

# **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.
- 8. The school or its district has in place and is willing to provide a link to or a copy of a non-discrimination policy, upon request. The U.S. Department of Education reserves the right to disqualify a nomination and/or rescind an award if unlawful discrimination is later discovered.

# U.S. Department of Education Green Ribbon Schools

Name of Principal: Dr. Lindsey Gatfield	
(Specify: Ms., Mrs., Dr., Mr., etc.) (As it should ap	opear in the official records)
Official School Name: Trabuco Elementary School	
(As it should appear on an a	ward)
*Private Schools: If the information requested is not applic	cable, 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.	
Gatfield, Lindsey - Trabuco Elementary School  Digitally signed by Gatfield, Lindsey - Trabuco Elementary School Date: 2023.12.07 11:28:46 -08'00'	Date: 12/7/2023
(Principal's Signature)	
Name of Superintendent: Dr. Crystal Turner	

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



District Name: Saddleback Valley Unified School District

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

Crystal Turner

Digitally signed by Crystal Turner Date: 2023.12.07 11:40:48 -08'00' Date: 12/7/23

(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: California Department of Education

Name of Nominating Authority: Mr. Tony Thurmond, State Superintendent of Public Instruction

(Specify: Ms., 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.

Date. January 10, 2024

(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: October 31, 2026

### **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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# Trabuco Elementary School

California School Nominee to U.S. Department of Education Green Ribbon Schools



Prepared By:
California Department of Education
School Facilities and Transportation Services Division
Green Ribbon Schools Award Program
January 2024

## PART II - SUMMARY OF ACHIEVEMENTS

# Trabuco Elementary School, Trabuco Canyon, Calif.

School Welcomes Field Trips to Explore Immersive Outdoor Learning

Trabuco Elementary School (Trabuco) is in Trabuco Canyon, Orange County, surrounded by O'Neill Regional Park. The school hosts on-campus field trips, allowing schools across Orange County to partake in the school's outdoor learning environments. The school has three gardens: a vegetable and fruit garden, a Pollinator Garden, and a Mindfulness Garden. Additionally, the school has a farm with miniature donkeys, horses, pigs, goats, sheep, and other animals. Rigorous problem-based science instruction incorporating California's Environmental Principles and Concepts extends to farm and garden lessons, fostering hands-on learning. Environmental education offers hands-on experiences with natural systems. Trabuco operates recycling and composting programs, with students sorting leftover food for landscaping or supplementing the farm animals' snacks. Trabuco Coyote Green Team, consisting of kindergarten through sixth-grade students, regularly meets to brainstorm ways to enhance campus eco-friendliness. Their initiatives have led to a 19% reduction in energy usage and a 7% decrease in water usage from the previous year.

# PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE

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

Element IA: Energy

- The student-led Trabuco Elementary School (Trabuco) Coyote Green Team created an
  energy conservation plan. The group's student leaders, under the name The Energy
  Conservers, brainstormed innovative ways for the school to conserve energy. Their
  resulting two-part plan focuses on minimizing energy consumption and includes the
  following components:
  - Develop and communicate a guideline stating that empty rooms will always have lights and air conditioning turned off.
  - Use surge protectors as power strips for all electronics needed in the classroom, and turn off the surge protector on the weekends and during any breaks.
- Trabuco staff used the Southern California Edison (SCE) Energy-Efficient Solutions for Schools guide and found that 27.3% of energy consumption in K-12 schools was due to lighting. With this information, the Coyote Green Team launched a campaign to turn off campus lights and placed reminders near light switches. The school also installed occupancy-sensing light switches and multiple switches for selective lighting in key areas.
- The school used Proposition 39 (California Clean Energy Jobs Act) funding to install efficient light-emitting diode (LED) lighting.
- In addressing the need for new lighting on campus, school personnel actively prioritize
  the installation of solar lights to minimize additional energy consumption. Notably, solar
  garden lights were incorporated into the walkways of the farm, providing illumination
  without increasing energy usage. Similarly, the entryways to two school sheds were

