the featured children's book *Change Starts with Us* and classroom read-aloud events with judges in partnership with the San Mateo County Superior Court Outreach Committee.
- The SMCOE promotes equitable outdoor education through initiatives like its 2017 partnership with Green Schoolyards America to develop the Outdoor Learning and Play Considerations Plan; this collaboration expanded during the COVID-19 pandemic, co-founded the National COVID-19 Outdoor Learning Initiative and provides professional development, air quality workshops, and grants for outdoor classroom and garden infrastructure.
- Established in 2014, the SMCOE Environmental Solutionary Teacher Fellowship (ESTF) has led institutes to support over 400 teachers in designing projects—and place-based learning units centered on California's Environmental Principles and Concepts (EP&Cs). The Administrator Fellowship has guided leaders in driving environmental transformation, with notable achievements like Redwood High School's recognition as a U.S. Department of Education Green Ribbon Schools honoree in 2023.
- The SMCOE's fellowship coordinators, trained in Education for Sustainability principles, support over 5,000 teachers annually by integrating environmental literacy and social justice into professional development and delivering workshops at conferences statewide and nationwide.
- ELSI supports environmental clubs and green teams in 45 high schools, 30 middle schools, and several elementary schools. The program provides a Green Team Guide to help advisors and student leaders form and facilitate clubs. In partnership with Rethink Waste, ELSI hosted a Green Team gathering, where students and adults shared successful Green Team efforts.
- ELSI collaborates with nonformal environmental education providers and community partners through the Community Based Environmental Education Partner (CBEEP) network, co-facilitated by SMCOE. Meeting quarterly, CBEEP ensures equitable learning opportunities for all students. Members contribute data that the SMCOE uses to create a

Tableau visualization of their impact, focusing outreach efforts on high-need areas to better serve marginalized students.

- ELSI Initiative hosted a January 2023 webinar for county facilities leaders on “Clean Energy, Solar, and School Greening Opportunities.” Agencies presented on technical assistance and funding for school greening. The Director of Sustainable Construction has since organized webinars on building electrification and collaborates with PCE and the San Mateo County Sustainability Department to cut greenhouse gas emissions. This collaboration helps school districts access funding for electric vehicle chargers, fleet electrification, energy benchmarking, and waste diversion.
- This year, ELSI collaborated with other county offices of education on a three-year grant from the California Department of Education’s California Regional Environmental Education Community (CREEC) Network. Through the Nature’s Narrative project, ELSI integrated language arts, social-emotional learning, and climate science with environmental literacy, providing professional development and stipends to 35 formal and informal educator leaders.
- SMCOE’s Outdoor Education Program’s curriculum employs place-based learning to empower students in assessing school systems, analyzing data, and designing sustainability solutions. Based on the Solutionary Project-Based Learning Framework, students compare their school’s systems—energy use, water management, waste handling, and land use—with those at Outdoor Education. After evaluations, they create advocacy campaigns to enhance sustainability practices. This approach has received state-wide recognition and enables students to spearhead environmental efforts for change.
- The SMCOE’s Outdoor Education Program expanded transportation funding to allow an additional 4,000 students to visit environmental education partner sites. To address transportation barriers, the SMCOE increased funding from \$50,000 in 2022-23 to \$150,000 in 2023-24, enhancing access to field trips and environmental learning opportunities.

### *Element IIIB: STEM Content, Knowledge, and Skills*

- In 2017, ELSI launched its environmental sustainability initiative at SMCOE’s STEAM (science, technology, engineering, arts, and mathematics) Center. The STEAM team is dedicated to equipping students with real-world challenges using an interdisciplinary strategy that emphasizes sustainability and equity in STEM education. Now, in the COE’s Superintendent’s Office, ELSI integrates environmental and social justice into all subject areas. The STEAM team is committed to preparing students for real-world challenges through an interdisciplinary approach incorporating sustainability and equity in STEM education.
- SMCOE’s ESTF empowers educators to create and implement project-based and place-based STEM units rooted in California’s EP&Cs and solutions-based learning. The program integrates design challenges into its summer institute, where teachers collaboratively develop STEM-rich solutionary units. These units emphasize engineering skills through “problem cycles” and solution-focused action projects, enabling educators to guide students in applying STEM principles to address real-world environmental challenges.
- In the 2023-2024 school year, ELSI hosted two STEM workshops, "Harnessing the Power of Wind in the Classroom," with a veteran educator and Peninsula Clean Energy (PCE). Aimed at middle and high school teachers, these sessions included a \$500

Vernier KidWind windmill design kit and an Energy Sensor for data analysis. Teachers also engaged with the Solutionsville unit, where they role-played in a fictional city, explored renewable energy options, and identified the most sustainable solutions, integrating STEM with hands-on experience

