



CASE STUDY BRIEF

Since 2013, the Partnership for 21st Century Learning (P21) has annually designated 21st Century Learning Exemplars based upon exceptional implementation of the [Framework for 21st Century Learning](#).

Each year, P21 has highlighted a cohort of early learning centers, K–12 schools, school districts, and beyond school programs in the U.S. as 21st Century Learning Exemplars. Now that P21 is a network of Battelle for Kids, we are leading together in celebrating the current year of 21st Century Learning Exemplars.

As part of celebrating these awardees, Battelle for Kids and its P21 network provide ways for their stories and impactful practices to be shared with others. This case study brief and those for the other awardees provide powerful insights to guide other school districts, schools, and programs so that every child can experience the best of 21st century learning experiences.



Vineyard STEM Magnet School Ontario, CA

With a strong focus on rigorous STEM education and character development, Vineyard STEM Magnet School (Vineyard) provides unique and extensive project-based learning opportunities that enable students to become advocates for themselves and others in the classroom, and beyond.

Grades Served: K–8

Enrollment: 773 Students

Founded in 1958

[Website](#)

- 2016 International STEM Education Association (ISEA) STEM School of Excellence
- California Positive Behavior Intervention and Supports (PBIS) Coalition Gold Implementation Award
- Schools of TechXcellence Honoree

Vineyard STEM Magnet School

Ontario, CA

ASTRO Framework

Recognized by the California PBIS Coalition with a Gold Implementation Award, Vineyard embedded a pervasive school-wide framework known as ASTRO. Vineyard students are Appropriate, Safe, Trustworthy, Responsible, and Optimistic. A consistent approach to behavioral goals across grade levels builds a culture where student interactions and communication of their learning process is conducted free from judgment.

With customized posters in classrooms and common spaces, the ASTRO framework is continuously reinforced as students and staff use a common language to set expectations and enhance collaborative experiences. ASTRO helps staff identify and appropriately reward positive behavior and choices. This provides modeling for students that require extra support. The district-wide SWIS monitoring system supports efforts to monitor student behavior data. Vineyard also uses longitudinal data to refine citizenship expectations and implement targeted, topical social-emotional programming, as needed. Vineyard also utilizes Ontario Montclair School District's student mentoring services to provide additional counseling support, peer coaching, and anti-bullying training to ensure students' social and emotional needs are met and students achieve ASTRO behavior.

Interconnected and Interdependent Learning Opportunities

Every aspect of Vineyard has been designed to provide a whole-child experience. No single program or initiative is responsible for school culture. Instead, they are interconnected. Programs such as Positive Behavior Intervention and Supports (PBIS), Advancement Via Individual Determination (AVID), ASTRO, project-based learning, and college-bound culture coalesce to provide rigorous STEM instruction through a 4Cs lens.

With 87% of its student population qualifying free or reduced lunch, Vineyard believes high-quality STEM education should be accessible to all. Vineyard integrates all core content with STEM. Vineyard's distributed leadership model helps accomplish this. Administrators and staff have equal roles in instructional decisions and implementing new school-wide initiatives and programs. A committee system encourages teachers to take leadership roles, form new partnerships, and seize new opportunities to increase student access to STEM curriculum and programming.



STEM Partnerships

Vineyard continues to expand its STEM offerings thanks to its many established partnerships. Vineyard works with Cal Poly and Pomona University on the robotics elective pathway and sends teams to the annual robotics competition. This provides an opportunity for students demonstrate their STEM learning and programming acumen. It also exposes students to the collegiate experience and often provides the first touchpoint with an institution of higher education.

As part of their Math Engineering Science Achievement (MESA) elective pathway, students compete in another STEM-related competition. Affiliated with the University of California-Riverside, the MESA Day challenges students to tackle projects—such as getting a concrete Frisbee to cover the longest distance—and present their science notebooks, which provide a narrative explaining the process behind experiments and projects. Vineyard partnered with the Girl Scouts of Greater Los Angeles to provide topical programs during DeSTEMber and empower Vineyard girls to pursue science and engineering careers and seek out real-world applications for their learning.



2019 21ST CENTURY LEARNING EXEMPLARS

Each of the following earned this year's award for its outstanding practices in equipping students with the necessary skills and knowledge for success in college, career, and life:

Early Learning

The Goddard School Located in Broadview Heights
(Broadview, OH)
The Goddard School Located in Simpsonville
(Simpsonville, SC)

K-12 Schools

Canyon Crest Elementary School (Fontana, CA)
Elon Elementary School (Elon, NC)
EVSC New Tech Institute (Evansville, IN)
Henry Ford Academy: Alameda School for Art + Design
(San Antonio, TX)
Kairos Public School Vacaville Academy (Vacaville, CA)
Kensington Elementary School (Waxhaw, NC)
Moreno Valley High School (Moreno Valley, CA)
Saint Ambrose School (Brunswick, OH)
Santiago Charter Middle School (Orange, CA)
Valley View High School (Moreno Valley, CA)
Vineyard STEM Magnet (Ontario, CA)
Vista Heights Middle School (Moreno Valley, CA)
Wolf Springs Elementary School (Overland Park, KS)

Districts

Lennox School District (Lennox, CA)
Vicksburg Warren School District (Vicksburg, MS)

Beyond School Programs

Camp Champions (Marble Falls, TX)

[Learn more](#) about the 21st Century Learning
Exemplars at: bfk.me/p21 [ExemplarProgram](#)