- equipped with solar lights, exemplifying a commitment to sustainable and energy-efficient lighting solutions.
- Trabuco analyzed its energy usage from energy bills provided by SCE and found it achieved a 19% decrease in total non-transportation energy usage during August and September 2023 compared to the same period in 2022.
- In 2011, the school's buildings scored 90 points on the ENERGY STAR building
  program's scale, earning them the designation ENERGY STAR certified. This
  certification reflects the energy efficiency and sustainable practices implemented in the
  construction and operation of the school's buildings.
- To monitor and manage energy consumption effectively, the school collaborates with the district to establish a spreadsheet for monthly tracking. The school principal collaborates with technicians in the fiscal services department, utilizing billing statements to ascertain monthly energy usage accurately. Following the guidelines recommended by the ENERGY STAR Portfolio Manager, Trabuco employs past consumption as a benchmark for evaluating current usage. This process involves comparing the energy usage of specific months across different years, considering variables like seasonal temperatures and the number of days students are on campus.
- Using the Greenhouse Gas Equivalencies Calculator from the United States
   Environmental Protection Agency, Trabuco reports a 16% reduction in greenhouse gas
   (GHG) emissions. The school documents this measurement using the kilowatt-hours
   from past utility bills from October 2022 through September 2023.
- The school does not purchase additional renewable energy above the portfolio minimum. However, the school's energy provider, Southern California Edison, reports that 48% of the power delivered is carbon-free. In addition, 34% of energy came from Renewables Portfolio Standard-eligible solar, geothermal, small hydro, biomass, and biowaste sources.
- Trabuco Elementary has undertaken two construction projects in the past decade, each compliant with green building standards. The school district's carpenters constructed a sizable wooden shed for outdoor learning items and wagons. The new storage unit requires no increase in water or energy usage. The shed is illuminated solely by a solar-powered light at the entrance. Another project involved building an outdoor stage for student performances without impacting water or energy consumption. Notably, both projects were situated on former black asphalt areas, thus reducing the heat island effect.
- The school is planting more trees to reduce the heat island effect on campus. They are also pursuing a *ShadeTrees* grant to replace the playground's asphalt with additional shade trees.
- Two local The Home Depot stores have chosen to support Trabuco Elementary through their grant programs. Collaborating with staff and drawing ideas from the Coyote Green Team, the school has installed raised flower beds along the asphalt edges to minimize sun exposure to the asphalt.
- Trabuco implements additional measures to decrease energy consumption, which include the following:
  - Students on the Coyote Green Team provide each classroom with a surge protector to use as a power strip for any electrical outlets they would typically use. Now, teachers use the surge protector, enabling them to quickly power off all plugs for weekends and school breaks with just one click.

- Trabuco plants shade trees in front of the windows by the front office to reduce the use of air conditioning.
- The school carefully considers the charging needs and electricity consumption of new items. For example, they chose a sound system that plays music for arriving students because it holds a charge for a few months. This decision decreases energy use compared to the previous system, which requires constant plugging in, as the new system only uses electricity a few times yearly.
- Two students created scripts to remind everyone over the school intercom to reduce energy use. The students also announce when a long weekend or holiday break is coming and remind all to "power down" before they leave.

### Element IB: Water and Grounds

- Trabuco reports a 25% reduction in indoor and outdoor water usage. Tracked through a spreadsheet, the data reveals a yearly decrease—from 127,908 gallons in 2022 to 96,492 gallons in 2023.
- The school has implemented several infrastructure changes to reduce water usage around campus. For instance, the school has covered large, compacted, bare, impervious soil areas with all-natural mulch and installed plants to support the soil's water absorption.
- Additionally, all student restrooms have time-delay faucets.
- The school collaborates with its local water district, Trabuco Canyon Water District, to
  educate students on water-efficient practices. Students set restroom rules with the water
  district, reducing water use. Rules included flushing only once and not playing in the sink
  on hot days. Students take this water education home, where they consider how much
  water they use in the shower and brushing their teeth and how they could reduce that
  amount.
- Trabuco students have recently designed and implemented a rainwater capture system
  and a system for reusing old drinking water. The school collects rainwater through rain
  gutters that lead water into wooden barrels used to water plants in the school garden
  and for cleaning on the farm.
- The school uses a student-designed drinking water recycling system. The school
  community can pour drinking water into the system, which flows through a funnel and
  network of pipes to water large flowerpots below. This system demonstrates the
  immediate effects of reusing water.
- The school's main garden has a drip system, a smart hose faucet timer, and a Wi-Fi hub. The weather-based software with the timer adjusts to maximize water use. Sprinklers use weather information to turn on drip systems only when water is needed.
- Eighty-five percent of the landscape on the school campus has an irrigation system. Besides the grass field used for educational purposes and physical activity, all campus plants are water-efficient and regionally appropriate. Plants and trees include native species such as rosemary, milkweed, mustard, and oak.
- Trabuco prioritizes ecologically beneficial uses for most of its school grounds, emphasizing outdoor environments for learning. The main school garden is an educational space that teaches students about soil, plants, and organic gardening. Additionally, a Pollinator Garden introduces students to native California plants and their role in attracting pollinators, with certification as an official Monarch Waystation. The

- Mindfulness Garden supports social-emotional well-being, combining sensory and meditation elements.
- District office personnel monitor Trabuco and other district schools daily for uncharacteristic water usage. The school's field irrigation system also has leak detection alerts. School personnel submit emergency work orders if leaks are detected, and maintenance staff immediately turns off the water to stop excess leakage.