- Each fall, SMCOE hosts the Environmental Youth Leadership Summit to promote green technologies, careers, and sustainability efforts. The summit includes a breakout session titled Green Careers in Sustainability, featuring professionals who lead panel discussions to share their expertise. Community partners provide information on internships, volunteer programs, and career pathways during lunch.
- SMCOE's Green Career Awareness Program introduces middle and high school students to green careers through project-based learning modules, field trips, and pre-apprenticeship opportunities. It creates pathways to high-wage, sustainability-focused careers.
- The YCA Community Partners Night connects students developing projects to drive environmental change with organizations like PCE and Grassroots Ecology, which offer career pathways and internships. These partners engage with students throughout the program, fostering connections between education, sustainability, and real-world action.
- The SMCOE supports and coordinates career technical education (CTE) in San Mateo County. The CTE Coordinator and the Science and Computer Science Coordinator emphasize sustainability as a foundational context for their respective disciplines. In the 2023–24 school year, ESTF included a Green CTE strand, focusing on reducing carbon emissions and building a workforce in green technology to support sustainability efforts.
- For the 2024–25 school year, SMCOE's College, Career, and Community Partnerships (CCSP) department is hosting a Green Internship pilot program in Building and Construction Trades in Half Moon Bay to connect youth with local professionals and career opportunities. Interns will work on projects aligned with the Building and Construction Trades sector, culminating in an assessment of their site's building envelope to identify energy performance and efficiency solutions.
- The CCSP department received funding from PCE to facilitate a monthly collaboration with education and industry partners on electric vehicles (EVs). The collaboration is conducting a landscape analysis to identify EV and charging infrastructure opportunities within automotive programs at a local community college and high school. It plans to visit three model programs for EV technology and electronics certification at the high school and community college levels.
- On November 4, 2024, 20 students from Design Tech High School visited SMCOE to learn about green careers in the workplace. The students toured the facility to observe the sustainable design elements of the building and programs, including the EV chargers, lighting design, and tri-bin waste system. They also heard from five educational leaders about their career paths and expertise.

### *Element IIIC: Civic Knowledge and Skills*

- SMCOE hosts the Sustainable and Climate Resilient Schools Challenge annually, offering \$500 awards or certificates of recognition to school community members for projects that positively impact the environment. During the 2023-24 school year, winning projects included electrifying new school housing, installing electric vehicle chargers and fleet electrification projects, habitat restoration projects, and zero waste campaigns. More than 160 projects have been recognized since 2018.

- The Outdoor Education Program, run by SMCOE since 1968, engages over 5,000 fifth and sixth graders each year in immersive five-day experiences where they explore chaparral, riparian, old-growth redwood, tidepool, marsh, and beach ecosystems. This program fosters ecological understanding and social-emotional learning through hands-on activities. Students learn about organism adaptations in the Big Trees lesson, explore ecosystems at the beach, and practice sustainable living by gardening, composting, and utilizing solar-powered resources in Sustainable Living.
- The SMCOE's Court and Community Schools provide outdoor learning opportunities at all grade levels, featuring garden beds, day or overnight experiences, and partnerships with organizations such as Environmental Volunteers, The HEAL Project, and Save the Bay to ensure access to high-quality environmental education for 20,000 to 40,000 students annually.
- ELSI trains educators in outdoor learning and trauma-informed practices, including Flow Learning techniques. These techniques are based on the idea that people learn best when they are in a state of flow. The program has reached over 440 teachers through fellowships emphasizing outdoor components, healing practices, and standards-aligned nature activities for grades TK/K-12.
- The SMCOE collaborates with PCE to assist schools with electrification, providing funding for sustainability dashboards, service corps fellows, and awards programs. It also supports initiatives like the Environmental Solutionary Teacher Fellowship and the Youth Leadership Summit.
- ELSI publishes a special edition of its newsletter every May to encourage educators to participate in Living Schoolyard Month. Articles include success stories from schools across the county, possible community partners or funding sources, and examples of outdoor lessons or activities.
- ELSI leads the Sustainable and Climate-Ready Schools Challenge. The Challenge celebrates sustainable school communities and living schoolyards. One of this year's winners collaborated with the San Mateo Rotary Club to remove weeds and prepare garden beds for planting. This effort included researching and selecting plants, as well as spending time each week weeding, growing, and nurturing gardens outside classrooms.
- SMCOE convenes the Zero Waste Education Alliance, which connects public agencies and waste haulers to provide schools with resources, training, and best practices for achieving zero waste goals and improving waste sorting and reduction efforts.
- ELSI staff lead and participate in local and state-wide working groups and organizations such as CAELI, scaling innovative sustainability programs; and promoting environmental literacy and climate resilience practices across California school districts.
- SMCOE collaborates with nonprofits, public agencies, and utility providers to deliver environmental literacy and sustainability programs. These efforts include annual gatherings and summits for district leaders and teachers to network and learn. On April 30, 2024, the inaugural Climate-Ready Schools Symposium gathered nearly 80 district leaders from 21 school districts to explore environmental literacy, legislative requirements, and sustainable operations. The event featured student keynote speakers, breakout sessions, and an awards ceremony recognizing 18 sustainability leaders.