### Element IC: Waste

- Trabuco reports a diversion rate of 20% achieved through composting and recycling efforts. The facilities manager, sustainability coordinator, and plant foreman actively monitor waste in campus dumpsters to measure volume before weekly pickups.
- The school manages its recycling instead of relying on a local waste hauler for pickup. Trabuco's Coyote Green Team volunteers collect and transport recyclables to a recycling center. This initiative serves as a fundraiser for the school, with the funds generated used to acquire additional plants for the school's gardens.
- Trabuco's compost program consists of multiple contributions by the school community.
  The school's instructional coach, who is part of the school's Coyote Green Team,
  develops lesson plans and teaches students in each class about the difference between
  waste, compostables, and recyclables. Students sort their lunchtime trash and place
  compost in two different bins. One compost bin is for food traditionally composted into
  the soil, and the other is for repurposing food to feed the school's farm animals.
- The school utilizes animal waste to fertilize campus landscaping and share with the local community. The school's farmer is currently sourcing materials to construct a more extensive fertilizer and compost area, which will help to increase the production capacity and enable them to provide more fertilizer and compost to the community.
- The school follows the Healthy Schools Act and only purchases cleaning products in the district-approved Green Purchasing List. Moreover, the school makes an effort to use post-consumer material, fiber from forests certified as responsibly managed, and chlorine-free paper, constituting ninety percent of the school's total paper content.
- Trabuco is actively working to reduce waste and eliminate single-use plastics in its cafeteria. The school uses refillable condiment containers. Moreover, there is a shift from individually wrapping utensils in plastic packaging. The school no longer automatically distributes plastic utensils to each student. Students only use utensils as needed and without individual packaging. The school has transitioned from using paper boats in previous years to using compostable trays, teaching students that healthy food choices encompass both food preparation and consumption practices.
- Trabuco safely stores hazardous items in a locked custodial storage closet, with limited
  access only to authorized adults. To be more environmentally friendly, the plant foreman
  switched from a gasoline-powered leaf blower to a battery-powered leaf blower,
  eliminating pollution associated with the original equipment.

## Element ID: Alternative Transportation

• School personnel calculated the number of cars at pickup over three months and surveyed students to determine their most common mode of transportation to and from school. From these sources, the school recorded 61% of their students carpool, 7% use the school bus, 4% walk, and 2% use human-powered modes of transportation (i.e., bike, scooter, skateboard).

- Trabuco has a safe pedestrian route to school. This route is communicated to all families and shown on a map for readability. A crosswalk with a crossing guard at a stop sign is utilized in front of the school campus, allowing students and families to cross the main road to school safely. The school also has a specific pedestrian gate that opens at arrival and dismissal for anyone walking. This gate path separates walkers from the street and the line of cars. A secure bike rack is also provided at the front of the campus to encourage human-powered modes of transportation to school.
- A school employee, who is also a parent, manages a walking bus initiative that involves
  picking students up from their homes and walking with them to school safely. Generally,
  only about 4% of the students walk to school, but when the walking bus program is in
  effect, the number of walkers increases to almost 16%.
- A student-led subset of the *Coyote Green Team* called *The Environmental Police* led a campaign to reduce transportation pollution. Students work with the principal to designate specific carpool parking stalls reserved for those who are carpooling. Students also created signs to encourage carpooling and explain its importance.
- Trabuco students implemented a no-idling policy for parents and school buses. They put
  up signs to encourage waiting vehicles to turn off engines. The school communicates
  this policy to families through their parent communication system.
- To prevent air pollution from entering buildings, all vehicle loading and unloading areas for cars and delivery trucks are approximately 50 yards away from building HVAC intakes, doors, and windows. Additionally, the vehicle loading zone for Food Services trucks is 25 feet from building doors and windows.
- Trabuco Elementary is part of the Saddleback Valley Unified School District (SVUSD).
   Each SVUSD bus in the fleet uses compressed natural gas (CNG). In addition, different grade levels combine with counterparts at other school sites for field trips, enabling the sharing of buses to reduce the overall number of buses on the road.

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

Element IIA: Environmental Health

- School personnel evaluate environmental factors to determine which pests are in the surrounding area and how the school can prevent their presence on campus. SVUSD contracts with an organization specializing in eco-friendly pest control solutions to handle its Integrated Pest Management (IPM) program. The company only uses products that target the pest causing an issue and are immediately safe for students and staff.
- When signs of a potential spider infestation surfaced on campus, the staff and families
  decided to plant lavender and rosemary in various areas around the campus. These
  outdoor plants work as natural deterrents for spiders. Notably, this initiative became a
  learning opportunity for the students to understand the concept of natural pest
  management and preventive measures.
- Trabuco Elementary prohibits smoking on campus and posts signs to communicate this
  to visitors. The school's handbook also shares the policy prohibiting tobacco use on
  campus with families.
- In 2008, asbestos was discovered on campus and immediately removed. District
  personnel tested Trabuco Elementary for asbestos, radon gas, and chromate copper
  arsenate but found no evidence of these hazardous materials. The school also follows
  SVUSD's policy against using elemental mercury. Additionally, the school does not have
  any fuel-burning combustion appliances.

- Trabuco Elementary participates in the California Healthy Schools Act and has strict
  policies against using hazardous materials. The school procures all its clearing products
  from SVUSD's warehouse, with products certified as environmentally friendly and
  deemed safe for use around children. Only custodial staff members who receive proper
  usage and storage training can access secured cleaning items, excluding green-certified
  disinfecting wipes designated for teachers.
- The school reduces air pollution by purchasing a battery-powered leaf blower to replace the previously used custodial gas leaf blower. The district recycles the new leaf blower's batteries through a battery recycling program once they are no longer usable.
- Trabuco minimizes exposure to asthma triggers like dust mites by vacuuming and
  dusting every classroom and staff area daily. The custodial staff employs CRI (Carpet
  and Rug Institute) Gold Level Seal of Approval / Green labeled Certified vacuums,
  ensuring the highest efficiency and effectiveness in cleaning. These vacuums feature
  dome filters made of high-efficiency particulate air (HEPA) media. Additionally, staff
  members utilize treated dust rags and microfiber rags as part of the cleaning routine.
- The school has implemented measures to ensure high-quality indoor environmental quality. For example, the school analyzed classroom acoustics using the dB Meter iOS app, and the average sound rating was 41 decibels due to carpeting, soft furniture, and ceiling speakers. Additionally, classrooms have ample daylighting from large doors and windows on opposite sides of rooms, maximizing sunlight. Each classroom also has a view of some combination of trees and landscape from the O'Neill Regional Park and mountains.
- Trabuco prioritizes air quality by employing HEPA purification units in every classroom and indoor space. The school strategically places the air purifiers in larger areas like the multipurpose room and staff lounge. The units use an ionizing fan feature to create a static charge around airborne contaminants for increased effectiveness. Classrooms also use Pothos plants, rated by NASA for removing toxins from the air, to maintain clean classroom air. The school controls relative humidity, with air conditioning systems automatically cooling and removing moisture when humidity exceeds 60%.
- Custodial staff routinely inspect facilities for any reports of mold in carpets or other areas. The school regularly shampoos carpets and dries them with industrial-strength blower fans to reduce the risk of mold contamination.
- Trabuco uses a Facility Inspection Tool annually to assess the conditions of the school facility. The plant foreman conducts a comprehensive inspection, documenting the findings in collaboration with the school principal and district staff. Additionally, the school utilizes the Environmental Protection Agency's (EPA) Indoor Air Quality (IAQ) Tools for Schools, explicitly focusing on checklists tailored for different audiences to evaluate campus needs.
- Trabuco Elementary underwent lead-level assessments conducted by SVUSD, revealing no instances of lead on the campus. Furthermore, SVUSD's policy prohibits using any potential lead contaminants, thus disallowing the presence of lead-based paint on campus.
- Trabuco receives water from the Trabuco Canyon Water District (TCWD), a municipal water source. TCWD regularly checks and analyzes the presence of lead and other contaminants in drinking water without any incident of lead to report in the school's history.
- In 2021, Trabuco Elementary installed a water bottle refill station with a point-of-use filter, ensuring students have a constant healthy drinking option. The school also

provides a water-filtered pitcher system in each refrigerator in the front office and staff lounge so all employees may enjoy filtered drinking water.

#### Element IIB: Nutrition and Fitness

- Trabuco participates in a farm-to-school program using fresh local produce. Saddleback Valley Unified School District (SVUSD) Food Services department prioritizes purchasing environmentally preferable food grown in the region to ensure freshness. Some of this food is even grown in the school's main garden to supplement student meals, whether they are eating a school lunch or a meal from home.
- SVUSD's registered dietitian nutritionist hosted a Healthy Families event at Trabuco, focusing on nutrition education and healthy choices. Students, families, and staff members attended this event. Staff in SVUSD's Food Services department have also scheduled time to visit lunch periods to teach students about farm-to-table programs and organic farming.
- The school collaborates with local growers and the SVUSD Food Services Department
  to enhance students' exposure to various produce beyond what the campus cultivates.
  The Food Services department introduces vegetables and fruits from external sources
  for students to compare with local produce. This program allows students to taste and
  experience new offerings, providing them with a recipe to replicate at home with their
  families. Each produce item incorporates lessons about the significance of organic
  gardening and farming.
- Trabuco has three on-site gardens maintained by students, staff, and families. These gardens are as follows:
  - The main garden is an instructional space for each class. Students receive weekly lessons on diverse topics like the different parts of plants, soil nutrients, types of plants, and plant habitats. The 1,000-square-foot main garden has 13 raised beds and provides supplementary food for the students. At the end of the 2022 2023 school year, students used the garden produce to make fresh salads, including kale, lettuce, and bell peppers. Additionally, students harvest potatoes from the garden for the Fall Feast, where they create a side dish for their families.
  - The Pollinator Garden features native Southern California plants intentionally planted to attract monarch butterflies, bees, and other pollinators. Students learn about the plants that thrive in the local ecosystem and the critical role of pollinators in the ecosystem. The Pollinator Garden is certified as a waystation for monarch butterflies, supporting students in learning about migration patterns and the needs of these butterflies.
  - The Mindfulness Garden, situated in the courtyard in front of the office, fosters emotional well-being for students. The Mindfulness Garden contains sensory elements such as trees adorned with sun catchers, bird feeders, and plants like lavender and thyme. Students use this area to calm their bodies and minds when needed.
- The school repurposed an old well on the campus, transforming it into a natural habitat
  for bean sprouts and providing a snack source for the chickens. The well also serves as
  an educational tool, helping students learn about different water sources and fostering
  discussions on improving access to clean water over the years.

- The school has a farm on campus with miniature donkeys, horses, pigs, goats, chickens, and sheep. The farm features an outdoor classroom with bleachers for students to observe animals and participate in instructional activities. Beyond structured instructional periods, students can visit the farm before school and during recess, engaging with and supporting the animals.
- Students engage in at least 200 minutes of physical education (PE) every two weeks.
  Fourth through sixth-grade classes receive physical education from specialized PE
  teachers twice weekly for 50-minute lessons. Kindergarten through third-grade students
  receive PE three to five times weekly in 20–35-minute increments. PE classes
  participate in the FITNESSGRAM Physical Fitness Test, which assesses fifth-grade
  students' strength, endurance, and flexibility.
- Trabuco encourages child-led, child-directed physical play activities. During recess each
  day, students are encouraged to begin games and invite friends to join. Students tell the
  playground supervisors they are starting a game in a specific location. Then, the
  supervisor announces the information to all the students so anyone who wants to play
  can join.
- Students access O'Neill Regional Park, adjacent to the school campus, through an
  ongoing permission slip. Teachers take students into the park for educational activities,
  including hikes, nature walks, and opportunities to explore the surrounding natural
  environment.
- The school has an outdoor classroom on campus, situated beneath a sizable oak tree, with repurposed tree stumps (sourced from the city's tree removal project) for student seating during morning meetings, restorative circles, and other lessons.
- The Trabuco Wellness Committee of staff members and parents meets monthly to
  evaluate environmental and health impacts on students and staff and plan the next steps
  for improvement. The Wellness Committee improves staff health by creating a
  sunscreen station for all adults and adding organic fruit options to the staff candy bar.
  The wellness committee also supported the development of the Mindfulness Garden,
  gathering donations such as wind chimes, bird feeders, and suncatchers.
- The school promotes and instills healthy choices across various campus settings, integrating nature whenever possible. For instance, overwhelmed students can make a healthy choice by meditating in the school's Mindfulness Garden, providing a space to de-escalate their feelings.
- Kindergarten through third-grade students engage in lessons delivered through the SunWise program. Classroom teachers facilitate these lessons, taking students outdoors to enhance their understanding of sun health.
- Trabuco prioritizes staff wellness with mental health check-ins, non-toxic sunscreen, and physical activities like hiking and kickball tournaments. The staff lounge now offers fruit instead of candy, fostering healthier habits among teachers.
- The school uses a comprehensive approach to child wellness, encompassing physical, mental, and emotional aspects. All students follow a state-adopted health program, including nutrition education, collaborating with the SVUSD Food Services department and classroom teachers to provide healthy snacks and lunches. Classroom and PE teachers address state-adopted PE standards, educating students on maintaining physical health. The school's counselor and psychologist provide support to students' mental health.
- Trabuco supports emotional regulation by providing students access to wellness areas called *Calming Corners* classrooms and the front office. Students visit the calming

- corner, stocked with soft layers, a weighted stuffed animal, stress balls, fidget spinners, books, and other items.
- The school's counselor provides dedicated social-emotional student support one day a
  week. Professionals from the district office visit the campus when students need more
  intensive mental health assistance. The Second Step social-emotional learning
  curriculum teaches students social skills and emotional regulation, complemented by a
  partnership with the non-profit organization Phoenix House for in-class lessons and
  small-group mental health support.
- Trabuco partners with a non-profit organization called Phoenix House, which supplies additional mental health support for students. Phoenix House provides two different services for the school. They provide 12-week cycles of weekly classroom lessons at each grade level. Lesson topics include thoughts, actions, feelings, peer pressure, managing emotions and anger, communication, kindness, and more. They also provide 10-week cycles of small group support for students needing additional emotional regulation support. They work with five to ten students on self-concept and identity, self-esteem and confidence, managing difficult emotions, conflict resolution, and coping skills.
- The school revamped the start of the day to promote a positive atmosphere, offering various engagement options such as visiting the farm, walking with friends, playing on the playground, or dancing to upbeat music instead of classes lining up before school.
- Twice a year, Trabuco students take the Panorama Survey to assess school climate, social-emotional learning, and satisfaction. Staff, in data team meetings, analyze the results and plan improvements. For example, in Fall 2022, recognizing a need to boost students' sense of belonging, staff implemented strategies like posting student photos in the staff workroom to track positive interactions. There was a conscientious effort to interact with students, with fewer interactions recorded positively. For students in the lowest 10%, staff used their collective knowledge to develop personalized plans for building connections with these individual students.
- In 2022, Trabuco received the Positive Behavior Intervention and Supports (PBIS) Silver Implementation Award. The school uses PBIS to be proactive with behavior, making expectations clear to students and incentivizing good behavior. The program's implementation increases student participation, feelings of well-being, and safety. Students engage in mini assemblies in various campus areas and teach each area's expectations. Each area incorporates the coyote mascot's howl with the expectations: Have respect, Own your actions, Work hard, and Lead with kindness.

# Pillar III: Provide Effective Environmental and Sustainability Education Element IIIA: Interdisciplinary Learning

- Trabuco sets its environmental literacy intentions within the school's vision. The vision states, "Through engaging and collaborative practices, Trabuco Elementary will develop students into competent, responsible, and environmentally conscious citizens. The school's vision for environmental literacy is to develop environmentally literate students who are knowledgeable about and inspired to take care of the natural world around them."
- The school's *Coyote Green Team*, a partnership with parents, the Parent Teacher Association (PTA), the staff, and the students, created a plan to increase students' access to outdoor learning spaces, including expanding the food and sensory gardens,

- creating a more functional outdoor learning classroom, and looking at how the school can convert existing spaces to be more sustainable.
- The school developed a Green Schoolyard pledge to improve its outdoor learning spaces and provide more opportunities for students to connect with the natural environment. They also aim to use eco-friendly options wherever possible and educate the local community on sustainable practices.
- At Trabuco Elementary, students engage in the district-adopted science, English-language arts (ELA), and history-social studies curricula, integrating environmental and sustainability concepts throughout the units of study. For example, fourth-grade students assume the role of systems engineers to discover how electrical systems work, explore why an electrical system may fail, and apply what they have learned to choose and construct new, sustainable energy sources and energy converters for a fictitious town. Fourth-grade students also explore the essential question: "How do we make decisions about developing new technology?" during their ELA classes. In the unit, students learn about green technology, including the benefits of green technology, ways humans use green technology, and why it is essential to explore more sustainable, environmentally friendly technologies.
- The school assesses students' environmental and sustainability learning and achievement through performance tasks, including writing tasks that evaluate their scientific understanding and ability to write like scientists.
- Students receive weekly garden lessons with a parent from the community. The school
  thoughtfully combines the garden lessons with California's Next Generation Science
  Standards (CA-NGSS) Environmental Principles and Concepts (EP&Cs) and social
  studies curriculum in the classroom.
- Trabuco's environmental literacy curriculum teaches students to think critically about
  environmental issues through all grade levels. For example, students learn about the
  declining monarch butterfly population and human activities that negatively impact the
  environment. By sixth grade, students investigate how human activities contribute to
  greenhouse gas emissions and devise solutions for climate change.
- Students engage in farm and garden lessons focusing on sustainable agricultural
  practices emphasizing the interdependence of plants and animals. For example, the
  school uses animal waste from the farm as fertilizer for the school's garden and produce
  from the school's garden to feed the farm animals.
- Trabuco Elementary students receive education on recycling, composting, and landfills as part of schoolwide efforts to minimize waste. Student leaders, trained in waste sorting, assist peers during lunchtime to promote positive environmental impact. Teachers actively engage in environmental education and sustainability lessons, covering composting methods, acceptable materials, and using compost in the school garden. The curriculum also highlights the environmental consequences of landfills and single-use plastics. Students and teachers learn about the significance of waste sorting to reduce landfill contributions, extending their knowledge to support energy conservation and intentional material use in classrooms.
- Trabuco hosts the *Trabuco Field Studies* program, offering hands-on learning experiences aligned with CA-NGSS Environmental Principles and Concepts. Schools from both the district and county visit Trabuco for this educational opportunity. All Trabuco students participate in the *Trabuco Field Studies* field trips, crafted through grants and in collaboration with the Orange County Department of Education's Science, Technology, Engineering, and Mathematics (STEM) Team.

• Trabuco ties field trips to hands-on outdoor education, including outdoor learning spaces on the school campus or the neighboring O'Neill Regional Park. For example, second-grade students take hikes through the park to observe real-world examples of erosion and then come back onto the school campus to observe the effects of water erosion in a large-scale sluice before designing solutions for water erosion using stream tables. These unique, authentic experiences with the impact of natural resources on local communities provide valuable lessons about how humans interact with natural systems.

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

- At Trabuco, students engage in science through problem-based learning units with a
  phenomenon and a problem where students take on the role of a particular type of
  scientist or engineer to solve a problem. Many of the problems students encounter
  include a theme of sustainability and the environment, and all units include crosscurricular connections to mathematical practices and content standards, literacy skills,
  and the CA-NGSS Science and Engineering Practices and CA-NGSS Cross-Cutting
  Concepts. Some examples of cross-curricular problem-based learning include the
  following activities:
  - Second-grade students take on the role of a plant scientist to answer the questions of a lead scientist at the Bengal Tiger Reserve, who has asked students why new Chalta trees are not growing there. Through this unit, students investigate scientific evidence and learn about the interdependence of plants and animals, including the impact of humans on ecosystems.
  - Fifth-grade students take on the problem of water scarcity in populations worldwide when they assume the role of water resource engineers. Students learn about water distribution, the natural factors determining water availability, and how people impact water supplies. Students engage in simulations and modeling tools to better understand scientific concepts.
- In addition to the adopted science curriculum, students use sustainability and the environment as a context for learning in other areas. Fourth-grade students develop comprehension and writing skills through an entire unit on renewable energy. Sixth graders measured the area of plant beds to determine how many square feet of mulch they helped to add to the school environment.
- Trabuco students assume roles in green career-related tasks through the science curriculum's problem-based units of study. Each unit of study allows students to look at problems through an expert's lens, learn related terminology, and engage in scientific engineering practices to develop solutions for real-world problems. The following activities describe these roles and green careers:
  - First-grade students assume the role of aquarists advising an aquarium director by helping answer young visitors' questions about a sea turtle who will soon be released back into the ocean.
  - In second grade, students work as geologists who use models to investigate how wind and water cause changes to landforms and design solutions to mitigate the impact of erosion.
  - Fourth-grade students assume the role of systems engineers who explore reasons why an electrical system may fail, examine how new energy sources and energy converters will make the electrical system more reliable, and construct devices to convert energy from one form to another to solve the problem of blackouts in a fictitious city.

- In 5th grade, students become ecologists, investigating why a rainforest ecosystem is failing and designing ecosystem restoration plans to recommend a course of action to restore the failing ecosystem.
- Trabuco Elementary students also partake in farm and garden lessons centered on sustainability and the environment. These lessons offer a context for learning about green technologies and enable students to participate in agricultural and farming career skills through engagement in the following activities.
  - In the school's garden:
    - Kindergarteners and first graders learn about the life cycle of plants and what plants need to grow and change.
    - Water and soil conservation lessons introduce second and third-grade students to sustainable practices. Additionally, students establish a connection with people's interdependence with their natural environment and understand where food comes from.
    - Fourth through sixth-grade students learn about climate science, its impact on growing, and the importance of native plants.
    - All grade levels participate in planting, tending, and harvesting crops, emphasizing organic gardening.
  - On the school's farm:
    - First-grade students learn about chickens, including the proper care and feeding of chickens, as well as the lifecycle of chickens.
    - Second-grade students learn how to care for and maintain pigs, goats, and sheep.
    - Fourth, fifth, and sixth-grade students care for the equines, mini horses, and donkeys.

## Element IIIC: Civic Knowledge and Skills

- Every spring, Trabuco students participate in a hoedown, presenting their knowledge
  from farm and garden lessons to their families and community members. Each grade
  level takes charge of showcasing specific animals at the event. Kindergarten and firstgrade students present chickens; second and third-grade students showcase goats,
  pigs, and sheep; and fourth through sixth-grade students exhibit equines, including
  donkeys and mini horses.
- The Trabuco Elementary *Coyote Green Team* meets weekly to discuss and implement school initiatives focused on becoming more environmentally conscious and sustainable. Students volunteer to be a part of this team and use part of their lunch times to work on launching initiatives and planning for follow-through. The *Coyote Green Team* also supports students at snack and lunchtime with a waste sorting program.
- The school leverages the *Trabuco Field Studies* program as a platform to share its environmental practices with other schools in the district and across the county. For example, during lunch, Trabuco students demonstrate their waste sorting program, categorizing their waste into recycling, composting, farm, and landfill bins.
- Trabuco collaborates with the Esperanza Education Center/Adult Transition Program, offering students educational and work opportunity experiences. Each week, Trabuco welcomes students from Esperanza to learn about farm animals and engage in feeding,

- cleaning, and grooming activities. Under the guidance of the animal care custodian, the sessions emphasize potential future careers for visiting students.
- Leadership students in Trabuco's Coyote Green Team engage the community in environmental and sustainability initiatives. Notably, they collect egg cartons and sell fresh eggs from the school's farm to the local community. The students develop and execute campaigns to reduce energy consumption, minimize waste, promote recycling and composting, and decrease air pollution. The Coyote Green Team implements the Edible Food Recovery program, redirecting surplus food to those in need within the local community and effectively addressing food waste issues.
- Families and community members participate in community workdays. They help with
  projects including planting, laying mulch, weeding, building, and designing enhanced
  outdoor learning spaces. In addition, the PTA has members dedicated to reaching out to
  the families and community for donations and volunteer opportunities during the school
  day. These PTA members are an integral part of the site's planning and implementation
  of environmental and sustainability projects at the school.
- Trabuco's vast outdoor learning environments allow each grade level to experience meaningful outdoor learning regularly. The adopted science curriculum provides many outdoor learning opportunities, including the following:
  - Kindergarten students learn about the needs of plants and animals. This
    problem-based learning unit allows students to go into the Pollinator Garden to
    plant and tend to native milkweed and explore how people can share space and
    support living things, such as monarch butterfly caterpillars.
  - Second-grade students learn about changing landforms, and they go out into the adjacent regional park and the land surrounding the school to see first-hand examples of landforms and the process of erosion.
  - o Fourth-grade students explore the Earth's features and can investigate sediment deposition from the local mountains in a creek behind the school.
- The *Trabuco Field Studies* program features many outdoor learning opportunities, including:
  - Kindergarten through fifth-grade field trips include a visit to the farm.
  - First-grade students visit the farm to observe the farm animals to determine how offspring have some of the same features as their parents.
  - Third-grade students learn what plants and animals need to survive in a specific area and how human and natural systems affect each other through observations of the native plants and animals that inhabit the neighboring regional park. Students put themselves in the role of a new resident of Trabuco Canyon and design their ideal backyard. Students decide what plants and animals they will have and how they will help those plants and animals survive. Students also consider the native plants and animals and how they, as homeowners in the community, will affect the lives of native species.
  - Fifth-grade students delve into the intricacies of the local ecosystem within the local park to comprehend the significance of fire abatement and the various approaches residents take. This project involves gaining insights into the spheres of Earth's systems and their interactions, accomplished through observing them within the park landscape.
- Students take advantage of the school's location amongst the environment to learn outdoors in the fresh air and make real-world connections to classroom learning. For example, the school's Mindfulness Garden is where students take brain breaks and de-

- escalate their emotions when needed. Students also spread out on the large grass field to collaborate or read. Additionally, students engage in restorative circles or group discussions while sitting under the shade of an old oak tree on campus.
- All grade levels take hikes into the neighboring regional park to investigate erosion in the local creek, observe animal and plant ecosystems, and collect data in the natural environment.
- Families can connect at the bi-annual campout in the adjacent regional park. The PTA
  reserves campgrounds in a secluded area of O'Neill Regional Park each October and
  May. Staff members, students, and their families spend the night in nature together,
  engaging in art projects and outdoor games and appreciating the natural world.
- The Coyote Green Team is involved in initiating many new programs to reach the broader community and provide for civic engagement, like organizing recycling days, where families and community members can drop off their plastic, glass, and aluminum to be recycled. The Coyote Green Team also built a stand to sell the fresh eggs from the farm's chickens to the community.
- In May, teachers and students engaged in activities for *Living Schoolyards Month*. Kindergarten and first-grade students participate in place-based understanding activities such as the *Sense-sational TreeTour* and "*I Spy a…Tree! Plant! Bug!*" Fourth-grade students participated in the *Introduction to Renewable Energy* activity in their English-Language Arts Benchmark Advanced curriculum, which is connected to their renewable energy unit. Students also create insect hotels around the Mindfulness Garden, creating a habitat for bugs to enjoy. For recreational activities during physical education, students participated in *Everybody's It Tag*, and upper-grade students participated in *Food Web Tag*.
- Trabuco brings in experts from outside the school to teach students concepts from professionals. For example, a farrier comes onto campus to teach the students about horse hoof care. Students watch the farrier work on the equines at their school farm.
- Trabuco maintains a robust partnership with the SVUSD district office, collaborating with
  various individuals and departments to actualize the school's mission and vision. The
  district's superintendent and assistant superintendents are pivotal in supporting Trabuco
  in exemplifying environmentalism and sustainability within the SVUSD. Recent
  endeavors focus on fostering an environmentally conscious and sustainable school
  community. Collaborating with the district Facilities and Maintenance Department,
  Trabuco installed water bottle filling stations. Additionally, partnerships with SVUSD's
  Food Services Department support nutrition education delivery to Trabuco's students
  and their families.
- The school contacts community utilities and services to enhance learning around environmental and sustainability principles. Community partners such as Aguinaga Green and Bee Canyon Greenery (OC Waste & Recycling) donated all-natural mulch for planters. Target stores and Stater Brothers stores also donated items for plant care. The school partnered with Home Depot for a grant with shade covers and raised garden beds. The local waste and recycling collection company, CR&R Environmental Services, and Trabuco Canyon Water District provide students with waste management and water education.